

# ENGAGING PRIVATE HEALTH CARE PROVIDERS IN TB CARE AND PREVENTION: A LANDSCAPE ANALYSIS

SECOND EDITION



Stop TB Partnership



The Global Fund





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Engaging private health care providers in TB care and prevention: a landscape analysis, second edition

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# Contents

Acknowledgements .....	iv
Executive Summary .....	v
Private sector engagement needs to be urgently expanded to reach End TB.....	v
Moving from Policy to Practice: We know how to do it .....	v
Strengthening private provider engagement: What more is needed .....	vi
Emerging opportunities for increased engagement .....	vi
A call to action: taking engagement of private providers to scale .....	vii
<b>1: INTRODUCTION .....</b>	<b>1</b>
Background, purpose and outline of document .....	1
Scope and definitions .....	2
Plus ça change, ... ..	3
Private healthcare in low- and middle-income countries .....	3
Why engage private providers for TB? .....	5
Published evidence of effectiveness of private provider engagement .....	8
Evolution of WHO guidance .....	10
Status of private provider engagement in high-burden Countries .....	12
PPM Roadmap .....	16
TBPPM Learning Network .....	16
PPM during COVID-19 .....	17
<b>2: ISSUES IN PRIVATE PROVIDER ENGAGEMENT FOR TB CARE .....</b>	<b>17</b>
Constraints to private provider engagement for TB .....	19
Lessons from private provider engagement in other health areas .....	22
Lessons from private provider engagement in COVID-19 .....	24
Evolution of institutional models .....	24
Social health insurance and tB in indonesia and Philippines .....	25
What we know about how to engage private providers .....	27
What we know about how private provider engagement may be stimulated .....	29
Performance management .....	25
Implementers and technical agencies .....	32
Donors and funding .....	34
<b>3: RECENT COUNTRY EXPERIENCES .....</b>	<b>43</b>
Bangladesh .....	43
India .....	46
Indonesia .....	48
Myanmar .....	49
Nigeria .....	50
Pakistan .....	52
Philippines .....	54
<b>4: THE WAY FORWARD .....</b>	<b>57</b>
Principles for change in mixed health systems .....	57
Developments likely to improve prospects for private provider engagement .....	59
Recommendations .....	60
<b>ANNEX 1. PRIVATE FOR-PROFIT PROVIDER ENGAGEMENT FOR TB IN 7 PRIORITY COUNTRIES, 2017 .....</b>	<b>63</b>
<b>ANNEX 2. POTENTIAL PERFORMANCE INDICATORS FOR PRIVATE PROVIDER ENGAGEMENT .....</b>	<b>65</b>
<b>BIBLIOGRAPHY .....</b>	<b>67</b>

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**Authors:** Guy Stallworthy, Hannah Monica Dias, William Wells, Madhukar Pai, Petra Heitkamp and Joel Klinton

**Additional contributions:** Jacob Creswell, Mohammed Yassin, Hong Wang, Shelly Malhotra, Chijioke Osakwe, Benyamin Sihombing, Puneet Dewan, Daniel Chin, Christy Hanson, Aamir Safdar, Farhan Kabir Patwary, Khalid Farough, Unyeong Go, Kyung Hyun, Michael Osberg, Bhavin Vadera, Mukund Uplekar, Razia Fatima, Laeeq Ahmad, Rajendra Yadav, David Clarke, Imran Pambudi, Celine Garfin, Omoniyi Amos Fadare, K.S. Sachdeva, Ayodele Awe, Obioma O. Chijioke-Akaniro, Hussain Hadi, Nasim Akhtar, Cho Cho San, Shamiul Islam, Nazis Arefin Saki and other members of the PPM Working Group.

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# Executive Summary

## Private sector engagement needs to be urgently expanded to reach End TB targets

TB is preventable and curable, but current efforts to find, treat and cure everyone who gets ill with the disease fall short. Of the 10 million people who fell ill with TB in 2019, only 7.1 million were officially notified to national authorities and reported to WHO. In 2019, 56% of the 2.9 million “missing people” with TB were in seven countries in which private providers accounted for more than two thirds of initial care-seeking: Bangladesh, India, Indonesia, Myanmar, Nigeria, Philippines and Pakistan. However, in these countries, private for-profit providers contributed just 28% of total TB notifications, equivalent to only 20% of estimated TB incidence in 2019. These seven countries have been designated as the “Big Seven” PPM priority countries(1). Since 2015, the total number of private for-profit TB notifications in these countries has increased nearly three-fold to more than 1.1 million. While this progress is promising, the challenge now is to further increase case-finding while extending the full package of publicly funded, quality-assured TB services to these private patients. The COVID-19 pandemic has also put gains at risk with a 21% drop in notifications across 84 countries in 2020 – including in several PPM priority countries.

Closing gaps and ensuring early access to diagnosis and treatment will require strengthened and expanded private provider engagement. Engaging private providers is also essential for reducing unnecessary deaths and suffering caused by inappropriate treatment, slowing the emergence of drug resistance caused by substandard care, reducing transmission by shortening delays to treatment, reducing catastrophic costs and impoverishment, and accelerating uptake of new tools.

As countries move towards Universal Health Coverage (UHC) and towards reaching the TB-related targets in the Sustainable Development Goals and End TB Strategy, they need to harness the full potential of private providers. TB programmes can be pioneers in this area by accelerating the strategic engagement of private health care providers. Access to essential TB services across both the public and private sectors should be ensured especially in emergencies such as the COVID-19 pandemic.

## Moving from Policy to Practice: We know how to do it

The need to engage private healthcare providers for TB has been acknowledged since the early 1990s and has featured briefly in many global and national strategies and plans since 2001, including the recent WHO End TB Strategy and the Stop TB Global Plan to End TB. Since 2002, WHO has issued and revised a dozen guidance documents addressing various aspects of Public-Private Mix, including how to engage private providers, how to advocate and plan for their engagement, and how to measure progress. Published literature on private provider engagement has increased significantly: a systematic review in 2015 found 78 studies, covering 48 projects in 15 countries (2). Much has been learnt about how to successfully engage private providers for TB care, although there remains considerable room for adaptation and innovation. However, this issue has not had priority or investment commensurate with the scale of the problem. Several countries have begun to slowly take public-private mix approaches to scale, yet private provider engagement (PPE) has been one of the most difficult TB technical areas to move from donor to domestic funding.

A root cause of this has been a strong public sector preference among those who manage TB programmes and those who fund them. It also reflects the ongoing journey, not specific to TB programmes, in which the public sector only gradually gains capacity to govern private health providers effectively, as countries develop. In recent years, a changing mindset towards the private sector has been evolving,



with countries such as India, Bangladesh, Myanmar and Pakistan achieving significant scale in private provider engagement.

In these countries, engagement of large numbers of private primary care providers has been led by strong non governmental organizations (NGOs) acting as intermediaries between providers and National TB Programmes (NTPs). Recently, India has begun to demonstrate unprecedented commitment to engaging private providers by setting ambitious targets (2 million private TB notifications per year by 2020), allocating substantial budgets and mobilizing strong political support at all levels. The Philippines and Indonesia, which had previously focused attention on engaging relatively small numbers of high-volume private hospitals, have recently begun to expand engagement of private primary care providers and redouble efforts to leverage social health insurance schemes. Indonesia is pursuing a model based more on engagement directly from the public sector to private providers with the support of professional associations, rather than using other intermediary organizations.

## **Strengthening private provider engagement: What more is needed**

Support for private provider engagement by external technical and financial partners of NTPs should be based on an appreciation of underlying systemic constraints as well as proximal determinants. There is a role for guidelines, plans, strategies and pilot projects, but they need to be complemented by efforts to increase basic understanding of patient and provider behaviors and of approaches to exercising stewardship over the whole health sector. On the public sector side, it is important to build system capacities for strategic purchasing for both curative and public health services: mandatory notification decrees and other regulatory approaches have a role, but most effort should go into the development and deployment of enablers and motivators to encourage private provider participation. On the private side, there is usually a need to empower intermediary organizations capable of engaging and aggregating large numbers of private providers on behalf of the program, at least until such time as social health insurance or other large-scale purchasing platforms are developed and mature.

## **Emerging opportunities for increased engagement**

Recent increases in notifications are largely driven by high level commitments made at the 2018 UN High Level Meeting on TB and through initiatives such as the WHO Director General flagship initiative Find. Treat. All. #EndTB (with the Global Fund and the Stop TB Partnership), the Global Fund's strategic initiative to find an additional 1.5 million people with TB by the end of 2019, and with continued support from the US Agency for International Development (USAID) in countries and at the global level. The recent 2020 progress report on TB by the UN Secretary General also highlights the importance of private sector engagement in its priority recommendations.

Several developments could facilitate a major increase in private provider engagement for TB in the coming years. Success in India, Bangladesh or Pakistan could set an example for other countries and inspire them to be more ambitious. The digital revolution is finally reaching TB: new digital technologies facilitate the engagement of private providers by transitioning from paper-based data to digital, case-based registration systems. Such systems enable additional innovations that further facilitate private provider engagement at scale, such as digital vouchers for drugs and diagnostics, adherence monitoring technologies, and digital payment of incentives and enablers to both patients and providers. Access to new and improved diagnostic and treatment tools, such as digital chest x-rays with AI-based tools, Xpert MTB/RIF and shorter, all-oral MDR-TB regimens, and digital adherence technologies, has increased the potential value to private providers of engaging with the public sector. Social health insurance schemes in some countries are approaching full population coverage and will provide an opportunity to drive quality of TB care in the private primary sector. Both social health insurance expansion, and the UHC movement in general, are also increasing the awareness of the need to engage private providers in order to reach true UHC.



The COVID-19 pandemic has been a big setback to TB prevention and care efforts, with substantial impact on public and private notifications in many countries. Data compiled by WHO from 84 countries indicates that an estimated 1.4 million fewer people received care for tuberculosis (TB) in 2020 than in 2019 - a reduction of 21% from 2019. In the group of 10 high-burden countries with the largest reported shortfalls compared with 2019, the overall shortfall was 28%. WHO estimates that these COVID-19 related disruptions in access to TB care could cause an additional half a million TB deaths. TB remains one of the world's top infectious killers. (3)

The first pressing priority is to catch-up on all the missed patients and offer them TB treatment, in both public and private health sectors. It is also critical to ensure that everyone on TB therapy is adequately supported to complete the full duration of treatment.

## A call to action: taking engagement of private providers to scale

Engagement of private providers on a scale commensurate with their importance will require a transformation of the TB response in countries. This will include new partnerships, modern data systems, new payment mechanisms, new skills, and different attitudes.

In 2018, WHO issued a "Roadmap" for TB public-private mix, calling on high-burden countries with large private healthcare sectors, NTPs and their partners to take the following actions (1):

- 

**Build** understanding about patient preferences, private sector dynamics and the rationale for engaging all providers
- 

**Establish** a supportive policy and regulatory framework
- 

**Set** appropriately ambitious PPM targets
- 

**Adapt** flexible models of engagement applicable to local contexts
- 

**Advocate** for political commitment, action and investment in PPM
- 

**Harness** the power of digital technologies
- 

**Allocate** adequate funding for engaging all providers, including by capitalizing on financing reforms for Universal Health Coverage
- 

**Deliver** a range of financial and non-financial incentives and enablers
- 

**Partner** with and build the capacity of intermediaries and key stakeholders
- 

**Monitor** progress and build accountability

By embracing the lessons learned from nearly 20 years of efforts to engage private providers and taking them to appropriate scale, TB programmes can help drive universal health coverage.



# 1 INTRODUCTION

## Background, purpose and outline of document

TB remains one of the world's top infectious killers, responsible for more than 1.4 million deaths in 2019. An estimated 10 million people fell ill with TB worldwide in 2019, and up to a quarter of the world's population has TB infection (4). Efforts to combat TB are receiving increasing global attention, as evidenced by the first WHO Global Ministerial Conference on Ending TB, held in Moscow in November 2017 which brought together Ministers, and the first-ever United Nations General Assembly High-Level Meeting on TB which brought together Heads of State in September 2018. Progress in reaching all people with TB with quality care is being driven through initiatives such as the WHO Director General flagship initiative Find. Treat. All. #EndTB (with the Global Fund and the Stop TB Partnership), the Global Fund's strategic initiative to find an additional 1.5 million people with TB by the end of 2019, and with continued support from the US Agency for International Development in countries and at the global level. The recent 2020 progress report on TB by the UN Secretary General also highlights the need to accelerate the TB response, including by scaling up private sector engagement to close gaps in care, in its priority recommendations. Policymakers' attention has been drawn to the more than 2.9 million "missing people with TB" (the gap between the number of cases diagnosed and notified by official TB programmes and the estimated annual incidence) and, because many of them are assumed to be accessing treatment in the private sector, this has led to renewed interest in engaging private providers. Provisional data compiled by WHO from 84 countries indicates that an estimated 1.4 million fewer people received care for TB in 2020 than in 2019 - a reduction of 21% from 2019. In the group of 10 high-burden countries with the largest reported shortfalls compared with 2019, the overall shortfall was 28%. This further widens gaps in access to care. WHO estimates that these COVID-19 related disruptions in access to TB care could cause an additional half a million TB deaths.

Since 2001, WHO and its partners have offered support on engaging private providers for TB prevention and care, the need for which has been recognized in global TB strategies since 2006. Since 2002, the Public Private Mix Working Group of the Stop TB Partnership has held 15 global meetings on the subject. Several WHO guidance documents have been issued<sup>1</sup> and a number of major reviews of the literature have been published. While considerable experience has been gained in a wide range of health market contexts, and some countries have made more sustained progress than others, overall engagement of private providers remains weak considering the important role of private providers in many high-burden countries. An essential premise of this document is that global and national goals in TB cannot be achieved unless private providers are engaged on a scale commensurate with their role in health systems.

In this context, the purpose of this document is ultimately to facilitate improved engagement of private providers, thereby contributing to universal access to quality and affordable TB care and the end of the TB epidemic. It focusses on the role of private for-profit providers and on specific challenges and experiences in engaging them for TB prevention and care.

**Part 1** begins with a short review of the role of private healthcare providers in low- and middle-income countries – a role that is often important but that typically receives insufficient attention in official health strategies and programmes. It also explains why engagement with private providers is essential for the achievement of all major TB objectives, not just finding the "missing people with TB". Published evidence on the extent and effectiveness of private provider engagement initiatives is summarized, together with

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1 Listed on Table 6, below.

the evolution of WHO guidance on private provider engagement. The section concludes with an analysis of recent data on the extent of private provider engagement for TB in high-burden countries, contrasting the number and percentage of private TB notifications with the importance of private healthcare in those countries. This data is new, and distinct from the data that has been presented in global TB reports, in that it distinguishes private for-profit providers from NGOs and faith-based organizations.

**Part 2** consists of a detailed reflection on some of the issues involved in private provider engagement, beginning with an analysis of the many constraints that have to be overcome if such engagement is to be taken to scale. TB programmes may learn from and be inspired by efforts in other health areas. Institutional models for private provider engagement are identified and discussed. It suggests some lessons learned regarding how to engage private providers, and how external actors can stimulate increased engagement of private providers. It includes a discussion of indicators and measurement challenges. It concludes with a review of the roles and characteristics of major implementers, technical assistance organizations, and funders.

**Part 3** presents brief summaries of private provider engagement in the seven PPM priority countries.

**Part 4** turns to the future. It begins with a reflection on principles underlying change in complex, adaptive, health market systems, suggests a number of trends in low- and middle-income countries that are likely to facilitate improved private provider engagement for TB, and concludes with recommendations for national TB programmes and their technical and financial partners.

## Scope and definitions

The focus of this work is the engagement of private health care providers for TB prevention and care. Health care refers primarily to the diagnosis and treatment of TB in this case, although of necessity we will address public health functions such as surveillance and data management, patient support, contact tracing, etc. We exclude general health promotion and primary prevention of TB, and we do not address the activities of companies that are not primarily dedicated to healthcare. We focus on healthcare providers (hospitals, independent practitioners, pharmacies and laboratories, including companies that operate chain outlets) rather than manufacturers or distributors of medical technologies.

Strictly speaking, “private” means “non-state” and embraces the non-profit sector as well as the for-profit sector. This analysis focusses on for-profit healthcare providers because they are more numerous and important than non-profit organizations, and much more difficult to engage. Non-governmental organizations (NGOs) are therefore addressed here as intermediaries that often engage for-profit providers, rather than as direct service providers. NGOs, and especially faith-based organizations (FBOs), do play a very important role as providers of healthcare (owners and operators of dispensaries, clinics and hospitals) in many countries. While many NGO or FBO facilities charge user fees that are sometimes comparable to those of similar for-profit providers, NGO and FBO providers differ substantially from most for-profit providers in their orientation and, critically, in their relationship with government: in many cases, they are already integrated into public health systems.<sup>2</sup> China is a special case, where hospitals are publicly owned but behave like private hospitals elsewhere.

In TB, the term “public-private mix (PPM)” embraces engagement of non-profit healthcare facilities<sup>3</sup>, as well as for-profit facilities and providers. Since 2004, WHO has expanded the acronym PPM to include “public-public mix” – efforts to ensure that all publicly-owned healthcare facilities (e.g. public medical colleges) conform to NTP guidelines and reporting systems – as well as public-private mix.

While most countries could improve their engagement of public providers and NGO/FBO providers, this analysis focusses on engagement of private for-profit providers because (i) the issues involved in engaging non-profit facilities are more similar to those of engaging public facilities than those of engaging for-profit facilities and providers; (ii) engagement of for-profit providers has been much more difficult than engagement of either non-profit providers or other public providers; and (iii) in many settings, engagement of for-profit providers is much more important for TB prevention and care at this stage because they have a much greater share of the healthcare market.

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2 In the United Republic of Tanzania, the National TB Programme categorizes FBOs with government facilities for purpose of TB case reporting, monitoring and evaluation, while in Zambia they are referred to as “semi-public”.

3 And community-based organizations (CBOs), but only if they either do clinical service delivery or refer to other PPM providers. I.e., CBOs that do case.

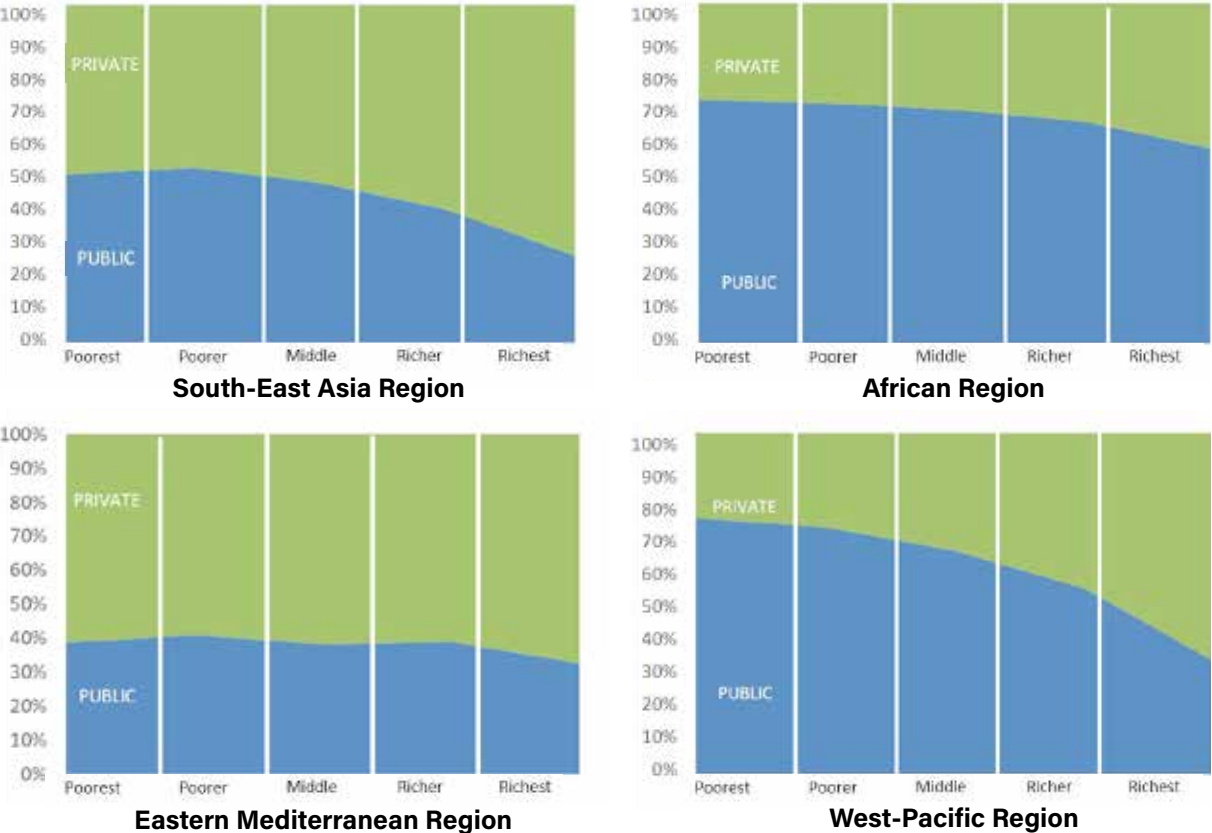
# Plus ça change, ...

The above text is taken from a 2001 WHO report that summarized the findings from a situation analysis of private provider engagement for TB, conducted in 23 countries during 1999–2000. The report remains fundamentally valid and insightful 19 years later, even if much has changed: increased concerns about MDR-TB; higher estimates of TB burden; improved understanding of the importance of private providers in TB; expansion of social health insurance in a few countries; major improvements in TB diagnostics and treatments; the emergence of the Global Fund to spearhead increased funding; higher incomes and urbanization. Perhaps the most rapid change has been in information and communication technologies. In the last three years, there has also been some innovation in private provider engagement for TB in a few countries, and some models show signs of the potential for sustained scale. But this field remains woefully inadequate in most high-burden countries, especially those with the highest burden of missing cases.

## Private healthcare in low- and middle-income countries

There is extensive literature on private healthcare in low- and middle-income countries.<sup>4</sup> In most low- and middle-income countries, private providers are an important source of healthcare for all socio-economic strata: typically, the less-poor tend to make more use of formal and qualified providers, while the poor often turn first to informal and unqualified providers. Private providers often account for 50%-70% of care, especially outpatient primary care (Figure 1).

**FIGURE 1. OWNERSHIP RATIO BY WHO REGION. WEIGHTED BY COUNTRY POPULATION FROM YEAR OF MOST RECENT DHS OR MICS SURVEY<sup>5</sup>**



<sup>4</sup> See for example, the articles in the Lancet Series “Universal health coverage: markets, profit and the public good” (26 June, 2016); and the book entitled Private Health Providers in Developing Countries (1997), edited by S. Bennett, B. McPake and A. Mills.

<sup>5</sup> Montagu D and Chakraborty. Analysis of DHS and MICS surveys. 2020.

In most low- and middle-income countries, private healthcare providers are varied, numerous and generally unorganized. The main types of private provide are summarized in Table 1.

**Table 1. Types of private providers**

Private provider type	Examples	Comments
Specialists (pulmonologists, chest physicians)	450 in Bangladesh; PDPI (Indonesia Pulmonologists' Society) in Indonesia	Very high case load but usually late in-patient pathway and higher income; often challenge national protocols; key opinion leaders
High-end corporate hospitals	500 in India (eg. Fortis, Care, Apollo etc.) Private medical colleges: 67 in Bangladesh 1-2 in major cities of the smaller lower-income countries	Often reluctant to address TB because of stigma and image Serve higher socio-economic groups Pathology, imaging, administrative capacity
Mid-size hospitals	~ 30 000 nursing homes in India	Access in secondary cities and major towns
Laboratories	9000 in Bangladesh; 30 000 in India (including 5 large networks)	Increasingly organized in networks
Pharmacies	25 000 Indonesia; 8200 in Kenya	Mainly in urban areas Chains emerging in some countries
Independent qualified general practitioners	60 000 Bangladesh; 97 000 Pakistan; 8000 Myanmar; ~70 000 Indonesia	Still mainly fragmented Represented by medical associations
Drug shops	200 000 in Bangladesh; 10 000 accredited drug-dispensing outlets (ADDOs) in the United Republic of Tanzania; 40 000-200 000 private Patent and Proprietary Medical Vendors (PPMVs), in Nigeria	Often regulatory controversy about what they can and can't sell. May provide consultations.
Independent less-than-fully-qualified practitioners	300 000 in Pakistan; 3-4 unqualified providers per village (77% of all providers) in India	Often first point of care, especially in rural areas Often controversial Considerable overlap with the category of drug shops

The provider types listed last (informal providers, drug shops, independent qualified providers) are both far more numerous and more important for early care-seeking, especially for lower-income populations, and therefore for interruption of transmission. They are also more difficult to engage because of their large numbers, the relatively low case yield per provider, low administrative capacities, and the fact that in many cases they operate on the borders of legality. In contrast, specialists and hospitals are fewer in number, are easier to engage, can take on more complex tasks and may often have relatively high case-loads, but they also tend to serve high socio-economic groups and are unlikely to be the first providers consulted.

## Why engage private providers in the TB response?

Failure to engage private healthcare providers in the TB response has five broad consequences:

- Increased transmission as a result of delayed diagnosis and treatment;
- Excess mortality and morbidity as a result of inappropriate treatment;
- Increasing drug resistance as a result of incomplete or incorrect treatment;
- Unnecessary impoverishment as a result of the high cost of private care;
- Delayed and incomplete introduction of improved TB tools as a result of failure to penetrate private channels.

Data on most of these problems (treatment delays, catastrophic expenses, coverage of new tools, treatment outcomes amongst private providers) is scarce. This review follows much of the discourse on private provider engagement by focusing on “missing people with TB” as the problem and case notification as the key performance measure, but it is worth noting that engagement of private providers will also have important, harder-to-measure impacts on delays (and therefore transmission), impoverishment, treatment outcomes, drug resistance and uptake of new tools. In countries with dominant private healthcare sectors, the number of missing cases is a salient metric indicative of multiple problems that must be addressed if global TB goals are to be achieved.

Globally, WHO estimates that 10 million people fell ill with TB in 2019. Government programmes notified 7.1 million and the remainder – 2.9 million people with TB, or nearly 30% of the total--are “missing”. Three countries – India, Indonesia and Nigeria – account for 38% of all missing cases, while a further 7 countries accounted for additional 32% of the global gap between incidence and notifications. The absolute number of missing cases is determined by population size, TB incidence and the treatment coverage rate. The treatment coverage rate (which also influences TB incidence) is itself determined by the strength of the public programme, the size of the private healthcare market, and the quality of the TB programme’s engagement with private providers.

While some people with TB are asymptomatic and delay seeking care, most of the missing people with TB are thought to seek some kind of treatment from public or private healthcare providers, including those that do not fall under the purview of national TB programmes. There is some considerable degree of under-reporting of publicly-managed cases (particularly in public hospitals, which often fall under another section of the MoH that is administratively distant from the NTP), and there are many missed diagnostic opportunities in routine consultations in both public and private facilities.<sup>6</sup> But in many high-burden countries the majority of the missing people with TB are likely to seek treatment from private providers at one or more points in their care seeking – and this private provider role is particularly critical in the countries at the very top of the high burden list.

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6 For a summary of the missed case finding opportunities at different stages of the patient journey, see Wells WA. Onions and prevalence surveys: how to analyze and quantify tuberculosis case-finding gaps. *Int J Tuberc Lung Dis.* 2017 Nov 1;21(11):1101–1113



**Table 2. Basic data on TB, private providers and health finance, 10 countries with highest TB incidence, 2019**

Country	Notifications from private for-profit providers										Private provider role			Health finance			
	Population (millions)	Incidence rate per 100 000	Incidence (thousands)	Notifications (new and relapse, thousands)	Treatment coverage	Mis-sing cases (thousands)	% of global mis-sing cases	MDR cases (thousands)	Number per year (all cases)	Per 100K population	% of estimated incidence	% of all TB notifications	% of initial care seeking	Per prevalence survey	Private TB drug sales market share	Private % of total health expenditure	% of available NTP budget from external
India	1,370	193	2,640	2,162	82%	478	16.5%	124.0	680,948	50	26%	31%	74%	46%	54%	72%	15%
Indonesia	271	312	845	562	67%	283	9.8%	24.0	107,640	40	13%	19%	74%	46%	51%	51%	62%
China	1,430	58	833	728	87%	105	3.6%	65.0							43%	0%	
Philippines	108	554	599	409	68%	190	6.5%	21.0	131,096	121	22%	32%	70%	21%	43%	65%	37%
Pakistan	217	263	570	328	58%	242	8.3%	25.0	94,819	44	17%	29%	85%		45%	67%	94%
Nigeria	201	219	440	117	27%	323	11.1%	21.0	17,250	9	4%	15%	67%	22%		78%	77%
Bangladesh	163	221	361	292	81%	69	2.4%	3.3	79,990	49	22%	27%	84%	30%		77%	70%
South Africa	59	615	360	210	58%	150	5.2%	14.0					30%	15%	44%	23%	
Democratic Republic of the Congo	87	320	278	179	64%	99	3.4%	6.5					43%		48%	97%	
Myanmar	54	322	174	135	77%	39	1.4%	10.0	18,432	34	11%	14%	78%	38%	76%	93%	

Sources: WHO Global TB report (2020) except: private for-profit notifications from each NTP; % of initial care seeking from DHS surveys and TB prevalence Surveys; 2017 private health expenditure from WHO global health expenditure database; drug sales market data from Malhotra et al (2018)

As Table 2 indicates, dominant and largely unregulated private health sectors are characteristic of seven of the top 10 countries ranked by TB incidence (the exceptions being China, South Africa and Democratic Republic of the Congo). In these seven countries, home to 57% of global TB incidence and over 56% of the missing people with TB:

- Private providers are the destination for an average of 76% (range: 67–85%) of initial care-seeking;
- Private expenditure represents 51–78% of total expenditure on health;
- Private markets deliver 15–54% of total anti-TB drugs;
- Yet private for-profit notifications represent just an average of 28% (range: 14–32%) of total notifications and 20% (range: 4–26%) of estimated incidence.

While there are often concerns about quality of care in public facilities, there is also increasing evidence that quality of TB care in the private sector falls short of international standards in many places and urgently needs improvement.<sup>7</sup> The evidence comes from systematic reviews on the quality of TB care or surrogates of quality (e.g. TB diagnostic delays), analyses of TB care cascades, and newer simulated patient studies that directly measure quality of TB care. Specific issues identified include:

- Low rates of TB testing by private providers, even when patients present with typical TB symptoms;
- Low rates of referral to the national TB program, even when patients present with typical TB symptoms;
- Private providers prefer to empirically manage with antibiotics and order tests later, resulting in multiple rounds of broad-spectrum antibiotics and other non-specific therapies, multiple patient visits and providers seen, and diagnostic delays;
- Chest x-rays are the preferred tests for TB; sputum tests such as smear microscopy or GeneXpert or cultures are rarely used;
- Use of drug susceptibility testing (DST) in the private sector is very low, even among patients with history of anti-TB therapy;
- What providers know and what they do in practice are often very different ('know-do gap');
- Limited capacity to support patients with adherence and treatment completion;
- High costs of care, with 50% of the total costs incurred before TB is diagnosed.

There is very wide variation in the quality of TB-related care amongst private providers, and some of it of course is very good. It should also be acknowledged that practices common amongst private providers have sometimes become more accepted by public programmes, such as chest radiography as a screening tool or, in India, daily regimens with fixed dose combinations. Table 4, below, shows the proportion of 'correct management'<sup>8</sup> of simulated patients with classic TB symptoms by private (non-NTP) providers in three countries, using the same standardized patient cases.

**Table 3. Proportion of patients with TB symptoms who are correctly managed or referred by private providers, according to Standardized Patient studies**

Location	% correctly managed	% referred	Reference
Mumbai, India	37%	15%	Kwan A et al
Patna, India	33%	10%	
Nairobi, Kenya	33%, private for-profit 40%, private FBO	4%, for profit 10%, FBO	Daniels B, et al.
3 provinces in China – village and township clinics	28%, village clinics 38%, township clinics	28%, village clinics 18%, township clinics	Sylvia S et al.
2 provinces in South Africa	63.41%	56.95%	Boffa J et al

7 Special thanks to Madhu Pai for the section on quality of private TB care

8 For patients with symptoms indicating presumptive TB, correct management included recommendation of sputum testing or chest radiograph or referral to a public DOTS center; for patients with evidence of microbiologically confirmed TB, referral or initiation of treatment with a standard, four-drug, first-line therapy; for suspicion of drug resistance, referral or recommendation of drug susceptibility test.

Whereas DHS and TB prevalence surveys provide data on the role of un-engaged private providers in initial consultations, data on their role in TB treatment is scarce. In recent years, attempts have been made to analyze data on private sector sales of anti-TB drugs in 10 high-burden countries for which such data are available (Table 4). There are considerable methodological challenges in converting sales units to number of patients who were, or could be, treated. Data suggest that private TB drug sales represent more than half of all TB drugs distributed in India and Indonesia, and between one third and one half in the Russian Federation, the Philippines and Pakistan. The private TB drug sales in India alone represent more than 60% of total private TB drug sales in these 10 countries. Private retail channels are relevant but less important in China, Bangladesh, Thailand, and Viet Nam (with a large decrease in private sector volume in Bangladesh from 2003–2008). Private retail sales seem to be of little significance in South Africa and in Brazil; the latter country was not included in these analyses and is an exception in that private TB drug sales are effectively prohibited by the regulatory authorities. TB drug sales data are not yet available for Nigeria, where a TB prevalence survey found 20% of cases were being treated in the private sector, or Myanmar, where a prevalence survey found 38% private treatment.

**Table 4. Estimates of annual first line treatment course-equivalents sold through non-NTP channels and the percent of total market (private sales plus NTP notifications) that they represent**

Source	Wells et al (2011)		Malhotra et al (2018) (18)	
Country	Data from 2008		Data from 2015	
India	2 320 110	64%	2 069 667	54%
Indonesia	498 487	63%	347 244	51%
Pakistan	265 850	52%	272 135	45%
South Africa	14 310	4%	52 978*	15%
Bangladesh	25 200	14%	n/a	n/a
China	299 230	23%	n/a	n/a
Thailand	15 640	22%	12 507	15%
Philippines	221 220	61%	217 925	43%
Viet Nam	12 250	11%	11 266	10%
Russian Federation	19 630	13%	72 556	36%

\* Estimate excludes INH because of the large volumes believed to be used in preventive therapy

The data on missing people with TB and private TB drug sales suggest that a failure to effectively engage private providers may not be the main constraint to TB care in some countries, notably South Africa, China, Ethiopia and Zambia. Ethiopia and Zambia have dominant public sector health systems, although Ethiopia's private sector is growing along with urbanization.<sup>9</sup> South Africa has a polarized health system in which a strong private sector serves a minority and the majority of the population is served by a strong public health infrastructure; the principal challenge for the TB programme is to reduce delays and losses within the public system. China is a special case: it has made considerable progress in reducing the burdens of TB, with publicly owned hospitals that act like private providers.

## Published evidence of effectiveness of private provider engagement in tuberculosis care

Table 5 suggests that the literature on public-private mix has increased considerably over the last few years, but it remains dominated by evidence from India. A systematic review of literature published

9 The private sector accounts for only about 25% of primary care in Ethiopia but employs 55% of the country's general practitioners, 65% of specialists, and 79% of laboratory technicians. These figures represent a significant increase over the past five years; growth has been greatest in cities and larger towns. Private providers contribute up to 30% of TB notifications in these urban areas

through May 2014 included 78 studies of 48 programmes in 16 countries (2). A rapid review of articles that were published after 2014 until October 2020 identified 137 articles about engagement of private sector for tuberculosis care across 27 countries.

**Table 5. Location of PPM studies in peer-reviewed literature**

<b>Countries</b>	<b>Lonroth 2004</b>	<b>Lonroth 2006</b>	<b>Dewan 2006</b>	<b>Malmberg 2011</b>	<b>Lei 2015 (2)</b>	<b>Konduri 2017</b>	<b>Klinton 2020</b>
Afghanistan						2	2
Iran (Islamic Republic of)							1
India	2	5	24	8	12	14	48
Nepal		1		1	3		1
Bangladesh		2		1	4	5	3
Pakistan				1	4		16
Thailand						1	
Indonesia		1		3	6		5
Myanmar		3		2	3	5	6
Viet Nam	1	1		1	1	2	4
Cambodia					1	6	4
Lao People's Democratic Republic						1	
Philippines		1		1	1	3	5
China					2		
Japan							1
Republic of Korea					2		3
<b>Subtotal Asia</b>	<b>3</b>	<b>14</b>	<b>24</b>	<b>18</b>	<b>39</b>	<b>37</b>	<b>99</b>
Egypt				1			
South Africa				1	2		1
Ghana						2	1
Gambia							1
Ethiopia							5
Zambia							1
Burkina Faso						1	
United Republic of Tanzania						3	1
Nigeria				1	2		6
Zimbabwe							1
Uganda							2
Kenya	1	1		1		2	6
<b>Subtotal Africa</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>8</b>	<b>25</b>
United States of America					4		1
Dominican Republic						1	
Bolivia (Plurinational State of)					1	1	
Brazil							1
<b>Subtotal Americas</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>2</b>



Countries	Lonnoth	Lonnoth	Dewan	Malmberg	Lei	Konduri	Klinton
	2004						
Australia							1
Republic of Moldova							1
<b>Subtotal Other regions</b>							<b>2</b>
<b>Countries</b>	4	8	1	12	15	15	27
<b>Projects</b>	4	15	24	22	48	47	132
<b>Studies</b>	4	20	14	45	78	77	137
Dewan(2006) was confined to India. Konduri (2017) was confined to drug sellers. PPM projects include NGOs and corporations as well as for-profit healthcare providers							

Evidence on the effectiveness of PPM was strengthened by three studies in 2006:

- A review of small pilot projects in India found that 27% of new smear-positive patients were attributable to private practitioners in 7 projects, while outcomes for privately-treated patients in 12 projects exceeded the program target of 85% treatment success; the projects were all small.
- A review of data from 15 public-private mix projects in 8 countries found a treatment success rate of 89.6% for new smear positive cases and an increase in case detection of between 10% and 36% over periods ranging from 9 months to 3 years.
- An economic analysis compared costs and cost-effectiveness of two pilot PPM projects in India with public sector treatment provision and non-DOTS treatment in the private sector. The average cost-effectiveness of PPM and public sector treatment was similar and roughly half that of treatment in the private sector.

In 2011, a systematic assessment of public-private mix for TB prevention and care identified 45 studies documenting 22 projects in 12 countries. The authors concluded: "PPM has improved case detection and treatment outcomes among patients seeking care with private providers. Evidence on reducing patient costs is inconclusive, and there is scope for increasing equity in access to care by systematically engaging those providers who are the primary agents for poor people seeking healthcare".

## Evolution of WHO guidance

The strategic approach to TB prevention and care from 1994 through at least 2006, DOTS, comprised five core elements: (i) political commitment and sustained financing; (ii) case detection through quality-assured bacteriology; (iii) standardized short-course chemotherapy, mostly under supervision; (iv) effective drug supply chain management; and (v) standardized monitoring and evaluation. It was essentially a public sector strategy in which the overwhelming task was for national TB programmes to adopt the strategy and mobilize the human and financial resources to progressively implement it throughout each country, which was largely achieved by 2006.

In 1998, the WHO TB department appointed a Medical Officer to focus on public-private mix. In 1999–2000, WHO conducted an assessment of private provider engagement in 23 countries and used it as a basis for the first guidance on public-private mix. It remains an outstanding summary of the importance of engaging private providers, the challenges and essential approaches. Since then, WHO has published a further twelve guidance documents and tools (Table 6).

In 2002, NTPs were asked to report whether they had a strategy for engaging private providers: only 4/22<sup>10</sup> countries reported that they did. For the 2003 global report, NTPs were asked to identify

<sup>10</sup> India, Kenya, South Africa and Pakistan

the main constraints to DOTS expansion: “non-compliance of private providers” was ranked second, after insufficient human resources.

By the 2005 WHO report, however, engaging private providers did not even feature amongst the 10 main constraints to DOTS expansion as identified by the NTPs. PPM, as one of the “additional strategies for DOTS expansion”, had been expanded to embrace public-public as well as public-private mix.

This articulation was adopted in the Stop TB Strategy, 2006–2015, in which “*engaging all care providers*” was number four of six components. This strategic emphasis pushed forward WHO’s normative work on PPM with several guidance documents and tools developed, including on monitoring and evaluation. However, uptake of these tools, including on performance monitoring, has been slow at country level due to lack of prioritization.

In 2009, WHO urged countries to report on PPM indicators, through the annual data collection form for the Global TB Report. This data was reported for the first time in the 2010 Global TB Report, with a single number covering contributions from all providers (non-NTP public providers, private not-for-profit providers, and private for-profit providers). Public and private provider contributions were disaggregated starting with the 2012 report (for 25 reporting countries), but the second number – the private provider contribution – was not disaggregated between non-profit and for-profit private providers.

In 2010, an extensive toolkit with detailed guidance on engaging different types of care providers was released and promoted. The 2020 Global TB Report provided an analysis of PPM contribution trends in the “Big 7” priority countries. However, reporting on private sector notifications from countries continues to combine non-profit and for-profit private providers in a single category.

**Table 6: WHO Guidance on PPM**

Year	Title	WHO Ref	Link
2001	Involving private providers in TB control: issues, interventions and emerging policy framework	WHO/CDS/TB/2001.285	<a href="http://www.who.int/tb/publications/private-practitioners-control/en/">http://www.who.int/tb/publications/private-practitioners-control/en/</a>
2003	PPM for DOTS: practical tools to help implementation	WHO/HTM/TB/2003.325	<a href="http://www.who.int/tb/publications/ppm-implementation-tool/en/">http://www.who.int/tb/publications/ppm-implementation-tool/en/</a>
2006	Engaging all health-care providers in TB control: guidance on implementing public-private mix approaches	WHO/HTM/TB/2006.360	<a href="http://www.who.int/tb/publications/2006/who_htm_tb_2006_360/en/">http://www.who.int/tb/publications/2006/who_htm_tb_2006_360/en/</a>
2007	A tool for national situation assessment: public-private mix for TB care and control	WHO/HTM/TB/2007.391	<a href="http://www.who.int/tb/publications/who_htm_tb_2007_391/en/">http://www.who.int/tb/publications/who_htm_tb_2007_391/en/</a>
2008	Promoting the implementation of collaborative TB/HIV activities through public-private mix and partnerships	WHO/HTM/TB/2008.408	<a href="http://www.who.int/tb/publications/tb-public-private/en/">http://www.who.int/tb/publications/tb-public-private/en/</a>
2010	Public-private mix for TB care and control: a toolkit	WHO/HTM/TB/2010.12	<a href="http://www.who.int/tb/publications/tb-publicprivate-toolkit/en/">http://www.who.int/tb/publications/tb-publicprivate-toolkit/en/</a>
2015	A situation assessment tool to engage all relevant care providers in drug-resistant TB (DR-TB) management at country level	WHO/HTM/TB/2015.17	<a href="http://www.who.int/tb/publications/situation-assessment-tool-provider-engagement-drtb/en/">http://www.who.int/tb/publications/situation-assessment-tool-provider-engagement-drtb/en/</a>
2015	Implementing the End TB Strategy: The essentials (pp 66–78)	WHO/HTM/TB/2015.31	<a href="http://www.who.int/tb/publications/2015/end_tb_essential.pdf">http://www.who.int/tb/publications/2015/end_tb_essential.pdf</a>
2015	Framework for the engagement of all health care providers in the management of drug resistant tuberculosis	WHO/HTM/TB/2015.04	<a href="http://www.who.int/tb/publications/public-private-mix-drug-resistant-tb/en/">http://www.who.int/tb/publications/public-private-mix-drug-resistant-tb/en/</a>



Year	Title	WHO Ref	Link
2015	Best practices in engagement of all health-care providers in the management of drug-resistant TB	WHO/HTM/TB/2015.24	<a href="http://www.who.int/tb/publications/best-practices-provider-engagement-drtb/en/">http://www.who.int/tb/publications/best-practices-provider-engagement-drtb/en/</a>
2017	Guide to develop a national action plan on public-private mix for tuberculosis prevention and care	Published jointly with USAID	<a href="http://www.who.int/tb/publications/2017/PPMAActionPlanGuide/en/">http://www.who.int/tb/publications/2017/PPMAActionPlanGuide/en/</a>
2018	Public-private mix for TB prevention and care: a roadmap	WHO/CDS/TB/2018.32	<a href="http://www.who.int/tb/publications/2018/PPMRoadmap">http://www.who.int/tb/publications/2018/PPMRoadmap</a>
2018	Engaging private health care providers in TB care and prevention: a landscape analysis	WHO/CDS/TB/2018.33	<a href="https://www.who.int/tb/publications/2018/PPMLandscapeAnalysis">https://www.who.int/tb/publications/2018/PPMLandscapeAnalysis</a>

In the WHO End TB Strategy, engagement of private providers is combined with that of civil society organizations and “communities”, as well as public non-NTP providers, as the 2nd component of the pillar “Bold policies and supportive systems”. PPM is one of 41 “key actions”. Given the broad agenda of the End TB Strategy, it is critical to ensure private provider engagement is prioritized, given that action in this area will drive success in reaching the targets under Pillar 1- “Integrated, patient-centered TB care and prevention” to ensure universal and early access to quality diagnosis and care. The Global Plan to End TB describes investment packages for 9 different “country settings”. Private provider engagement is one of 13 proposed investments for India (country setting number 7) and is the focus of setting number 5 (“high to moderate burden of TB with a large proportion in private care”), which includes south-east Asian countries but not Nigeria or other African countries.

In 2018 the UN general assembly held its first high-level meeting focused on TB, at which countries reaffirmed their commitments to ending TB. That year, WHO published the first edition of this Landscape Analysis, along with the Roadmap. In 2020, the UN Secretary General progress report developed with WHO support, noted the continuing need to “scale up engagement and leverage the capacity of private and other unlinked public health care providers in the delivery of TB prevention, diagnosis and care services to reach the missing people with TB, including children, especially in countries with a large private sector”.

One of the main ways in which WHO has contributed to this agenda is by hosting the Public Private Mix Working Group of the Stop TB Partnership. Since 2002, 15 global meetings have been organized. The meetings have served to advocate for PPM engagement, facilitating linkages and support amongst champions in this area, educating new NTP managers in this technical area that is unfamiliar to most, and contributing towards documentation and sharing of best practices. Efforts have been made to mobilize support by inviting NTP managers, staff of the Global Fund, and United States Agency for International Development (USAID), and WHO advisors to attend and present.

## Status of private provider engagement in high-burden countries

Data on private provider engagement for TB is weak (see section above on PPM indicators), which is itself a sure indication of the low priority accorded to this work. WHO began requesting data on PPM case notifications in the annual report from national TB programmes from 2009, but some countries still fail to provide it because their own data systems do not disaggregate notifications in this way. Data is inconsistent: it sometimes includes public-public mix as well as public-private mix; it often includes only notifications of private treatment but not private provider referrals; and it is often no possible to distinguish contributions from for-profit and non-profit providers.

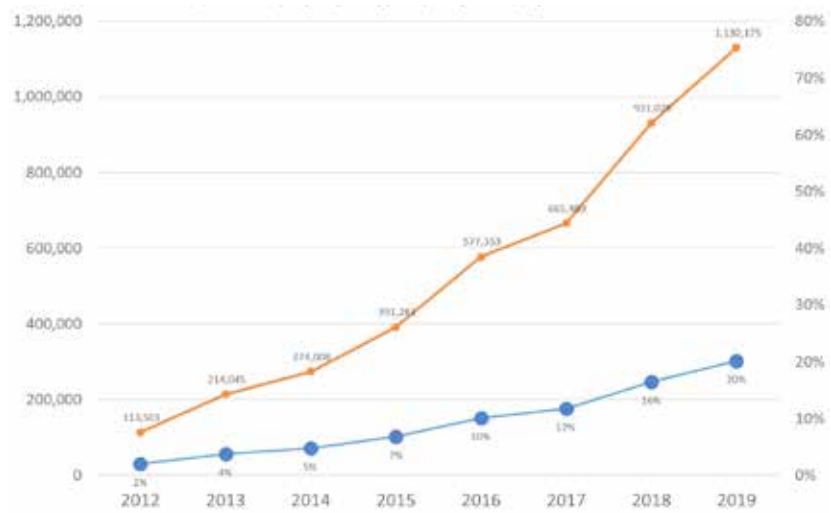
It would be easier to promote a standardized collection of data on private providers if the priority of this work was equally high in all countries. In the short term, promoting such data disaggregation in a more



limited group of countries with an undeniably high potential yield from private providers may be a more practical objective. While there has been progress in private provider engagement for TB in some countries, others have not even begun, and all could do much more. Much of the experience has been in Asian countries with very large and developed private health sectors such as Bangladesh, India, Indonesia, Myanmar, Pakistan and the Philippines. Despite some interesting examples in Ethiopia, Kenya and United Republic of Tanzania, efforts in Africa have generally lacked scale.

The reported number of private provider notifications in the seven of the 10 highest burden countries with large private sectors increased ten-fold from 2012 to 2019, from 113,000 to 1,130,175 and from 2% to 20% of estimated incidence in those countries (Figure 2). India has by far the largest number of TB cases notified by private providers (680,948 in 2019). India, Pakistan and Bangladesh together account for 80% of the latest data on private provider case notification. India, Indonesia and Pakistan seem to be the only countries in which this number is increasing significantly. Private notifications in Myanmar remain significant but have been declining steadily throughout this period. Nigeria lags far behind the other countries considered here.

**FIGURE 2. PRIVATE PROVIDER NOTIFICATIONS: NUMBER AND PERCENT OF INCIDENCE; 2012-2019. TOTAL OF INDIA, INDONESIA, NIGERIA, PHILIPPINES, BANGLADESH, MYANMAR AND PAKISTAN**



There are several ways to put these numbers in perspective:

- Per capita, private provider engagement has been most effective in the Philippines, Pakistan and Bangladesh, with private provider notifications at 40-50 per 100 000 population.
- As a fraction of total case notification, private provider contributions have been most important in Bangladesh (consistently around 30%). However, in 2019, this fraction increased in Philippines (32%), India (31%) and Pakistan (29%).
- Relative to estimated incidence, private provider notifications are highest in India (26%), followed by Philippines (22%) and Bangladesh (22%).
- The gap between the proportion of incident TB cases notified by private providers and their share of initial care-seeking for childhood illness is between 60 and 70 percentage points in all the countries under consideration.
- The data for Bangladesh refer to referrals from private providers, whereas for the other countries these private notifications are largely also managed by private providers.
- In Pakistan, Myanmar and Indonesia, most of the privately-notified patients receive publicly-funded TB drugs, diagnostics and adherence support, whereas recent increases in private notifications in India and the Philippines have not always been accompanied by service provision.<sup>11</sup>

11 Presentations by Guy Stallworthy at 14th and 15th PPM Working Group Meetings 2019 and 2020

### Data on For-Profit Provider Notifications

For this report, a special effort was made, working with NTPs and their partners, to disaggregate data on the contribution of for-profit private providers from that of NGOs/FBOs and others. Note that these numbers often differ from those in WHO Global TB Reports for several reasons: reports to WHO include notifications from private non-profit and faith-based organizations, and sometimes community-based organizations; data available for this analysis is typically for total notifications, whereas data in WHO global reports often include new and relapse cases only; and NTPs sometimes revise their data after sending annual reports to WHO.

Data in this report for India is from annual RNTCP Status Reports using the Nikshay system, which attributes each notification to public or private providers and distinguishes the latter amongst hospitals, stand-alone providers and laboratories. It may include data from some non-profit facilities, but these are thought to be few in number. Bangladesh and Pakistan have particularly rich data, collected consistently over several years. For Bangladesh, this analysis includes contributions from private hospitals, independent graduate providers, non-graduate providers and Village Doctors. For Pakistan, data here includes notifications under schemes PPM1 (private GPs) and PPM3 (private hospitals). For Myanmar, the data includes notifications from PSI and the Myanmar Medical Association; there is no procedure for acknowledging private contributions independent of these two main intermediary organizations. For Indonesia, the SITTT data includes notifications from private hospitals, private clinics (or group practices) and independent private doctors; contributions from FBO/NGO are included in the public provider data. In the Philippines, since 2015 the ITIS system has distinguished notifications from private providers and "community" sources. In Nigeria, notification data at the district level typically identifies the contributing provider and type, distinguishing private for-profit from private FBO, but these distinctions have been imperfectly aggregated at the national level. The analysis presented here benefits from considerable effort that was made to improve the quality of data for recent years in preparing the PPM Action Plan in 2017 and the Global Fund application in 2018.

**Table 7. Private for-profit TB notifications in selected high-burden countries, 2012–2019**

Country	2012	2013	2014	2015	2016	2017	2018	2019
<b>Private for-profit notifications</b>								
India	3 547	38 596	106 414	184 802	330 186	383 784	542 233	680 948
Indonesia	5 432	26 345	28 186	31 002	38 334	59 549	101 839	107 640
Philippines	19 946	19 946	n/a	41 977	53 394	52 375	94 163	131 096
Pakistan	n/a	31 400	38 000	36 817	66 103	79 332	86 402	18 432
Nigeria	8 121	12 995	13 031	13 088	3 975	4 968	12 625	18 432
Bangladesh	49 576	59 964	65 239	62 279	65 651	67 332	74 524	18 432
Myanmar	26 879	24 799	23 138	21 316	19 710	18 149	19 242	18 432
<b>Total</b>	<b>113 487</b>	<b>260 888</b>	<b>362 586</b>	<b>391 281</b>	<b>577 353</b>	<b>665 489</b>	<b>931 028</b>	<b>1,130,175</b>
<b>Private for-profit notifications as a percentage of total notifications</b>								
India	0%	3%	7%	13%	19%	21%	28%	31%
Indonesia	2%	8%	9%	9%	11%	13%	18%	19%
Philippines	9%	9%	n/a	15%	16%	17%	25%	32%
Pakistan	n/a	11%	12%	11%	19%	22%	24%	29%
Nigeria	9%	14%	15%	15%	4%	5%	12%	15%

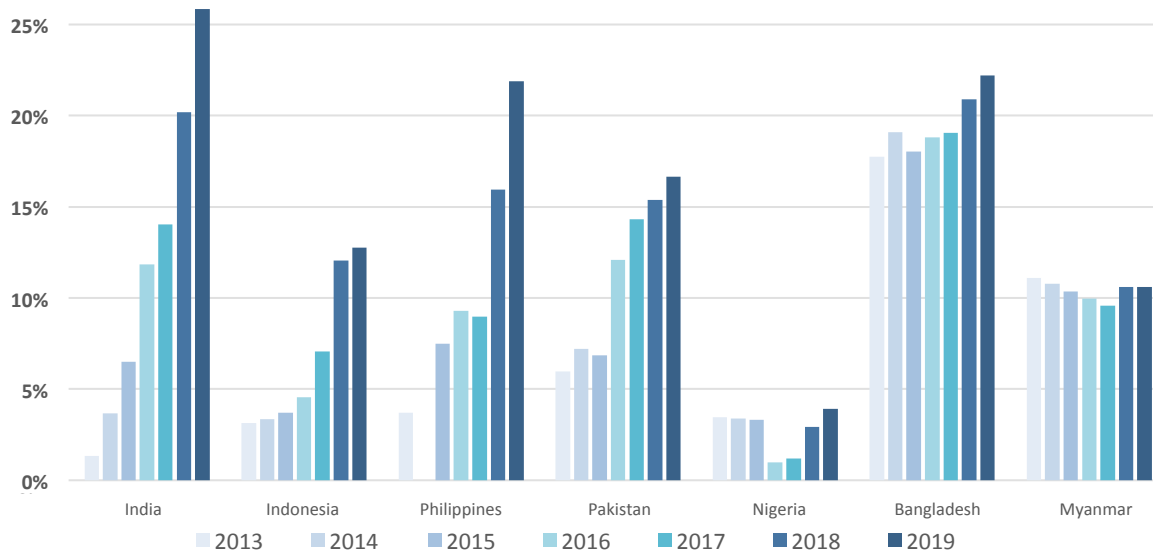


Country	2012	2013	2014	2015	2016	2017	2018	2019
Bangladesh	29%	32%	34%	30%	30%	28%	28%	27%
Myanmar	18%	17%	16%	15%	14%	14%	14%	14%
<b>Total</b>	<b>4%</b>	<b>8%</b>	<b>10%</b>	<b>14%</b>	<b>18%</b>	<b>19%</b>	<b>25%</b>	<b>28%</b>
<b>Private for-profit notifications as a percentage of estimated incidence</b>								
India	0%	1%	4%	7%	12%	14%	20%	26%
Indonesia	1%	3%	3%	4%	5%	7%	12%	13%
Philippines	4%	4%	n/a	7%	9%	9%	16%	22%
Pakistan	n/a	6%	8%	7%	13%	15%	15%	17%
Nigeria	2%	3%	3%	3%	1%	1%	3%	4%
Bangladesh	14%	17%	18%	17%	18%	18%	21%	22%
Myanmar	14%	13%	12%	11%	10%	10%	11%	11%
<b>Total</b>	<b>2%</b>	<b>4%</b>	<b>5%</b>	<b>7%</b>	<b>10%</b>	<b>12%</b>	<b>16%</b>	<b>20%</b>

Source: WHO, NTPs (see Box page 13); incidence estimates from WHO

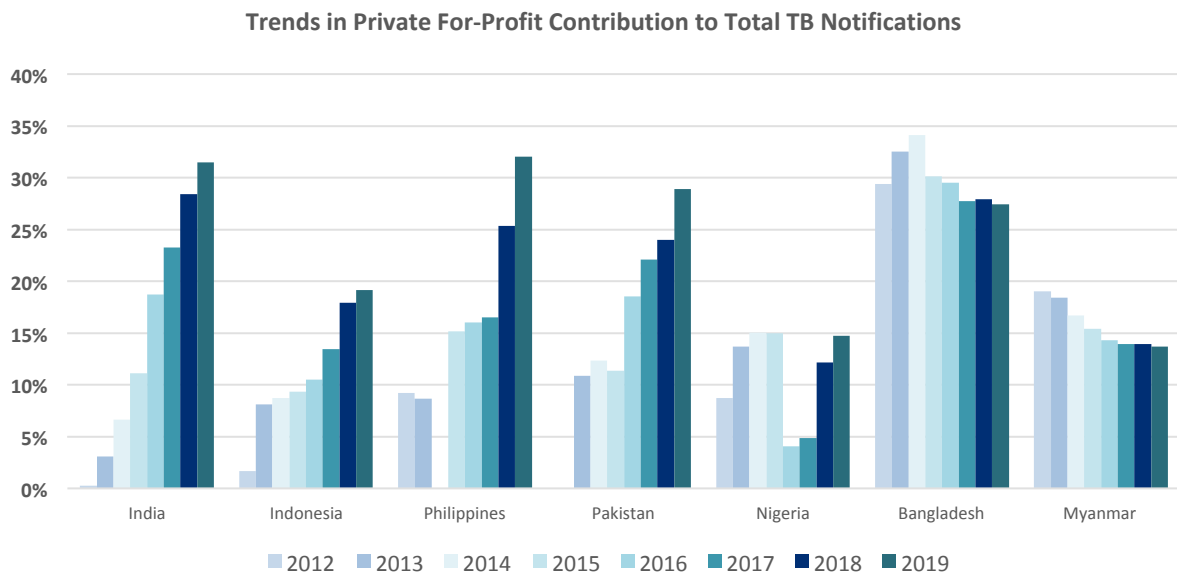
Figures 3 and 4 show recent trends in private provider notifications, expressed as a proportion of estimated incidence and as a proportion of total TB notifications, respectively for seven of the highest-burden countries in which more than two thirds of patient care-seeking behavior is with private providers.

**FIGURE 3. PRIVATE FOR-PROFIT TB NOTIFICATIONS 2012-19 AS A PERCENTAGE OF ESTIMATED INCIDENCE**



Source: Authors' analysis of NTP notification data; WHO incidence estimates

**FIGURE 4. PRIVATE FOR-PROFIT TB NOTIFICATIONS 2012-19 AS A PERCENTAGE OF TOTAL TB NOTIFICATIONS**



Source: Authors' analysis of NTP notification data; WHO incidence estimates

## PPM Roadmap

In 2018, WHO, the Public-Private Mix Working Group of the Stop TB Partnership, and global partners released a Roadmap to scale up the engagement of public and private health care providers in efforts to end TB. It identified clear actions needed to expand the engagement of all care providers towards universal access to care, building on a Landscape Analysis of the private health sector on TB that was also simultaneously released. In 2019 and 2020, over 20 countries were successfully implementing the PPM Roadmap.

The 10 key actions outlined in the roadmap that are required to scale up the engagement of all care providers towards universal access to care. NTPs and their partners, in collaboration with the private sector, include:

	<b>Build</b> understanding about patient preferences, private sector dynamics and the rationale for engaging all providers		<b>Establish</b> a supportive policy and regulatory framework
	<b>Set</b> appropriately ambitious PPM targets		<b>Adapt</b> flexible models of engagement applicable to local contexts
	<b>Advocate</b> for political commitment, action and investment in PPM		<b>Harness</b> the power of digital technologies
	<b>Allocate</b> adequate funding for engaging all providers, including by capitalizing on financing reforms for Universal Health Coverage		<b>Deliver</b> a range of financial and non-financial incentives and enablers
	<b>Partner</b> with and build the capacity of intermediaries and key stakeholders		<b>Monitor</b> progress and build accountability

The 10 priority actions have been included in national TB strategic plans and Global Fund proposals including through the Global Fund Strategic Initiative.

## TBPPM Learning Network

The TBPPM Learning Network<sup>12</sup> was launched in October 2019 to create, nurture and maintain a dynamic south-to-south exchange of expertise. It is an online platform designed to accelerate uptake of what works and thereby close the know-do gap in the area of private provider engagement in TB. The community rapidly grew to 1300 members in its first year. It offers a variety of resources, learning and interaction tools, including monthly webinars, feature stories from the frontline, and discussion forums. In a survey conducted in October 2020, 78% of community members stated that the Learning Network was worth their time. According to this survey, the most useful component of the online platform were the resources (92%) followed by feature stories, webinars and events. Survey respondents also indicated to have learned most about the practical steps to engage the private sector ('implementation of the PPM Roadmap') and about COVID-19, the first being a key objective of the Learning Network and the second being a rising need during the year.

The network has been instrumental in offering a platform for the larger TB community during the COVID-19 pandemic through informative webinars, dissemination of vital resources on TB and COVID-19, an online tool to track the impact of COVID-19 on the TB services<sup>13</sup> and facilitating a community perspective on the impact of COVID-19 on TB<sup>14</sup>. In 2021, the TBPPM Learning Network will be developing stronger high TB burden country components (dashboards, in-depth practical knowledge tools, cross-country learning), including a separate chapter in India.

## PPM during COVID-19

The afore mentioned progresses in TB care that were observed after decades of work faced a huge challenge in 2020 due to the COVID-19 pandemic. Immediately following the first alarm-bells on COVID-19, it became clear that a secondary impact on morbidity and mortality could be expected due to TB service interruptions. Assessments and modelling studies (3,28,29) predicted that an additional 6.3 million people will develop TB by 2025 due to COVID-19 - related disruptions of TB services and an additional 1.4 million people will die of TB. Overall, it is clear that the pandemic puts progress made in the fight against HIV, TB, and malaria over the past two decades at serious risk. Over the months the fears were confirmed and the dire impact of COVID-19 on health systems at large was seen throughout the world in communities, healthcare workers, TB programs and research<sup>14</sup>. Measures taken by governments to mitigate the impact of COVID-19 such as lockdowns and travel restrictions combined with the impact on care seeking behavior resulted in a fall in the notification rate in both the public and private sector.

Though unprepared for this challenge public and private sectors found innovative ways to cope. Governments promoted combined screening for TB and COVID-19, facilitated patient support through community health workers and use of digital tools such as social media, telemedicine and video observed therapy. Private providers also responded to alleviate the impact of COVID-19 on TB services through innovative strategies, including courier services for diagnosis and sputum transport, digital and mobile screening, and digital reporting tools. These adaptations if sustained could improve TB care overall, and the increased political attention and investment in COVID-19 and health do offer opportunities for integrating TB services. However, the real impact of COVID-19 on availability, access, quality, and costs of TB services in the private sector remains to be evaluated.

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12 TBPPM Learning Network. See <https://www.tbppm.org/>.

13 TBPPM-COVID-19 tracker. See <https://www.tbppm.org/topics/17342/page/tbppm-covid-tracker>

14 The Impact of COVID-19 on the TB Epidemic: A Community Perspective. Available at <https://spark.adobe.com/page/xJ7pygvhrIAqW/>



# 2 ISSUES IN PRIVATE PROVIDER ENGAGEMENT FOR TB CARE

## Constraints to private provider engagement for TB

Given the importance of private providers for TB prevention and care, what explains the relative lack of engagement in most countries? There are many powerful constraints to private provider engagement for TB.

1. *Bias towards public provision:* Ministries of Health and most funding and technical agencies demonstrate a bias in favor of public provision of healthcare services, even though the most successful health systems (and virtually all health systems in high income countries) are characterized by a mixture of public and private providers. The underlying reasons for this bias may include ideology, mistrust, self-interest, lack of information and practicality (weak administrations may find it easier to establish under-performing public health services than to engage private providers). Ministries of Health in low-income countries generally have the skills to manage in a specific public sector environment. By contrast, governance of the private sector requires a very different skillset in indirect management and influence, which takes time to learn and develop. This bias is common in many health areas.
2. *Lack of funding for private provider engagement:* It is widely acknowledged that there is insufficient funding for health in low- and middle-income countries and that the proportion allocated to TB is less than its share of avoidable mortality and morbidity would indicate. These two factors are compounded by the bias towards public provision to result in resources for engaging private providers that are tiny relative to their importance. Even when plans are drawn up for engaging private providers, they are amongst the first to be cut in the face of competing priorities or budget shortfalls. Available external funding is also often not conducive to effective private provider engagement, either because it is short-term or because grant and contract mechanisms do not encourage innovation and adaptation. Meanwhile, it has been difficult or impossible to access domestic financing for private provider engagement in TB in high burden countries. There are several contributing reasons. NTPs typically lack the skills necessary to bid out and manage government service contracts, which would be needed to contract intermediaries using domestic funds. Furthermore, although it is already difficult to negotiate an increase in domestic financing for TB, such a negotiation is far easier when requesting the increase for procuring commodities, rather than for procuring an uncertain service contract for provider engagement.

### Constraints to private provider engagement for TB

1. Bias towards public provision
2. Insufficient funding
3. Lack of understanding of private healthcare markets
4. Entrenched approaches
5. Few champions or orchestrators of system transformation
6. Fragmentation of the private market
7. Weakness of key health systems
8. Shortage of experienced and qualified implementers
9. Few inspiring models at scale
10. Challenges specific to TB
11. Market forces
12. More attractive competing priorities



If the financing increase is instead required for more NTP staff to directly undertake private provider engagement, this runs up against rigid public sector staffing rules. (See discussion of funding, below.)

3. *Lack of understanding of private healthcare markets:* The lack of data on private healthcare markets is both a cause and a consequence of the bias towards public provision and the lack of funding for private sector approaches. Very few high burden countries maintain comprehensive registries of private healthcare providers (the lists that do exist are typically unreliable) and little is known about patterns of care-seeking, patient pathways, prices and margins, quality of care, willingness-to-pay, informal arrangements between providers, relationships between price and quality, etc. Some of these studies (such as those tracing patients from care seeking to treatment<sup>15</sup>) are inexpensive yet are not part of the expected data foundation for a TB program. USAID-funded Demographic and Health Surveys have long provided an indication of the importance of private markets in care-seeking for other health areas (childhood illnesses and family planning).<sup>16</sup> USAID has supported a number of private sector assessments but they have typically been focused on family planning or HIV. For TB, recent advances have included analysis of private drug sales data, demonstration of the applicability of the simulated patient methodology to TB, the use of TB inventory studies to detect sites of under-notification, and Patient Pathway Analyses.<sup>17</sup>
4. *Entrenched approaches:* Most TB programmes have prioritized the process of scaling up and fine-tuning TB care in the public sector. They have embraced evolution within that field, most notably adjusting operational approaches to address TB/HIV co-infection and MDR-TB, but they do not tend to look outside the TB field for inspiration. This has constrained adoption of digital technologies as well as engagement of private providers. Systematic engagement of private providers, on a scale commensurate with their role in health markets, is best understood as an example of a “disruptive innovation”. Serving large numbers of TB patients not reached by current programmes will require major changes in mission, attitudes, systems, technologies, skills, partnerships and overall business models.
5. *Few champions or orchestrators of systems transformation:* At the international level, there are only a few champions of private provider engagement for TB who are strategically placed to influence this agenda in multiple countries, and even fewer with the mandate to drive a flexible but long-term vision in a particular country. PPM is viewed as just one of many technical areas for TB practitioners, and thus competes with a long list of technical priority areas such as TB/HIV, MDR-TB, active case finding, contact investigation, pediatric TB, supply chain management, and monitoring and evaluation. Staffing of NTPs and international TB organizations reflects this division of tasks, thus leaving few if any individuals devoted to the complex, multi-disciplinary effort of engaging private providers through systems change.
6. *Fragmentation of the private market:* The proliferation of independent, owner-operated healthcare providers is a characteristic of middle-income countries, just as consolidation of healthcare providers in chains (of hospitals, labs, pharmacies) is a characteristic of advanced market economies. Consolidation facilitates engagement and regulation, as officials can negotiate with a smaller number of large companies that deploy standardized systems of quality assurance, motivated by brand stewardship, public relations and fear of liability. In the meantime, engagement of large numbers of private providers will require deployment and management of large field forces, although their effectiveness can be multiplied by Information and Communications Technologies (ICT) systems and strategic purchasing.<sup>18</sup>

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15 See Kapoor SK, Raman AV, Sachdeva KS, Satyanarayana S. How did the TB patients reach DOTS services in Delhi? A study of patient treatment seeking behavior. PLOS ONE 2012; 7: e42458; and use of the same methodology in Nigeria by Abimbola S, Ukwaja KN, Onyedum CC, Negin J, Jan S, Martiniuk AL. Transaction costs of access to health care: Implications of the care-seeking pathways of tuberculosis patients for health system governance in Nigeria. Glob Public Health. 2015 Oct; 10(9): 1060–77.

16 Demographic and Health Surveys. See <http://dhsprogram.com>

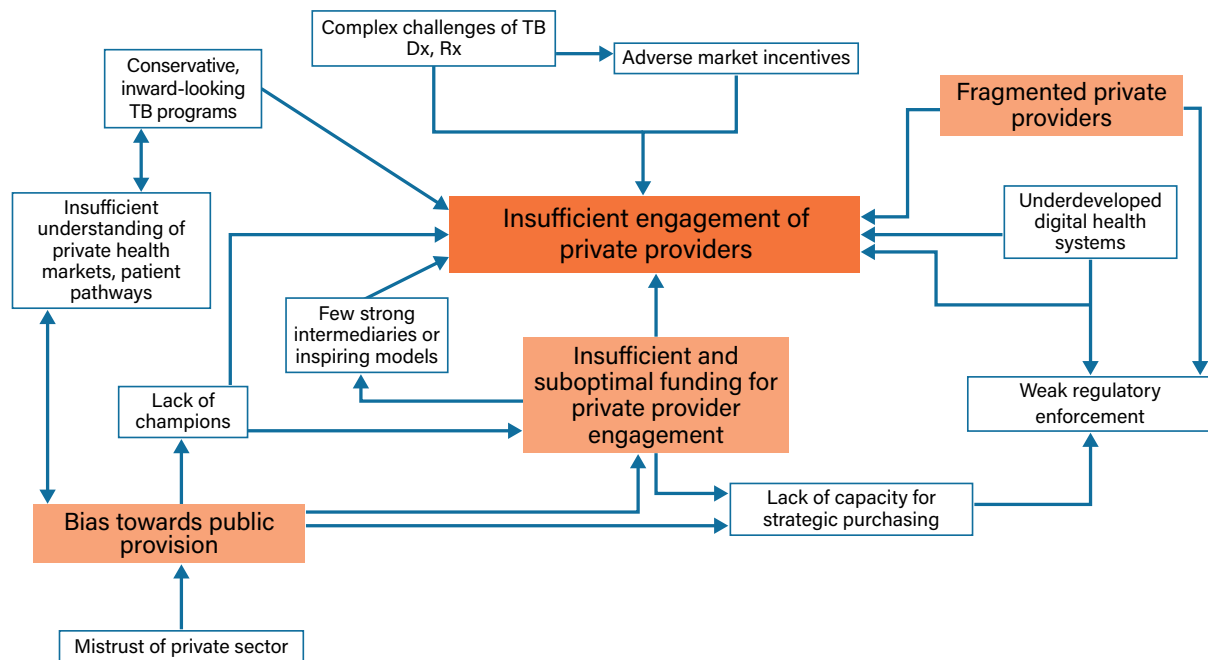
17 The problem of lack of information about private health sectors and their role in TB should not be over-stated or used as an excuse for inaction. The broad outlines of the role of private providers in TB, and in health in general, have been known since at least the 1990s, when countries such as Morocco and Korea demonstrated the benefits of engaging them for TB

18 “Shifting to more active or strategic purchasing involves linking the transfer of funds to providers, at least in part, to information on aspects of their performance or the health needs of the population they serve.”

7. *Weakness of key health systems:* The challenge of engaging private providers is compounded by the weakness of several health sub-systems in low- and middle-income countries, notably regulatory enforcement, strategic purchasing and information systems.
8. *Shortage of experienced and qualified implementers:* A direct consequence of the lack of funding for private provider engagement is the relative lack of intermediary organizations and policy advisors with skills and experience in this area. Associations of medical doctors, specialists and pharmacists are to be found in most countries, but while they can play an important communications role in raising awareness, they do not usually have the skills, human resources or financial and program management capacity for field operations at scale. Organizations with TB expertise often lack interest or capacity for private provider engagement, while social marketing organizations (DKT, Population Services International, MSI) are ubiquitous and strong at engaging private providers but usually focused on reproductive health. Many efforts to engage private providers have been undertaken by contractors who have mobilized to implement a time-bound project on behalf of a donor, in contrast with mission-driven organizations (such as BRAC and some PSI affiliates) that use donor projects as stepping stones towards a long-term vision to serve a particular population or area.
9. *Few inspiring models at scale.* For all the above reasons, there have not been many successful models of sustained implementation at a scale commensurate with the problem and the opportunity. The most promising exceptions are in Asia, in Bangladesh, Pakistan, Myanmar and (recently) India. Significant achievements in health systems that are now more developed and mature (e.g. Japan and Korea) deserve more attention so that other countries can draw upon their lessons in private engagement.
10. *Challenges specific to TB:* Engagement of private providers suffers from the same features of TB care that are challenging in public channels, such as: the lack of rapid, objective and accurate screening and diagnostic tools; the multiple categories of TB case; lack of consensus on treatment regimens; long duration of treatment; stigma; etc. Independent private providers particularly struggle with recording and reporting requirements, contact tracing and adherence support. In contrast, private provider engagement can be much simpler in areas such as family planning and malaria.
11. *Market forces:* In the absence of regulation and dominant public purchasing, competitive market forces work against good TB care. They discourage patient counselling, referral for diagnosis and compliance with long treatment regimens (especially as the patient feels better within a few weeks) while encouraging misuse of antibiotics, steroids and other therapies aimed at providing quick symptom relief. By comparison, market forces can be better aligned with appropriate care in family planning, management of simple diarrhea, malaria, etc.
12. *More attractive competing priorities:* The relative lack of attention to private provider engagement by national TB programmes is largely due to their public sector bias but can only be fully understood in the context of the other challenges that demanded greater attention over the last 20 years: roll-out of basic TB care in the public sector (including training and human resources management; supply chain logistics; and reporting, recording, monitoring and evaluation); development and roll-out of TB/HIV interventions; development and roll-out of highly complex responses to MDR-TB; adjusting to the changes in the donor environment such as the Global Fund, sector-wide approaches, and health systems strengthening agendas; attending to gender and rights agendas; and adopting new diagnostic and treatment tools. Faced with multiple challenges, people and organizations focus on what they know best and can control.

Figure 5 below illustrates the interactions between the main constraints. They are not all equally important, and their importance also varies over time. One could say that the underlying problem is that market dynamics are not conducive to good TB care. The next most important constraint is the bias towards public provision. If this is overcome, such that managers and funders are serious about engaging private providers and assuming responsibility for all TB patients in a country, the next most important constraint is the fragmentation of the private primary care sector. Given sufficient funding and commitment, this can be overcome by simultaneously addressing the remaining constraints, many of them related to strategic purchasing (see next section).

**FIGURE 5. CONSTRAINTS TO PPM**

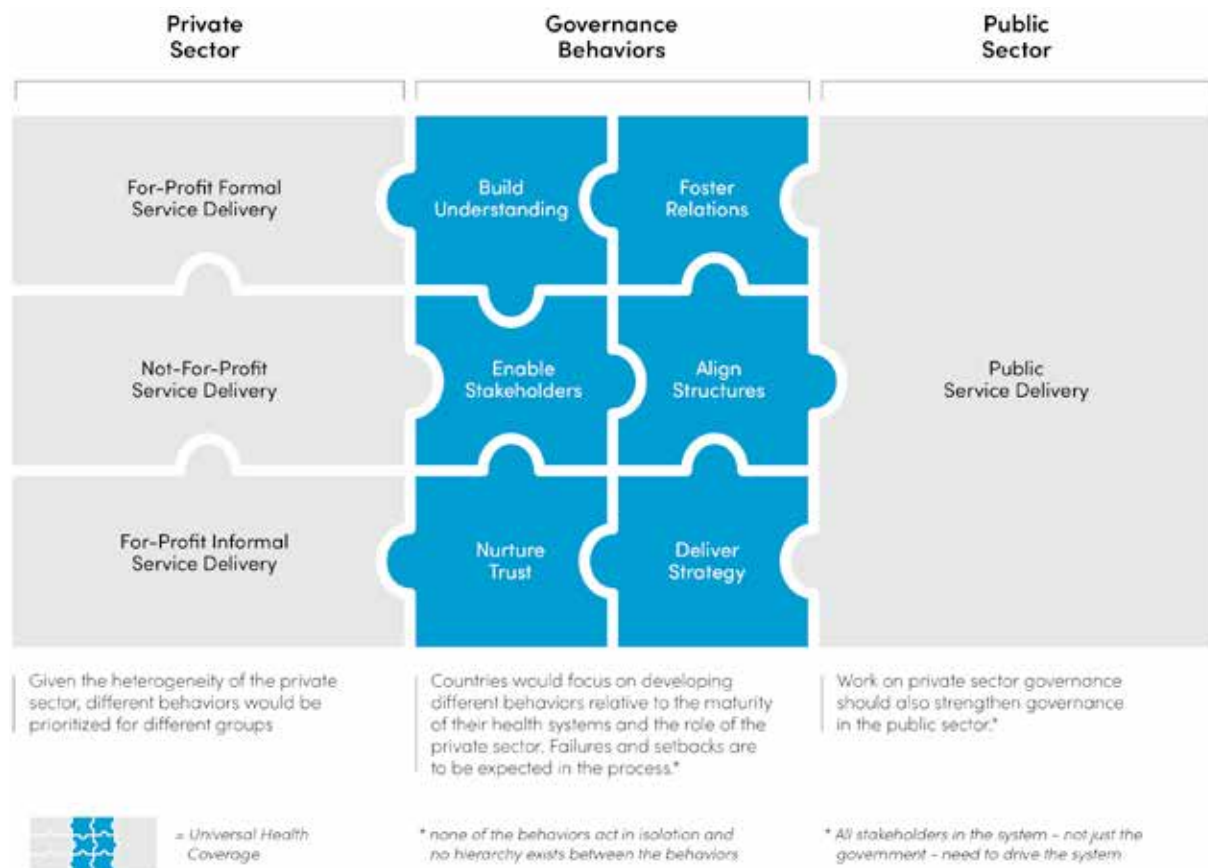


## Lessons from private provider engagement in other health areas

The department of health systems governance and financing (HSGF) of the WHO has been actively involved in supporting countries in achieving the UHC goals. In recent years, a major area of focus for the department has been the engagement of private health sector. In February 2019, an advisory group was convened with the primary goal of providing advice and recommendations on engaging the private health sector for service delivery. Based on their recommendations and a series of consultation with key stakeholders, a strategy document was developed<sup>19</sup>. The strategy outlines six governance behaviours that are critical to engage the private health sector (figure 6). During the same period, the HSGF also conducted a landscape analysis of private sector engagement in 18 low- and middle-income countries with high private sector utilization across six WHO regions and produced several key documents that stakeholders could utilize to gain understanding about the private health sector.

19 WHO Strategy "Engaging the private health service delivery sector through governance in mixed health systems" - Summary

**FIGURE 6. STRATEGY TO STRENGTHEN GOVERNANCE OF PRIVATE HEALTH SECTOR**



Other health areas have generated substantial experience with a variety of approaches to engaging private healthcare providers and markets to advance public policy goals. Approaches have included social marketing, contracting, franchising and other kinds of network development, accreditation, access to credit, training and continuing medical education. Clinical, social and market factors combine to create distinct challenges and opportunities for different kinds of health technologies in different contexts; given this variation, it is difficult to say whether other health areas are doing “better” or “worse” than TB in private provider engagement, but there are lessons to be learnt.

The health area for which private providers have been most engaged is family planning. Contraceptive social marketing began in India in the 1960s. By 1991 there were substantial programmes in 29 countries delivering 9 million Couple-Years of Protection (CYP); by 2019 programmes in 73 countries delivered 89.3m CYP. Family planning is not an infectious disease and there are no major diagnostic issues, so most of this work has been marketing of commodities. However, the field does include technologies with a substantial element of skilled provider service, and therefore a strong element of training and quality assurance, such as IUDs (3 million in 56 programmes in 2015), implants, sterilization (not included in the above statistics) and abortion. The “social enterprise model”, which seems innovative in TB, has been common in family planning for decades.<sup>20</sup>

Private channels are used very extensively for malaria diagnosis and treatment. The rapid test and short treatment for malaria simplifies diagnosis and treatment (compared to TB) but the concerns about drug resistance are similar to TB. Private providers are also engaged for diarrheal disease management (especially for ORS and zinc), although in this case the medical issues are even more basic. Private providers have not been used much for pneumonia, where diagnosis and case management challenges are arguably even more challenging than TB.

20 In 2016, the 164 member associations of the International Planned Parenthood Federation operated 27,860 clinics; Marie Stopes International operates more than 600 clinics in 37 countries. They cover all or a large part of their costs from user fees

EPI vaccines are a quintessential publicly-provided (command-and-control) health service, and yet even here for-profit providers deliver 17% of vaccinations in India (27% in urban areas) – about the same as the private provider share of TB case notification, for a service for which the private provider role would be expected to be far less significant.

Private providers have been engaged substantially for maternal care, especially under the Chiranjeevi and Janani Suraksha Yojana (JSY) maternity benefit schemes in India (although the latter program was used to increase market share of public facilities). India, Pakistan and other countries have contracted extensively with for-profit companies and social enterprises for ambulance services.

Private hospitals have been very heavily engaged for general health services under social health insurance schemes, initially and mainly for in-patient care but also for outpatient or primary care in some cases. In India's Ayushman Bharat-PMJAY scheme, 56% of empaneled hospitals are private, and they account for 63% of claims volume and 75% of claims value.<sup>21</sup> Indonesia's JKN scheme similarly contracts with large numbers of private hospitals and providers and, in the Philippines, private providers represent 60% of all accredited PhilHealth providers and attract 55% of PhilHealth payments.

## Lessons from private provider engagement in COVID-19

The COVID-19 pandemic presented an urgent need for health systems to work together and called for 'all hands-on deck' WHO advised governments to take a whole-of-government and whole-of-society approach in their COVID-19 response by working along with the private health sector and civil society. While countries that had existing contracting mechanisms adapted quickly to engage the private health sector, others struggled to do so. Empanelment of private hospitals under national health insurance schemes, increased reimbursement for COVID-19 patients, price regulation and price capping for private service delivery and engaging private providers for non-COVID-19 treatment were some of the strategies adopted.

Responding to this demand, WHO's Department of Health System Governance and Financing established a Private Health Sector for COVID-19 Initiative (PCI) that offered rapid, real-time and evidence-based guidance for the member states. They developed an 'action plan' as an interim guidance for ministries of health. This action plan was organized around six pillars namely Plan, Space, Staff, Stuff, Systems and Supply-Side financing. A resource house was created with news and articles on the approach taken by countries to engage the private health sector in COVID-19.

Through a comprehensive document analysis and key stakeholder interviews, WHO-PCI identified that countries encountered several policy challenges that hindered their engagement with the private sector. To mitigate these challenges, a series of discussion notes and country experiences were disseminated swiftly through webinars and blogposts. A learning exchange was also hosted through the Joint Learning Network for Universal Health Coverage (JLN) to facilitate dialogue, learning, and knowledge products on private sector engagement during COVID-19.

## Evolution of institutional models

In the initial approach to PPM (version 1.0), staff of the NTP directly engage private providers, urging them to refer persons with suspected TB to the NTP. This model still applies in many places, but most countries recognize that private providers are reluctant to lose patients and have been willing to allow qualified providers to manage their own TB patients, using drugs and diagnostics provided by the government, in exchange for notifications (version 2.0).

Continued poor performance led to a recognition that the public sector was inherently ill-equipped to directly contact large numbers of individual, fragmented private providers and thus to the emergence of version 3.0, in which an intermediary organization takes on the task of engaging private providers on

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21 Kumar R. Why 75% of PMJAY claim value goes to private hospitals? Dr Vipul Aggarwal, Deputy CEO, NHA, explains | Interview. Financial Express 24 December 2020



behalf of the NTP. A review of 15 projects in 2006 found 8 with an NGO intermediary. The government's preferred intermediary organization is typically the national medical association, which is able to convene qualified providers, but performance has typically been better when the task is taken on by a suitable NGO. This model has become quite common, but the work of the intermediary organization has almost always been funded by international donors.

Version 4.0 is currently emerging in India in response to the government's inability to commission intermediary organizations: specialized units are to be established, at federal and state levels, to develop RFPs, contracting and performance management systems to facilitate establishment of intermediary organizations. These are initially funded by donors (version 4.0) but the hope is that the Government of India (GOI) will assume responsibility for funding these units and the intermediary organizations (version 4.1). This is consistent with the 2017 GOI health policy, which calls for greater engagement with private providers via strategic purchasing.

Version 5.0 is similar to PPM 2.0, in that government staff (such as TB nurses or outreach workers) take on the role of reaching out to private providers. However, this is now in a context where governance of the private sector by the public sector has become a more entrenched and accepted task, and thus there is more energy, seriousness and scale behind the public sector effort. Such acceptance of this public sector role typically arises as countries move from low income to upper middle income, and is assisted greatly by the establishment of social health insurance (or other, similar systems for strategic purchasing at scale) – which is often the first time that substantial amounts of public money are flowing to private providers to compensate the care they provide. Such flows reinforce the necessity for effective oversight of this public money and, by extension, the necessity for oversight of the private providers who receive that money. Large-scale, government-staffed models of engagement have driven past achievements in Japan and the Republic of Korea, are currently being expanded in Indonesia. Government staff remain directly responsible for private provider engagement in many areas of India, and other high- burden countries.

Social health insurance schemes not only establish a culture of working with private providers, but also help reinforce the work of engaging via both versions 4.0 and 5.0 – the only two models with real potential to engage private providers sustainably and to scale. Through judicious choice of purchasing arrangements for TB, social health insurance organizations (or other similar system for strategic purchasing at scale) can nudge providers towards higher quality practices, and effectively establish a platform of private provider engagement, including accreditation, data flows and quality assurance, all backed up by timely and reliable payments. The impact of social health insurance on private sector TB in high burden countries has been constrained by general problems within the SHI schemes (enrolment, definition of benefits, accreditation of private providers, payment delays) and issues specific to TB (specific reimbursement rates, provision for diagnostic referrals, etc.). The need to provide for public health functions, such as reporting and recording, contact tracing and patient support, remains under such arrangements (65). Insurance organizations are less likely to staff this direct provider engagement role themselves, but these insurance systems establish a much firmer basis for engagement under either PPM 4.0 or 5.0 schemes.

## **Social health insurance and TB in Indonesia and Philippines**

Until recently, efforts in Indonesia and the Philippines have focused on private specialists and hospitals, rather than primary care providers, and the TB programmes have partnered with specialist-led associations rather than the kinds of NGOs that have been prominent in other countries. Social health insurance schemes are approaching full population coverage in both countries and account for increasing proportions of government health spending but have thus far made minor contributions to TB prevention and care.

Each of these countries faces distinct challenges to maximizing the impact of social health insurance on TB (Table 8). They need a combination of inpatient and outpatient payment mechanisms that incentivize desired behaviors by both providers and patients, and to offer a compelling value proposition (including ease of accreditation and prompt claims processing) to contract large numbers of private primary care providers, as well as hospitals.

**Table 8. Social health insurance and TB in Indonesia and the Philippines: salient opportunities and challenges**

Feature	Indonesia (JKN)	Philippines (PhilHealth)
Proportion of population covered (2017)	70%	90%
Share of public sector spending on health	2017: 9% 2020 projected: 40%	2017: 46% 2020: 48%
Proportion of notified TB cases benefitting from SHI	Unknown, current topic of analysis	11%
Performance-based TB outpatient package	No. TB expected to be covered out of capitation. Reform discussions ongoing.	Yes, but payment amount unchanged since 2003 and rigid model of care
Contracts private primary care providers	Yes: 9781 in 2016, 53% of them group practices	Yes, for general inpatient care: Private providers are 60% of all accredited providers and 55% of PhilHealth payments. No for TB: only 96 private facilities accredited for DOTS package, all are hospitals (10% of total); no primary care package for private providers
Notification requirement for claims management	No. Currently exploring options for extracting TB data from insurance claims data, particularly the case-based data from hospitals	Yes (although not easy to distinguish number of claims from number of patients)

Sources: Authors' participation in Indonesia Joint Monitoring Mission (2017) and part of PPM Action Planning in Philippines (2017). Indonesia and Philippines Global Fund requests, 2017, Full Funding Landscape annexes.

## Republic of Korea

The Republic of Korea is not a high-burden country (incidence is now 80 per 100 000) but its experience with national health insurance may be of benefit to Indonesia and the Philippines. TB diagnosis typically happens in private primary care clinics, but notification is in hospitals, just prior to treatment.

Private sector notifications increased from 18 395 (54% of the total) in 2001 to 28 487 (92% of the total) in 2016 (82). A PPM initiative was introduced in 2009 and expanded nationwide in 2011. It includes strict patient monitoring and contact investigation, backed up by a web-based notification system. Aside from National Health Insurance Scheme reimbursements, a government grant funds 211 PPM nurses, hired by government health centers and assigned to 127 private hospitals and clinics to take care of notification and support to up to 200 patients each. About 82% of the private notifications come from those 127 high- volume facilities. The remaining 18% are managed at other private facilities with lower volumes, with support and oversight by regular TB nurses at the local health centers. The Korean Academy of TB and Lung Health organizes review meetings at various levels.<sup>22</sup>

<sup>22</sup> Dr. Kyun Hyun, personal communication



## What we know about how to engage private providers

The broad outlines of how to engage private providers of different types are well established<sup>23</sup>, although there is ample scope for local variation and innovation around mechanisms for recording and reporting, incentives, regulatory penalties, roles of private laboratories, informal providers, pharmacies, and community health workers and active case finding. The keys to motivating private providers to conform with the International Standards of TB Care (ISTC) have been well articulated by implementers: building respectful relationships; understanding providers' need to retain patients, provide rapid relief for them and safeguard their reputations; and acknowledging the importance of revenues but also of public recognition, access to new technologies and professional development.

At this stage, the most significant differences between programmes include whether the focus is on private primary care providers or hospitals and specialists, whether engagement is led by local NTP staff or entrusted to an NGO intermediary, the extent of integration with other disease areas, and the extent to which digital systems are used. There are tactical differences between and among the relatively successful models that have been implemented in different health markets and over time, as one would expect. One of the most important lessons learned is that there is no single model, and efforts to distill a single "recipe" are likely to be misplaced.

WHO's 2006 Stop TB Strategy, noted that "the basic premises of PPM are that the financial resources to establish and sustain the collaboration are provided or facilitated by the NTP, that drugs are provided free of charge or heavily subsidized, and that fees for tests and consultations are waived or kept to a minimum" (6). A clear and obvious pre-requisite for private provider engagement is willingness and commitment on the part of the NTP. WHO guidance has often suggested that a strong and effective NTP is a pre-requisite of good private provider engagement, but in fact the demands on the NTP vary according to the institutional model followed. If the NTP tries to engage private providers itself rather than work through intermediaries, then it needs sufficient capacity to be able to allocate substantial numbers of dedicated staff to the task of engaging private providers. Staffing and logistical burdens are reduced if intermediaries are entrusted to engage private providers, but they are replaced by more sophisticated requirements of strategic purchasing.

Some of the health systems and policy foundations of effective private provider engagement for TB include:

- Policy, regulations, enablers (such as simplified digital systems) and enforcement mechanisms for notification of TB cases;
- Policy, regulations and enforcement mechanisms regarding sales of anti-TB drugs and inappropriate diagnostics;
- Policy and systems for quality assurance of healthcare practitioners and facilities (licensing, certification, registration, accreditation);
- Policy, systems and specialist staff dedicated to contracting and to purchasing of packages of health services.

While policies often in place, mechanisms for enforcing regulations are missing in most low- and middle-income countries. The policies constitute a useful framework for engaging private providers, but any capacity for regulatory enforcement should be understood as an additional support rather than an essential prerequisite or a primary driver for engaging private providers. A review of mandatory TB case notification policies found that they were in place in 11 of 15 high-incidence countries surveyed but barriers to compliance included "lack of time, confidentiality concerns, fear of offending patients, lack of knowledge about notification, no simple notification mechanism, and lack of trust and coordination with government." Recent experience in India, the Philippines and elsewhere demonstrate that it is not sufficient to drive for increased private TB notifications unless systems are in place to extend the package of publicly-funded TB services (diagnostic, TB drugs, adherence support and social support as appropriate) to those privately-managed patients.

Beyond the policy foundations noted above, the general functions involved in private provider engagement itself are fairly clear, even if their practical application may take different forms in different locations and

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23 Summarized in Public-private mix for TB care and control: a toolkit. World Health Organization, 2010

at different times. Eight general functions may be identified, as follows:

1. **Develop and nurture relationships:** Those who interact with private providers must have appropriate skills and aptitude and are sometimes recruited from pharmaceutical sales representatives. The skill set for engaging informal providers will be distinct from that of engaging large private hospitals. If there is an intermediary organization between the NTP and private providers, it must also have the outlook, skills and capacity to build and continue to nurture effective relationships with the NTP (at all relevant levels) and local health and administrative authorities, as well as any relevant community-based or patient organizations. The leadership of the intermediary organization has to build the trust of the NTP.
2. **Develop and refine market intelligence:** The NTP and/or intermediary organization must have or develop a detailed understanding of local health markets, including the location, characteristics and client load of all relevant providers, the networking and referral relationships amongst them, and their practices with presumptive and confirmed TB patients. In some places, identification of champion TB care providers who contribute a large proportion of case notifications is an important strategy for intermediary agencies.
3. **Negotiate roles, responsibilities and value propositions for different actors:** PPM plans typically include a “task mix matrix”, summarizing agreement on the various roles in referral of persons with potential TB, diagnosis, confirmation, treatment observation, support, etc.) of the various providers and actors (informal providers, qualified doctors, pharmacies, drug shops, labs). If the partnership is to be successful, private providers have to see value in the roles and responsibilities assigned to them: initiatives that simply instruct them to refer potential TB patients to government clinics are rarely successful. While it is essential to take into account financial costs and benefits to private providers of any proposed behavior, it is also a mistake to believe that private providers are only motivated by financial considerations: experience suggests that their motivations include nurturing a positive reputation in their communities<sup>24</sup>, recognition, professional development and access to technical information, networking amongst peers, professional self-esteem and altruism.
4. **Train and equip private providers as necessary:** Even graduate medical practitioners usually need training in the latest standards of TB diagnosis and case management, while paramedical and administrative staff will need training on client counselling and recording and reporting. Training modalities need to be appropriate for the trainees: curricula and courses designed for public sector personnel need to be adjusted to cover only the material that is absolutely necessary for quality service provision and to accommodate private providers’ needs to maintain their practices (through short and convenient schedules and opportunities for distance learning). Low-intensity, high-frequency sensitization sessions in clinic can mimic medical detailer interactions.
5. **Develop systems to ensure private patients’ access to diagnostics and treatment:** Options include engagement of private laboratories, with provision of free or subsidized consumables in exchange for data and assurance of free or low-cost services to patients, and/or referral to public labs. Systems for vouchers and sample transportation may also be required. Similarly, TB drugs may be supplied to private providers or pharmacies, or vouchers may be used to subsidize private patients’ purchase of quality-assured regimens from selected pharmacies. Many PPM projects have focused on engagement of one provider type, whereas an entire network solution is often required.
6. **Develop data management systems for reporting, monitoring and evaluation:** Standard TB recording and reporting forms were developed for public sector contexts and often need to be simplified and adapted for use in private facilities. NTPs or intermediary organizations typically have to deploy field workers to take on much of the work of recording and reporting, as private providers rarely have the capacity to take on such paperwork. However, the need for an intermediary’s assistance with reporting may be reduced or eliminated by using a greatly reduced and simplified data request, which is channeled either through a simple app (with examples in Bangladesh, Indonesia and Pakistan), use of a Call Center (as in India) or a data system used for health insurance reimbursement.
7. **Develop systems for linking private patients to support services:** Access to nutritional and other forms of social support and adherence counselling is as important for TB patients managed in the private

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<sup>24</sup> This is often a very powerful motivation for private providers to take on tasks that don’t seem financially attractive, but it is also linked to financial incentives since local reputation is critical to private providers’ business success

sector as it is for those in the public sector. Ideally, interventions link patients to existing support services rather than establish parallel systems.

8. Develop and deploy ICT systems to facilitate efficient and effective implementation at scale: Advances in information and communication technologies have the potential to overcome many of the challenges of engaging large numbers of fragmented providers. Applicable innovations range from basic SMS messages and call centers to geospatial technologies, low-cost tablets and smart phones, fingerprint and iris scanners, barcodes and QR codes. Critical functions that can be enabled at scale include case notification and reporting, communication of diagnostic results, payments to providers and patients, adherence support and monitoring, and overall performance management. Call centres have played a critical role in facilitating private notifications in India. On the other hand, recent experience in India suggests that ICT cannot entirely substitute for interpersonal outreach and relationship-building. There must also be a conscious process of defining a stably funded institutional "owner" of this ICT capacity— either with a stable contract from government or situated within government itself.

Given the large number of private providers at the primary care level, it is very difficult for interventions that rely on individual engagement to go to scale. This suggests that interventions that realign structures and incentives through an entire health market may be more promising. While regulatory constraints and penalties are difficult to enforce, system-wide approaches to incentives (such as health insurance reimbursements) and enablers (such as IT-based notification and payment platforms) may show more promise.

## What we know about how private provider engagement may be stimulated

The text above and existing literature have established that, to achieve private engagement at scale, a systemic effort is needed. This includes not only attention to proximate enablers, such as demonstration models, plans and guidelines, but also efforts that address underlying attitudes, capabilities and systems, such as empowering advocates and champions with compelling evidence, building system capacities in ICT, strategic purchasing and regulatory mechanisms, and identifying and strengthening intermediary partners.

Recognizing that engagement of private providers depends on local systems and institutions, external funders and technical agencies have supported it by intervening at both distal and proximate points of leverage. Following are some of the main activities that have been deployed to stimulate greater engagement of private providers by TB programmes.

1. *Support advocacy:* Leaders of WHO's Global TB Programme and the Stop TB Partnership have used their positions to call for improved engagement of private providers, and since the nineties international strategies from WHO have included of private providers. These interventions contribute to the establishment of a norm within the TB community.
2. *Generate descriptive evidence:* Since the 1990s there has been a steady accumulation of published evidence on the importance of private providers for TB prevention and care, with considerable advances in recent years thanks to Patient Pathway Analyses, Standardized Patient Studies, Prevalence Surveys and modeling from market research data.
3. *Support Champions and the Community of practice:* The PPM Working Group has received sustained financial and technical support from USAID and WHO and served to maintain attention and facilitate supportive linkages between and amongst champions of this work. Through its publications and meetings, it has increased awareness and understanding of the need for PPM and of effective approaches. It is now complemented by the PPM Learning Network, which is designed to facilitate more continuous interactions in between annual meetings.
4. *Fund pilots, demonstration projects and implementation at scale:* Funders and NGOs have supported and implemented dozens of pilot and demonstration projects. Many or most achieve small-scale results and are not sustained: the implicit assumption of a simple linear relationship between evidence and behaviors is often overstated. Nevertheless, projects have contributed to a steady increase in evidence, experience, capacity and lessons learned; have sometimes changed

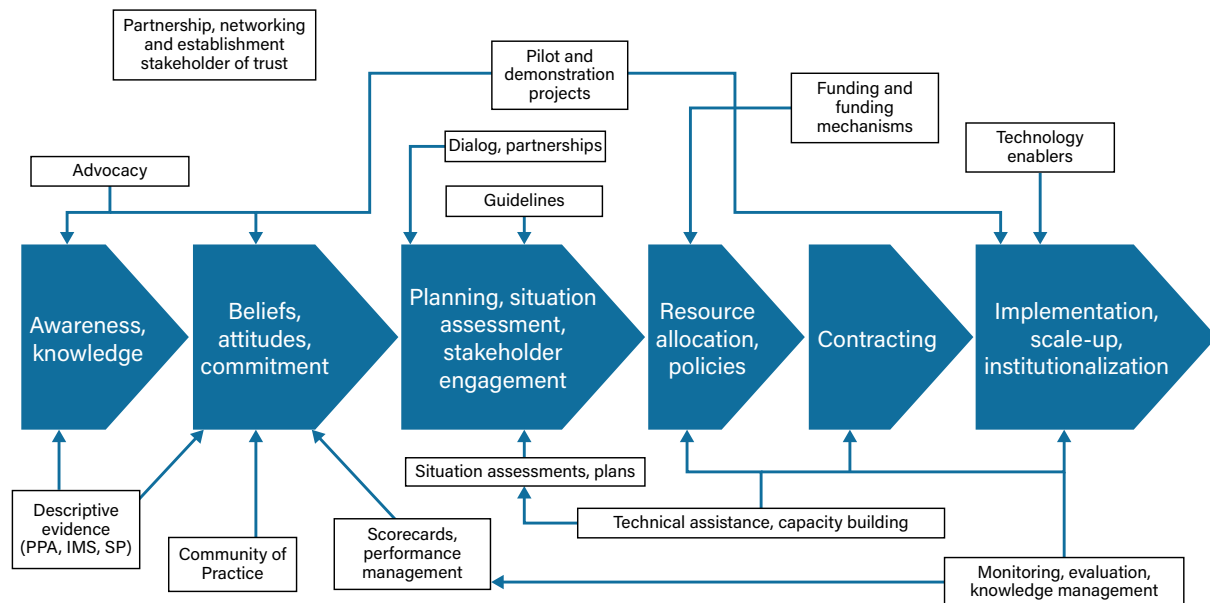
the attitudes of NTP managers and other TB stakeholders; and some have gone to some scale and become institutionalized. Few TB funders have the resources or mandate to support implementation at scale and, as noted above, the failure to tap into domestic resources has hampered scale-up.

5. *Develop guidelines:* WHO has published several sets of guidelines on various aspects of PPM: situation analysis, implementation, monitoring and evaluation, and implementation for MDR and TB/HIV in the private sector (see page 11).
6. *Conduct situation assessments and develop PPM plans:* WHO and USAID have provided support to situation assessments and for the development of national action plans for PPM, and the integration of those plans into National Strategic Plans for TB and Global Fund proposals. Interventions across multiple countries (such as efforts for 11 countries of EMRO and AFRO in 2006–7 and 10 countries of AFRO in 2016–17) seem to generate some awareness but overall be less effective than more intensive and sustained support to generate detailed plans with genuine local support (e.g., Bangladesh in 2016, and Nigeria and Philippines in 2017). These efforts are also more likely to be effective if key actors in the country are already predisposed to increasing PPM, and if the planning exercise is timed to feed into national TB plans and significant funding cycles, such as those of the Global Fund and World Bank.
7. *Facilitate dialogue and partnerships:* Support has been provided to professional associations, to improve the private sector's capacity to engage in dialog and partnership, and for meetings that serve to bridge the gap between public and private sectors.
8. *Build enabling ICT tools and systems:* More recently, we have seen that technology tools can play a critical role in enabling PPM, although this potential remains latent in most settings because TB programmes have been slow to embrace ICT. Promising examples include Nikshay and eNikshay in India, adherence support tools such as 99DOTS, and notification and patient management apps in use in Bangladesh, Indonesia and Pakistan.
9. *Provide technical assistance:* Given the variety of perspectives needed for this work, staff capacity for analysis, planning and implementation is typically weak. WHO PPM Consultants and others have often played a critical role in supporting the entire process.
10. *Build enabling regulatory and financing capacities:* Health systems strengthening projects funded by USAID, the World Bank and others are addressing issues required for governance of the private health sector, such as establishing the legal authority and operation of medical councils, and benefit package design and other issues of strategic purchasing. The TB pay-off from these efforts is not immediate but they create the foundation for a more sustainable and embedded response.
11. *Structure funding mechanisms:* International donor agencies have provided financial resources directly, to develop and sustain PPM projects, and have collaborated to create wholesale funding mechanisms such as the Global Fund, the Global Fund Catalytic Funding mechanism, Fidelis and TB REACH. Staff of these funding mechanisms and proposal reviewers need support to understand private provider engagement.
12. *Support monitoring, evaluation and knowledge management:* Journal articles and systematic reviews serve to define, legitimize and codify knowledge, and interact with preconceptions and ideology to shape beliefs within the TB community. Examples include the range of monitoring and innovative evaluation research around the PPIA interventions in Mumbai and Patna. More disaggregated data, especially on private for-profit provider notifications and treatment outcomes, should be compiled in countries and globally.
13. *Create scorecards for performance management:* WHO's annual global TB report serves a critical function in collating performance data in a format that encourages stakeholders to compare and contrast country performance and measure changes over time. This capability has not yet been fully applied to PPM.

Figure 7, below, illustrates the role of these interventions in influencing the process by which private provider

engagement may be adopted and institutionalized within a country. This is clearly an example of complex systemic evolution in which outside intervention often plays a limited role. Interventions at any single point in the process may be ineffective in the absence of appropriate conditions or complementary interventions upstream and downstream, and multi-faceted interventions at multiple points in the process are more likely to be effective than single, simple interventions. Tipping points or threshold effects are to be expected: interventions may have some immediate effects that are insufficient to catalyze systemic change.

**FIGURE 7. INTERVENTIONS TO ENCOURAGE PRIVATE PROVIDER ENGAGEMENT AT THE SYSTEM LEVEL**



## Performance management

Some high-burden countries with substantial private healthcare sectors still struggle to record the number of notifications by sector, and only Bangladesh seems to be able to comprehensively track the source of referrals. WHO has focused on measuring PPM's contribution to case finding expressed as the proportion of case notifications contributed by PPM providers. As indicated above, inclusion of non-NTP public providers and NGOs, along with private for-profit providers, is misleading in countries where for-profit providers dominate primary healthcare. In addition, contribution to total case notification can be misleading because it is dependent on the overall NTP case notification rate. Private for-profit notifications as a percentage of estimated incidence is a more appropriate measure of performance in case finding, while multiplication of this figure by the treatment success rate amongst private providers would address quality of care and capture ultimate impact. Such a measure of effective coverage would be aligned with recent effort to develop composite measures of progress towards UHC.

WHO recently suggested that inventory studies could be used as a basis for setting appropriate targets for PPM contributions, and that the target level for PPM contributions should be  $c(1-U) + U$ , where  $c$  is the current PPM share of total notifications and  $U$  is the level of under-reporting.<sup>25</sup> The problem with this is that it fails to consider the often large proportion of publicly-notified patients who first seek care in the private sector. A simpler and more useful way to set the target for private provider notifications would be to multiply estimated incidence by the private share of primary health-seeking behavior, perhaps adjusted by the feasibility of engaging each provider type.

<sup>25</sup> WHO Global TB Report (2017). The current private sector contribution to the current case finding is added to the remaining, unnotified gap in private sector treatment as identified by the inventory study

**Annex 2** presents a list of potential performance indicators designed to capture prioritization of private provider engagement, as well as its scale, quality and impact. Many of the key indicators are disaggregation of data already collected. As a first priority, TB registers need to be modified to classify the notifying facility on two dimensions: sector (private for-profit, private non-profit, public NTP, public non-NTP) and level (primary, secondary or above). This is possible even with paper-based aggregate data but is much easier if the program has a digital case-based notification system. Ideally, the provider will have a unique identifier, since this would not only reduce data entry (because the sector and level would already be specified) but also permit indicators that show real coverage of private practitioners by type and permit analysis of drop-out rates and yields. With a case-based digital registration system and basic identification and characterization of providers, many of the indicators may be automatically generated from the TB data system.

Data for some indicators could be generated either from the routine notification system or by sample surveys, using the TB registry as a sample frame. This applies to care-seeking prior to treatment, patient costs and public funding.

Some additional data collection beyond the TB data system is also required:

- Analysis of budgets and expenditures, using a consistent approach to capture staff, operations, shared and indirect costs;
- Surveys of randomly sampled patients to understand care seeking, expenditures and catastrophic costs;
- Inventory studies to estimate notification gaps;
- Mapping to estimate provider coverage;
- Standardized Patient surveys of providers to quantify their behaviors and assess quality of care;
- Analysis of data from other surveys (Demographic and Health Surveys, TB Prevalence Surveys, Living Standards Measurement Surveys, etc.) to estimate shares of early care-seeking by sector and level;
- Analysis of market research data on private TB drug sales volumes to estimate treatment-course equivalents.

This implies considerable additional effort in data collection and analysis, which would be consistent with appropriate prioritization of this issue.

## Implementers and technical agencies

The field of private provider engagement for TB needs to be strengthened and taken to scale in countries. Lessons can be learnt from efforts to engage private markets for other issues, including family planning. This is primarily a consequence of lack of funding for this work, but the lack of strong implementing organizations also constitutes a constraint once funders and policymakers begin to show interest.

A distinction may be made between technical assistance contractors and organizations that might take on the role of intermediary between the NTP and private providers. Technical assistance agencies may be contracted for time-bound assignments in support of NTPs, such as developing payment schemes or ICT systems or facilitating the development of plans. Such organizations obviously need to be competent in the specific areas of work for which they are contracted and are likely to be more effective if they have longstanding relationships with their counterparts. There are more potential technical assistance contractors than there are effective implementation intermediaries.

Compared to technical assistance contractors, intermediary agencies require different characteristics. The ideal profile of an intermediary agency is more complex and includes the following attributes:

- Understanding of market dynamics and experience of working effectively with private providers, preferably at some scale;
- Basic understanding of TB diagnosis and treatment, monitoring and evaluation;
- Credibility in the health sector; aptitude for advocacy and relationship management;
- Entrepreneurial, mission-driven commitment to long-term presence and impact in the country, rather than a temporary contractor mentality;



- Pre-existing core capacities: accounting and financial management; data management, mapping, monitoring and evaluation; field operations and logistics; supply chain management; human resources management; communication; training; project cycle management; fundraising;
- Continuing relationships with private healthcare providers for other purposes, which not only facilitates start-up but also cost sharing and efficiencies;
- Access to international ideas and latest best practices;
- Organizational culture that favors innovation, adaptation, creativity and results-driven performance;
- Costs (especially indirect costs) that are competitive and low enough to accommodate Global Fund and government contracting.

There is clearly a need for both technical assistance organizations and implementing organizations. They perform different functions, and the success of each kind of organization is enhanced by the other. By themselves, intermediaries will quickly run up against constraints around the government stewardship functions such as licensing, accreditation, enforcement, outsourcing, and strategic purchasing.

In Bangladesh, Pakistan and Myanmar, and increasingly in India, engagement of large numbers of private primary care providers has been led by strong NGOs acting as intermediaries between providers and the NTPs. They have done so not as contractors implementing a particular time-bound project, but as mission-driven NGOs that have identified private provider engagement for TB as part of their long-term role and that have succeeded in attracting resources from multiple donors to sustain their work over multiple project cycles. Some are generalist NGOs, such as BRAC in Bangladesh and Mercy Corps in Pakistan; others, such as Damien Foundation in Bangladesh and, recently, IRD in Pakistan, are more focused on TB. Population Services International (PSI)/Myanmar, SMC in Bangladesh and Greenstar in Pakistan are social marketing organizations that have long engaged private markets for family planning and other health issues. World Health Partners (WHP) in India has its roots in social marketing and has developed a strong focus on digital technologies. They have in common the ability to operate at scale, strong management systems (including human resources, information systems and logistics), dynamic leadership, an aptitude for adaptation and innovation, and success in fundraising.

Specialist TB technical agencies, such as WHO itself, KNCV and International Union Against Tuberculosis and Lung Disease (The Union), have tended to focus on public provision. Interactive Research and Development (IRD) based in Pakistan but with activities in South Africa, Indonesia, Bangladesh and elsewhere, that is unusual in that it focuses on private and social enterprise models with technology. The American Thoracic Society (ATS) has engaged private chest specialists in high burden countries in support of the International Standards of TB Care, which is consistent with its domestic role as a professional society in the United States of America.

**Table 9. Main agencies leading private sector engagement on behalf of NTPs, by area of focus**

Private sector health	General and health	TB
PSI (India, Myanmar)	BRAC (Bangladesh)	WHO KNCV IRD
Abt (Nigeria, Ethiopia)	PATH (India and other countries) Mercy Corps (Pakistan)	The Union ATS
WHP (India)		
CHAI (India)	MSH (Afghanistan and other countries)	
Greenstar (Pakistan)		

Organizations that have developed deep capabilities in private markets for health by working in family planning, HIV and malaria include Population Services International (PSI), Abt Associates, World Health Partners (WHP) and CHAI. PSI has substantial programmes in around 60 countries, but TB is a very small part of their portfolio; large independent affiliates of PSI include GreenStar in Pakistan (which is active in TB) and Society for Family Health (Nigeria). Other health social marketing organizations, notably DKT and Marie Stopes International, decline to work on TB because they are focused almost exclusively on family planning. Other general USAID contractors have from time to time won contracts to work on private sector health, especially in family planning, but are not currently active in private sector TB.<sup>26</sup>

<sup>26</sup> They include Chemonics, Palladium, and Deloitte Emerging Markets



A few organizations that are strong in health and other areas, notably BRAC, PATH, Management Sciences for Health (MSH) and Mercy Corps, have niches of capability in both TB and private sector engagement, even though neither is their main focus.

## Donors and funding

The amount of funding available for engaging private providers in TB prevention and care has been woefully inadequate, but qualitative aspects of available funding are also important. Especially in its early stages in a given country, there is a need for funding that is conducive to innovation in complex systems. Such funding must encourage flexibility and adaptation (with minimal restrictions on the line items and timing) and be patient, looking for medium-long term transformative impact rather than short-term incremental gains. Funders of such early-stage innovation must be supportive and challenging thought-partners but should avoid micro-managing. For this kind of work, it is important to select implementers with the right attributes, sometimes bringing in new partners or sub-contractors as needs change. The aim should be partnership between groups with complementary strengths while avoiding the artificial time-bound consortia that come together just to bid on projects.

Over time, interventions in a country may stabilize such that more bureaucratic sources of funding can help to drive scale-up, even though there will always be a need for continued learning and adaptation. At present, Indonesia and Nigeria may need flexible funding of innovations, while India, Pakistan, Bangladesh and Myanmar may be able to absorb funding more suitable for scale-up.

## Governments

The national government budget is the main source of funding for TB prevention and care in the BRICS group of countries (Brazil, the Russian Federation, India, China and South Africa). Ministries of Health tend to be very reluctant to transfer budgetary resources to private entities, for reasons related to ideology and self-interest but also because of concern about potential allegations of procurement fraud. Particularly in lower income countries, these budgets also typically have little flexibility or discretionary money for new activities, with most fund flows going to recurrent salaries and commodities. Ministries are usually quite willing to provide in-kind resources (drugs and lab consumables) to selected private providers under close supervision, which is often all that private health care providers need in order to participate in a program, and funding flows to private providers for curative care, via established social health insurance schemes, are also acceptable. But governments are very reluctant to provide significant funding to intermediary organizations. Precedents in other fields (such as family planning, ambulance services or HIV in India) don't tend to be replicated by TB programmes. In India, just 1.5% of state-level expenditure by the RNTCP in 2008 was for various "schemes" for engaging NGOs and private providers; beginning in 2019 several states have begun to allocate substantial budgets to contracting intermediary agencies for TB, and by late 2020 contracts worth more than \$5m had been awarded and projects worth up to three times that were in various stages of procurement. Significant expenditure on the intermediary function depends on development of the capacity for outsourcing and contracting through government systems.

## The Global Fund

In 2019, 77% of international development assistance for TB was channeled through the Global Fund. An analysis of Global Fund support for PPM found a marked increase from 4% of TB funding and 5% of expenditure for PPM in 2008 to 14% during 2018-2020 cycle. This included engagement of NGOs, prisons and other non-NTP providers. (see Table 10).

Table 10 shows large shifts in PPM funding over time in the big 7 PPM priority countries.

For 2017-19, the Global Fund Board set aside US\$800 million for Catalytic Funding, including US\$115 million in 12 countries for innovative initiatives to find missing people with TB. An increasing proportion of funds is being allocated to PPM, especially in India, Pakistan and Nigeria. The coverage and scope of

catalytic funding for TB have been expanded to 20 countries during the 2020-2022 funding cycle.

Global Fund guidance on private provider engagement for TB is being strengthened with renewed focus on capitalizing on PPM approaches to reach the missing millions of people ill with TB. A core information note on Private sector engagement has been developed as well as dedicated staff position to support coordination.

**Table 10. Global Fund budgets for TB and TB PPM, 2002-14 and 2018-20, USD**

Country	TB Budget (2002-2014)	PPM Budget (2002-2014)	% PPM budget (2002-2014)	TB Budget (NFM 1 2015-2017)	PPM Budget (2015-2017)	% PPM budget (2015-2017)	TB Budget (2018 - 2020)	PPM Budget (2018-2020)	% PPM budget (2018-2020)
India	374,663,030	18,240,808	5%	242,236,673	19,736,120	8%	283,872,481	40,000,000	14%
Pakistan	187,086,783	7,440,464	4%	136,163,555	18,226,546	13%	144,163,228	55,000,000	38%
Indonesia	275,920,543	2,635,949	1%	88,162,964	2,790,000	3%	117,803,232	11,655,538	10%
Nigeria	153,670,939	667,861	0%	172,361,073	4,695,113	3%	121,000,000	15,000,000	12%
Philippines	114,952,156	4,687,830	4%	120,853,697	905,577	1%	98,543,867	6,289,633	6%
Bangladesh	102,817,435	3,944,309	4%	80,992,506	752,544	1%	110,935,648	1,226,014	1%
Myanmar	76,379,955	5,135,606	7%	54,193,586	1,569,929	3%	94,041,827	1,914,999	2%
<b>Total</b>	<b>1,285,490,841</b>	<b>42,752,827</b>	<b>3%</b>	<b>894,964,054</b>	<b>48,675,829</b>	<b>5%</b>	<b>970,360,283</b>	<b>131,086,184</b>	<b>14%</b>

## USAID

The United States is the largest bilateral funder of TB prevention and care. In 2019, USAID funding for TB totaled US\$ 306 million; when combined with the United States contribution to TB activities through the Global Fund (totaling US\$ 1.35 billion across all three diseases), the United States contributed 25% of total international development assistance for TB.

Past USAID TB support has been channeled in part through a series of flagship projects: TBCTA (2000–2005), TB CAP (2005–2010), TB CARE I (2010–2015), TB CARE II (2010–2015 in countries) and now Challenge TB (CTB, 2014–2019). Each has consisted of a consortium of implementing organizations. CTB was led by KNCV and included ATS, FHI 360, IRD, The Union, Japan Anti-Tuberculosis Association (JATA), MSH, PATH and the WHO.

At the 2018 UNHLM, former USAID Administrator Mark Green announced the Agency’s new TB business model – the Global Accelerator to End Tuberculosis. The Accelerator includes a strong focus on building local commitment and capacity to achieve the goals set forth at the UNHLM, with approaches such as signing Partnership Statements with Ministries of Health in USAID’s priority countries for TB, embedding senior-level advisors in NTPs, developing and managing TB commitment grants with local government entities, and greatly increasing investment directly in local organizations to drive local service delivery capacity, including in private provider engagement.

USAID programmes are largely determined by national and international staff in country-based missions with varying degrees of expertise in and time available for TB, with support from a central TB team of 28 specialists including one person leading on engaging private providers. In general, USAID has tended to be more supportive of private sector approaches than other funding agencies. USAID has supported many PPM pilot or demonstration projects over the years and has also provided critical policy and financial support to the WHO PPM Working Group, to private sector assessments, and for development of PPM plans in several countries.

Some notable interventions developed with USAID-funded TA and resulting in significant contributions to

notification include the Hospital-DOTS Linkage (HDL) model (TB CARE I Indonesia), pharmacy referrals (TB CARE I Cambodia), development and expansion of the accredited drug-dispensing outlets (ADDO) programme in the United Republic of Tanzania (along with other donors),<sup>27</sup> engagement and policy support for private sector clinics (PHSP Ethiopia; a sustained achievement of ~14% of national notifications), urban provider engagement by professional associations in Kenya and Indonesia, and district-based PPM approaches under Challenge TB Indonesia. A number of the USAID country missions (such as in Bangladesh, Indonesia, Philippines, and Nigeria) prioritize private provider engagement, among other topics. For example, Challenge TB Indonesia supported 16 districts (accounting for 11% of the national population) and had private provider engagement as a major theme. TB notification in these 16 districts increased from 57,916 in 2014 to 105,219 in 2018, including an increase in private provider contribution from 11,802 patients (20% of the total) in 2014 to 33,810 (32% of the total) in 2018. When expressed per 100,000 population, this private provider contribution was 4-6 times higher than in other districts, especially compared to provinces that were not supported by CTB.<sup>28</sup> This work is now continuing under the TB Private Sector (TBPS) bilateral project, which is focusing only on private provider engagement. TBPS and the Health Financing Activity (HFA; see below) are working together on piloting new approaches to strategic purchasing for TB for both public and private providers.

Another project, PHSP Ethiopia (2015-2020), was notable for being dedicated entirely to private provider engagement, working on both policy and implementation, and increasing its impact by accepting funding streams from multiple health areas. The new bilateral End TB in Ethiopia (ETBE) project will continue this work but with a focus on integrating these approaches into government systems. There are also dedicated private sector engagement projects in India (Tuberculosis Health Action Learning Initiative, or THALI) and Nigeria (SHOPS Plus Nigeria). In 2017, the WHP-led THALI project contributed 7922 private notifications, or 75% of the total private notifications, in an urban population of 14 million in six districts of West Bengal.<sup>29</sup>

In Nigeria, the SHOPS Plus project supported local intermediary organizations, developed a mobile app and web-based dashboard, and used ongoing data analysis to optimize the composition of private TB diagnostic and treatment networks. It facilitated 1,184 TB case notifications from private facilities in Lagos State (catchment population of 21 million) in the first half of 2020. This represented 26% of total (4,629) TB case notifications in the state (up from 22% in 2019) and was equivalent to 93% of the total (1,278) private sector notifications in the state. The corresponding figures for SHOPS Plus in Kano state (catchment population 13.4 million) were 1,696 notifications from private facilities, which represented 21% of total (8,055) TB case notification in the state (up from 14% in 2019) and almost 100% of the state's total (1,702) private sector notifications.

Thus, out of the six high burden countries with the most missing cases and high private provider presence (India, Indonesia, Nigeria, Philippines, Pakistan and Bangladesh), there are USAID private provider engagement efforts in all except Pakistan, which does not currently have USAID TB bilateral funds. USAID has also financed a dedicated private provider engagement stream as part of Waves 6, 7 and 8 of TB REACH (see next section), in order to stimulate the development of more intermediary organizations.

Recent USAID projects working on health financing and policy issues related to private provider engagement, in multiple countries, included the Health Finance and Governance (HFG) and Health Policy Plus (HP+) projects. These projects have, for example, worked on actuarial analyses and development of social health insurance packages for TB in several states in Nigeria, and on a reform process for TB payments under social health insurance in Indonesia (an effort now being continued by the Health Financing Activity, a USAID/Indonesia bilateral project). Related work includes the USAID/Philippines bilateral ProtectHealth (which is helping to guide implementation of the recent UHC Law to ensure optimal TB outcomes in public and private sectors) and the global Health Systems for TB (HS4TB) project. HS4TB will work on health financing and governance issues specifically related to TB, including topics directly relevant to private provider engagement such as outsourcing and private provider access to rapid TB diagnostics.

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27 See, for example, the Annex at [http://www.who.int/alliance-hpsr/resources/FR\\_Ch5\\_Annex1.pdf](http://www.who.int/alliance-hpsr/resources/FR_Ch5_Annex1.pdf). There are also many peer reviewed publications on the ADDO experience

28 Challenge TB Indonesia Final Report. [https://pdf.usaid.gov/pdf\\_docs/PA00WNR7.pdf](https://pdf.usaid.gov/pdf_docs/PA00WNR7.pdf)

29 India TB report, 2018 (page: 50) Available at: <https://tbcindia.gov.in/showfile.php?lid=3314>

While USAID has supported much of the progress that has been made in private provider engagement, its role is sometimes constrained by several factors:

- Because USAID is often the only significant funder of TB technical assistance in many of the high burden countries (with Global Fund covering more of the implementing costs), there is pressure from NTPs and other stakeholders for its investments to cover a wide range of areas, including technical assistance around many different TB topics, plus support of major studies (such as prevalence surveys). Therefore, project design may either neglect private provider engagement in favor of other priorities, or address only one or two of the dozen or more constraints to private engagement;
- USAID TB technical assistance money is intended to drive innovation and smooth the pathway to scale-up via the use of other funding sources. But the volume of USAID TB money is not sufficient to act as an ongoing source of implementation funds at scale. The difficulties noted above with adoption of private sector engagement by government and Global Fund sources therefore threaten ongoing impact;
- Procurement procedures are often slow and unwieldy. Projects are designed to run for 5 years, which is longer than the 3-year cycle seen in recent Global Fund grants, though they are subject to an annual funding and workplan cycle. These factors are mitigated by, respectively, the use of subcontracting (for mid-course corrections and flexibility) and the establishment of 5-year country visions and objectives at the start of projects. In some cases, implementers may win successive awards that enable them to work on issues over 15 years or more, and the increased focus on local implementers (see above) has the potential to result in greater institutional learning and consistency in support.

## TB REACH

Since 2003, Global Affairs Canada has supported mechanisms to provide relatively small-scale funding for innovations in TB detection and care: FIDELIS, 2003–2008, and TB REACH since 2010. The Gates Foundation and USAID have joined Canada in funding TB REACH, which is managed by the STOP TB Partnership. TB REACH combines fast-track, results-based financing and rigorous, external monitoring and evaluation (M&E) to produce results, so other donor agencies and/or national governments can scale-up successful approaches and maximize their own investments.

TB REACH provides up to US\$400 000 for proof-of-concept grants, and up to US\$1 million each for grants that focus on scalability; larger grant applications are by invitation only. Projects typically last 15–18 months, with selected successful projects eligible for larger amounts over repeated rounds. In the first five waves, TB REACH provided US\$117.4 million to more than 220 projects in almost 50 countries. The aspiration is that successful approaches and interventions can be transitioned to Global Fund funding, and this has happened in a number of cases. Eligible countries for Wave 5 numbered 100. Prior to the addition of USAID funding for private provider engagement in Wave 6 (see below), TB REACH's independent Proposal Review Committee included few members with particular expertise in private provider engagement and the information notes for applicants covered community outreach, innovative partnerships, and the introduction of new tools and technologies, but not the engagement of private providers although a number of successful projects were supported.

Examples of early successful PPM projects include:

- ICDDR,B piloting of “social enterprise” TB diagnostic centers at 3 sites in Dhaka, expanding to 10 with Global Fund and USAID support;
- IRD in Karachi (with Indus Hospital) over 3 rounds, also transitioning to Global Fund;
- Uganda SPARK in 5 districts, expanding to 10 districts with Global Fund support

Funding for Wave 6, launched in October 2017, included a USAID-funded earmark for projects designed to engage private providers; this funding continued through Wave 6 scaleup grants, and Wave 7 and 8 grants. Indeed, Wave 8 was dedicated solely to private provider engagement. Guidance notes were developed for Waves 6–8 to strengthen applications involving private provider engagement.

Wave 6 outcomes are outlined below. Of note, TB REACH is designed to encourage innovations, so

some level of difficulty is expected. Furthermore, these are short grants, with most achieving operational efficiency only towards the end of the grant period, and the cost data includes the entire budgets of the projects, not only the intervention costs. For two projects in Pakistan, the grants were focused on process changes rather than primarily on case finding, so these are presented differently in the Table.

TB REACH has been used as a mechanism for stimulating innovation, developing the capacity and experience of potential intermediary agencies, testing and developing interventions and transitioning them to scale. It can also be a valuable way to support organizations that may be too new or too small to qualify for Global Fund funding. The risk is that it might support a large number of small pilot projects that don't go to scale. It could avoid this by becoming a more "active" investor, focusing on a small number of high-priority countries and picking implementers more deliberately. In Wave 8, for example, applications were limited to a shorter list of USAID priority countries and to local implementing organizations.

**Table 11: Outcomes from TB Reach Wave 6 Grantees**

Country	Grantee Organization	Main interventions	Number of All Forms TB patients started on treatment	No. screened to find one symptomatic	No. symptomatic to find one TB patient	\$ per patient started on treatment
Bangladesh	IRD Global Limited	Active screening for pediatric TB at hospitals; provision of TPT	540	41	13	601
Ethiopia	Management Sciences for Health, Inc.	Link lower-level private clinics to public treatment facilities	800	67	10	777
Ghana	Aurum Institute Ghana	Active case finding with private providers in urban slums	572	47	21	1,255
India	TB Alert India	Engage & train 600+ informal providers	1147	72	8	148
Malawi	Clinton Health Access Initiative, Inc	Engage informal providers in two districts	42	312	28	8,690
Pakistan	Foundation for Innovative New Diagnostics	Develop private sector Xpert testing network				
Pakistan	The Indus Hospital	Improving the diagnostic pathway for EPTB				
Philippines	ACCESS Health International Inc.	Establish a social enterprise in Metro Manila	370	12	5	926
United Republic of Tanzania	Christian Social Services Commission	Engage rural Accredited Drug Dispensing Outlets (ADDOs)	296	91	22	1,157
South Africa	Aquity Innovations NPC	Place TB testing in private sector facilities; link to public notification system	877	14	16	416

Source: Stop TB Partnership

## World Bank

World Bank lending and technical support is focused on health systems, especially primary care, and their emphasis tends to be on public provision. Few projects are focused on TB. A US\$100 million TB loan to India (2014–2018) was originally intended to include a focus on PPM but was not implemented as planned. A \$US 400 million credit to India, entitled “Program Towards Elimination of Tuberculosis” (2019-2024), is focused largely on support for private provider engagement in nine focus states of India that account for 40% of the national TB burden. This is a “Program For Results” credit in which disbursements are based entirely on progress against performance indicators, including private TB notifications, treatment success amongst privately-notified patients, nutritional benefits provided to privately-notified patients, and incentives to private healthcare providers.

The World Bank is indirectly relevant to private provider engagement via its more technical work to strengthen data systems (including its participation in the Primary Health Care Performance Indicators Initiative, PHCPI), strategic purchasing and Universal Health Coverage. Since 1997, thousands of government officials and others have participated in the World Bank’s flagship Health Financing course, which covers issues such as strategic purchasing and payment mechanisms. There is potential for World Bank funding flows to help develop and strengthen government outsourcing arrangements, which could then be applicable to supporting private provider engagement.

## Bill & Melinda Gates Foundation

However, over the last 10 years the Gates Foundation has supported important initiatives to improve engagement of private providers for TB in Myanmar, China and India.

From 2008 through 2013, the Gates Foundation supported expansion of the Sun Quality Health (SQH) social franchise model in Myanmar, as part of a US\$25 million grant that spanned family planning, HIV, pneumonia and diarrhea as well as TB. PSI had begun to integrate TB diagnosis and treatment into the SQH network in 2004.

Gates Foundation support for innovations in TB delivery in China has included reform of provider payment mechanisms under social health insurance schemes since 2009.<sup>30</sup> The key healthcare financing interventions include increasing insurance reimbursement rates for TB/MDR-TB diagnosis and treatment, capitation for primary care providers, and case-based payments for hospital care providers. Financing for TB prevention and care has significantly increased; TB case detection and management have improved; and the cost of services has declined. While these interventions affected all publicly-owned facilities, those facilities behave much like for-profit providers in other countries, and lessons from China could inform efforts to engage private providers through social health insurance mechanisms elsewhere (74).

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30 Thanks to Hong Wang for this paragraph



## Summary strengths and weaknesses of TB funders regarding private provider engagement

The strengths and weaknesses of different potential sources of funding for private provider engagement may be summarized as follows (Table 12).

**Table 12. Summary strengths and weakness of funders for TB private provider engagement**

Funder	Strengths	Challenges
Government	Long term major funding 52% of total spending on TB	Strong tendency to fund public provision NTPs' lack of experience in outsourcing
Consumers	Significant funding (50%-78% of total health expenditure in priority countries)	Fragmented, unpooled, catastrophic costs and barrier to accessing quality care
Private equity	Substantial resources Increasing role in emerging markets Business acumen	Focused on curative care for elite TB associated with stigma and government programmes
Global Fund	52% of TB development assistance Public sector capture Increasingly proactive	Need to scale up successes from Strategic Initiative to other countries with a large private sector.
USAID	25% of TB development assistance is from US Govt. Traditional interest in private sector ~ 23 countries	Competing priorities Challenging pathways to scale
World Bank	Significant funding and policy influence UHC and strategic procurement	Few TB-specific projects Public sector focus (client driven)
Gates Foundation	Flexible Orchestration of innovation 14% of TB development assistance	Low priority Few country offices
TB REACH	Preference for innovation Flexible funding	Small and brief projects Limited capacity to scale up at programmatic levels







# 3 RECENT COUNTRY EXPERIENCES

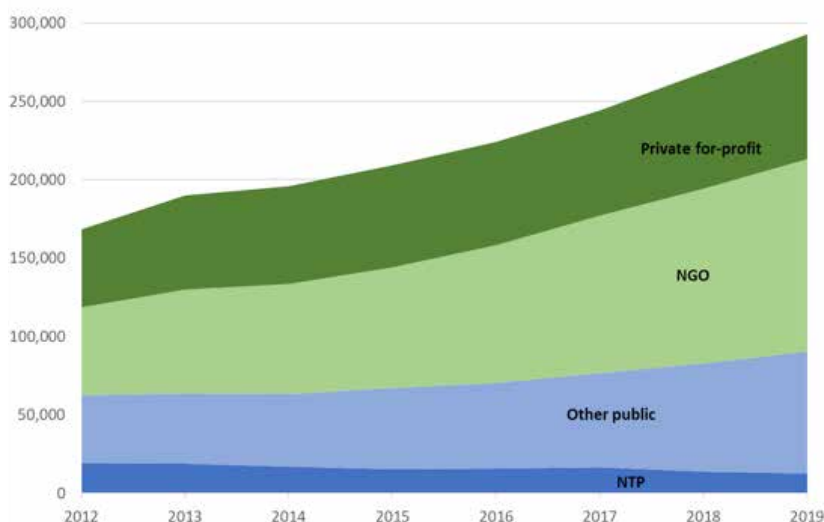
## Bangladesh

Bangladesh has achieved steady increases in total case notifications, currently at 81% of estimated incidence. Private providers, both profit and non profit contributed to 69% of total case notifications in 2019. Market research data from 2008 suggested that private TB drug sales were about 25% of incidence, but had decreased significantly over the previous 5 years (14).

Bangladesh has long had an exceptionally strong NGO sector. The main donors are the Global Fund and USAID. The distinguishing feature here is the strong NGO role in the TB program. Every sub-district of the country is allocated to an NGO partner which deploys Community Health Workers (CHWs) for case finding, referral and treatment support. NGO CHWs refer 38% of all notified cases and are responsible for generating most of the 69% that come from private providers; a further 27% comes from non-NTP public providers.

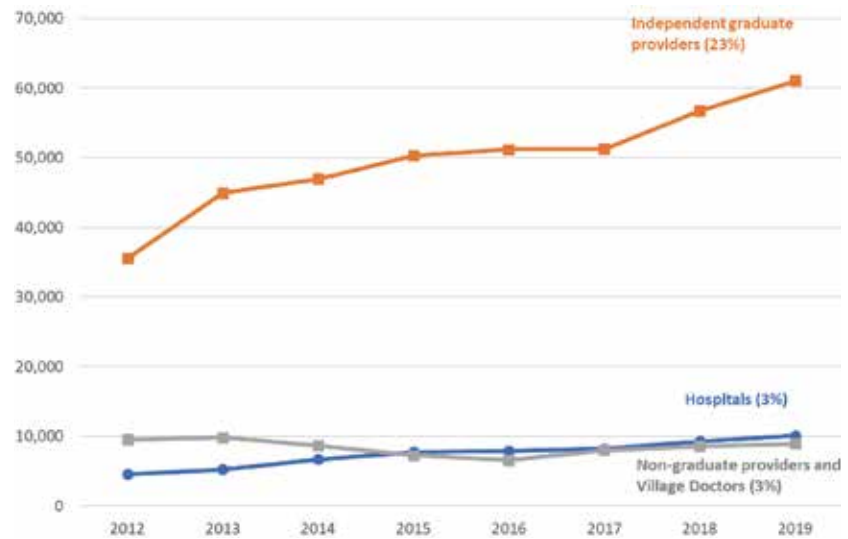
The Bangladesh National Strategic Plan for TB, 2018–2022, notes the need for engaging private providers but does not focus on this issue. Engaging all providers is listed last in a list of nine issues in notification of missing cases. In 2016–17, with support from USAID, Bangladesh prepared a National Strategic Plan for Public-Private Mix (2016–2020), revised Guidelines on Public-Private Mix for Tuberculosis Prevention and care, and a Public-Private Mix Operational Plan, 2017–2020 (draft); as a result, several million dollars of Global Fund money was reprogrammed to private provider engagement. These documents identify at least five “models” for PPM: hospitals; graduate private providers; non-graduate private providers; the “social enterprise model (SEM)” (which refers to ICDDRB’s diagnostic centers) and worksite interventions, notably at garment factories. However, targets are modest, in part because of the absence of reliable data on the numbers of private practitioners currently referring or managing cases.

**FIGURE 8. BANGLADESH TB CASE NOTIFICATION 2012-2019 BY SOURCE OF REFERRAL**



**BRAC** is the main implementing partner of the NTP, responsible for areas with 110 million people (70% of the total). BRAC's TB work is implemented by nearly 2000 field staff and nearly 14 571 DOT providers supported by 48 734 Shasthya Shebika (CHWs). BRAC has been PR for Global Fund TB grants totaling US\$248 million since 2004. BRAC manages 24 Sub-Recipients (the most significant being Damien Foundation, RDRS, TLMI and HEED) covering a population of 56 million people with 1038 staff. BRAC conducts orientation sessions for Village Doctors, pharmacists and private practitioners, but their focus is on their own CHWs and treatment supporters. More than half of the referrals to BRAC's TB centres come from their CHWs and DOT centres while 22% referrals comes from government hospitals and 14% from various private providers. In BRAC supported areas, the Total case notification increased by 18.2% in 2018 compared to 9.5% in the same regions in 2016 and 2017.

**FIGURE 9. PRIVATE FOR-PROFIT TB NOTIFICATIONS IN BANGLADESH, 2012-2019: NUMBER AND 2019 PERCENT OF TOTAL NOTIFICATIONS**



Case notifications have increased by around 30% over the last 5 years. Data on aggregate referrals are more complete than most countries, but in the absence of full coverage of a case-based reporting system it is impossible to know how many providers of different types are active.

Table 13, below, details the contributions of all kinds of providers (for-profit and non-profit, non-NTP public, formal and informal) to TB notifications over five years. It shows the importance of understanding the role of all kinds of providers, and the feasibility of doing so when the issue is prioritized.

**ICDDR,B** has received a total of US\$7.5 million over 7 years to create Diagnostic Centers, known as the TB Screening and Treatment Centers (TBSTC) under the innovative Social Enterprise Model (SEM): US\$3.7 million (in cash and in kind) in two waves of TB REACH, US\$2.8 million from Global Fund and then US\$1.2 million from the USAID Challenge TB project. In this model, though GeneXpert was offered free of charge always, initially the digital X rays were charged Tk/ 300 – 400 (US\$3.75-US\$5.00). However taking into account NTP's strategy to uniformly provide TB services free of charge across the country, iccddr,b stopped the charges on X-ray and provided this service free since January 2020. The first three TB centres of ICDDR,B were located in Dhaka and were fully operational in 2014. These centres contributed 50% of bacteriologically positive cases diagnosed in Dhaka metropolitan area. By 2018, 7 new ICDDR,B centres were operational and diagnosed at an average annualized rate of 423 per centre. With the recently awarded USAID funded Alliance for Combating TB in Bangladesh (ACTB Bangladesh), iccddr,b will be adding two more similar centers in 2021. Strengths of this model include convenient opening hours (until 8pm or 10 pm), access to Xpert, high throughput of pulmonary clients, and the excellent reputation of ICDDR,B in terms of generating quality and client friendly services. Through USAID's ACTB support, iccddr,b plans to utilize the PPM approach to implement universal TB Preventive Therapy (TPT) for the families of the diagnosed patients. The vast majority of cases notified to-date have been patients who have already reached the top chest specialists and hospitals in the urban areas. Such patients may well benefit from improved adherence and lower costs as a result of this initiative. Building on the strengths of local non-profit organizations and by engaging them in TB prevention and care, iccddr,b is also looking forward to develop a compact model of continuum of care for TB through TB PPM in the country.

Using funds from Global fund, BRAC scaled up PPM model for enhancing cases detection through TB Diagnostic Centres (TDC) to 62 sites/area starting from 2017. Between ICDDR,B and BRAC, there are 72

non-profit specialist TB diagnostic centers, attracting presumptive TB cases from private providers for digital chest X-ray and Xpert, in urban and peri-urban areas. The key to maximizing their impact in the future will be the ability to generate referrals from private primary care practitioners of patients who are either earlier in their treatment-seeking or who would not otherwise access appropriate care.

The **Social Marketing Company (SMC)** was established in 1972 as a project and affiliate of PSI and has since become a very substantial independent NGO focused on family planning, diarrhea control (ORS), and nutrition. It seems to have the potential to make a considerable contribution to private provider engagement for TB. Its major platforms include the “Blue Star network” of 8600 private village doctors and other non-graduate providers, and 4500 “Green Star Providers”, or licensed pharmacies. ICDDR,B and SMC have partnered to train 300 blue star providers in Dhaka and 200 in Chattogram. SMC has also begun a pilot initiative to collect name and contact details of referred presumptive TB patients.

**Table 13. Trends in Bangladesh TB case referrals from public, NGO and private sectors, 2012–2017**

Provider type	2012	2013	2014	2015	2016	2017	2018	2019	
	Number	Number	Number	Number	Number	Number	Number	Number	Share
Private hospitals	4537	5196	6654	7723	7898	8170	9,257	10,051	3%
Private graduate providers (GPP)	35 543	44 940	46 957	50 291	51 191	51 217	56,715	61,020	21%
Private non-graduate providers	3685	3932	3372	2861	2321	2150	2,342	1,866	1%
Village doctor (VD)	5811	5896	5296	4364	4241	5795	6,210	7,053	2%
<b>Subtotal private for-profit</b>	<b>49 576</b>	<b>59 964</b>	<b>62 279</b>	<b>65 239</b>	<b>65 651</b>	<b>67 332</b>	<b>74,524</b>	<b>79,990</b>	<b>27%</b>
Shastya Shebika (SS)/ NGO	54 484	63 758	66 904	73 366	82 666	92 935	104,582	112,446	38%
Community volunteer (CV)	1939	2574	3537	3449	5502	7460	6,639	10,165	3%
<b>Subtotal private non-profit</b>	<b>56 423</b>	<b>66 332</b>	<b>70 441</b>	<b>76 815</b>	<b>88 168</b>	<b>100 395</b>	<b>111,221</b>	<b>122,611</b>	<b>42%</b>
Government hospital (non-NTP)	32 371	34 585	36 592	40 149	41 450	43 228	49,274	55,761	19%
Government facility staff (GFS)	10 830	10 499	9558	9426	9672	11 018	12,609	12,420	4%
Community Health-care Provider (CHCP)	-	-	-	2541	3421	5935	7,125	9,795	3%
<b>Subtotal public non-NTP</b>	<b>43 201</b>	<b>45 084</b>	<b>46 150</b>	<b>52 116</b>	<b>54 543</b>	<b>60 181</b>	<b>69,008</b>	<b>77,976</b>	<b>27%</b>
TB patient	5394	5123	4842	5101	5430	5697	5,038	5,307	2%
Direct to NTP (UHC, CDH, CDC)	13 642	13 518	11 994	10 082	10 129	10 596	8,805	7,058	2%
<b>Subtotal direct to NTP facility</b>	<b>19 036</b>	<b>18 641</b>	<b>16 836</b>	<b>15 183</b>	<b>15 559</b>	<b>16 293</b>	<b>13,843</b>	<b>12,365</b>	<b>4%</b>
<b>Total notifications</b>	<b>168 236</b>	<b>184 125</b>	<b>190 410</b>	<b>209 353</b>	<b>223 921</b>	<b>244 201</b>	<b>268,596</b>	<b>292,942</b>	<b>100%</b>

Source: NTP, BRAC

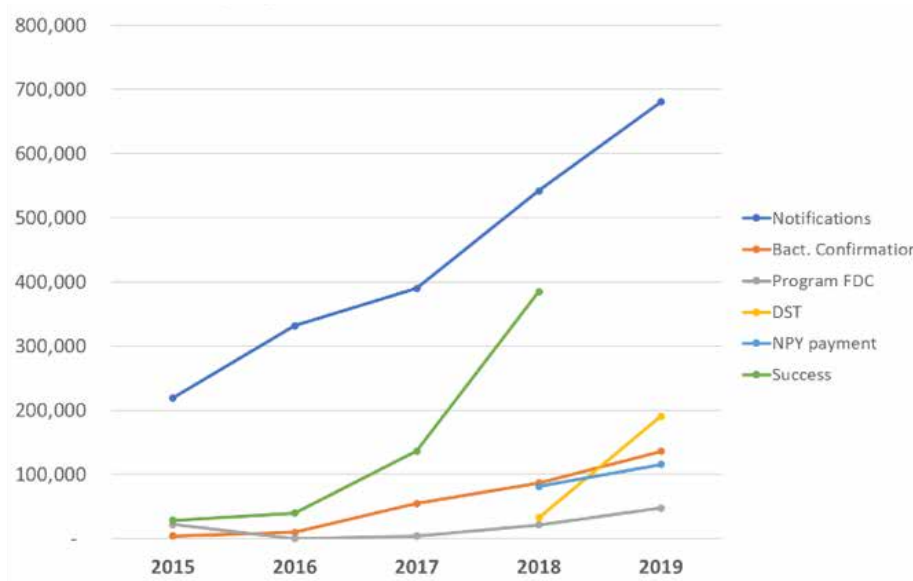
# India

The India TB program had articulated various “schemes” for engaging private providers since 2002, but they were never prioritized. Successive Joint Monitoring Missions from 2003 noted the same lack of attention to the issue, in spite of various USAID and Global Fund projects<sup>31</sup>. The foundations of a new approach were laid in 2012. These include the development of a case-based electronic TB case notification system (Nikshay), issuance of decrees banning serological tests<sup>32</sup> and making TB notification mandatory. The decision to move to daily drug regimen, fixed dose combinations (FDCs) and a common standard of TB Care in India<sup>33</sup> helped align RNTCP regimens and those commonly used in the private sector. Between 2015 and 2017, demonstration projects of private sector engagement in Mehsana, Patna, Mumbai and elsewhere showed dramatic increases in case notification and treatment completion on a relatively large scale.

India’s National Strategic Plan for TB (2017–2025) calls for a six-fold increase to two million private notifications per year by 2020, which would represent 75% of estimated incidence. The plan projects a three-fold budget increase. There appears to have been a major change in attitude towards private provider engagement by the RNTCP, in line with a new National Health Policy in 2017 that stresses private provider contracting via strategic purchasing (45) and the ambitious National Strategic Plan. The Global Fund program for 2018–20 included US\$36 million (13% of the total) for three Principal Recipients dedicated to scaling up private provider engagement across 40 cities. Since 2019, a World Bank credit of \$400m has been largely focused on support for private provider engagement.

As figure 10 shows, private provider notifications have increased significantly in recent years, even if falling short of the ambitious targets set in the NSP. In 2019, private providers notified 680,948 patients, more than three times the total for 2015. The 2019 figure represented 31% of total notifications and 26% of estimated incidence that year. However, the majority of those patients did not receive program-supported diagnostics, TB drugs or social support, and there

**FIGURE 10. TREND IN PRIVATE TB NOTIFICATIONS AND COVERAGE OF PROGRAM SERVICES IN INDIA, 2015-2019**



are some concerns about the validity of the latest estimate of treatment success for privately managed patients (71% for the 2018 cohort).

The main elements of the private provider engagement strategy, and their current status, may be summarized as follows.

31 JMM Reports. Available at <https://tbcindia.gov.in/index1.php?lang=1&level=2&sublinkid=4161&lid=2809>

32 Government bans TB Serological tests. Hindu Business Line. 2012. <https://www.thehindubusinessline.com/economy/policy/Government-bans-TB-serological-tests/article20455635.ece>

33 Standards for TB care in India. <https://tbcindia.gov.in/showfile.php?lid=3061>

**Table 14. Strategies for private provider engagement in India and their current status**

Strategy Component	Introduced	Current status
Mandatory notification	2012	Legislation and implementing regulations are in place; sanctions are very rare
Enforcement of Schedule H-1: restriction of TB drug sales and reporting of prescriptions	2014	Effective enforcement highly uneven, limited to a few locations (Madhya Pradesh, parts of Gujarat, etc.)
<i>Nikshay</i> digital case-based data system for notification, patient management, program management	2012	Version 2.0 introduced in 2018. Continuing enhancements including a common register for public and private sector. 223,223 private facilities registered in <i>Nikshay</i> ; 41,243 providers notified >1 TB patient in 2019.
Program diagnostics for private patients	2017	DST 28% amongst private notifications (68% public). 339,308 CBNAAT tests (10% of total) were for private patient samples; of them, 92,257 were positive, representing 14% of private notifications
Program drugs for private patients	2017	No publicly available data on coverage amongst privately-notified patients
Nutritional cash benefit (NPY) for all TB patients, including those in private sector: Rs/ 500 month	2018	
Direct Benefit Transfer to private providers: Rs/ 500 per notification, Rs/ 500 per treatment completion	2019	5,077 private providers (12% of those who notified any case) received Rs/ 38.4. million (US\$ 518,686)
Treatment support for privately notified patients	2017	In 2019, 27% of private TB patients received a home visit from program staff (cf 57% public patients).
Deployment of District PPM Coordinators	2015	In 2019, 608 were sanctioned and 455 were in place (60% of the total).
Contracting NGO intermediary "Patient provider support Agency"	2019 (GOI funds)	Global Fund "JEET" program (\$40m) in 42 cities, 2017-21. Revised Partnership Guidelines issued 2019. Five states have awarded contracts with an annual value of more than \$2.2m; many more are budgeted and in procurement process.
Call Centre	2015 (UATBC) 2018 (Gol)	Key to UATBC demonstration projects 2015-17. National 100-seat Call Centre implemented 2018 but private provider functionality de-emphasised. Pilots under way to explore increased role for privately notified patients.

Source: Central TB Division: India TB Report 2020; authors analysis

The 2019 Joint External Monitoring Mission noted the impressive ambition of the NSP and the considerable achievements made to-date. It focused on critical remaining challenges, notably: the need to extend program services (diagnosis, drugs, adherence support, social support) to all, including patients accessing care in the private sector; the need to scale up the two basic models of engagement—via contracted intermediary agencies, or directly by program staff; the ambitious change management required to effectively implement output-based contracting, as envisioned in the new Partnership Guidelines; and the need to continuously improve data quality, timeliness and completeness. It outlined potential mechanisms for increasing the access of patients accessing care in the private sector to program-funded diagnostic services and TB drugs and recommended exploration of ways to include TB in the expanded government-sponsored health insurance program (PM-JAY).



# Indonesia

Indonesia has a large and growing private healthcare sector, including 24 716 pharmacies, 8615 licensed drug shops and more than 1500 private hospitals. There are 110 000 registered general practitioners, although the number actively practicing is much lower; many are also employed in government service and practice privately only part-time. The numbers of private hospitals groups and general group practices have doubled in four years. The number of private laboratories is not known.

In 2017, private healthcare providers (including pharmacies) accounted for 74% of the initial care-seeking behavior of people with TB in Indonesia and 42% of treatment but only 13% of TB notification (increasing to 19% of the total notifications in 2019 though with primary private providers contributing only 4%).

The importance of engaging private providers has been recognized in national TB plans since at least 2006. For the 2016–20 National Strategic Plan (NSP) “improvement of networking TB services through public-private mix” is one of the main activities under Strategy 2: improving the quality of “TOSS-TB” services. Planned activities include developing technical guidance for district-based PPM, mapping service providers, signing MOU and working with professional societies. The plan includes no target for private provider notifications.

Efforts to engage private providers have focused on specialists and hospitals, where the numbers of patients per provider or facility tend to be higher than at the primary care level. The Pulmonologist Society, PDPI, has been working with the NTP since 2010 to improve involvement of pulmonologists and increase adherence to ISTC/PNPK, in partnership with the ATS and with funding from USAID and Global Fund. This has been a high yield intervention but thus far has typically stopped with the specialists, rather than using the specialists to reach large numbers of general practitioners.

Due to limited human resources availability especially at district level, NTP has enormous challenge to engage private primary care providers. Since 2014 there has been an initiative to certify general practitioners for TB, but very few general practitioners had been trained and certified by the end of 2019. Meanwhile, the social health insurance scheme has contracted more than 10 000 private General practitioners to provide outpatient primary care, but collaboration between the NTP and the social health insurance scheme remains nascent (see below).

**Table 15: Private provider engagement in Indonesia**

Type of provider	No. of facilities/providers			Proportion of			
	Total	Contracted by JKN	Engaged by NTP and Notified any cases 2019	Initial care-seeking	Diagnosis	Treatment (all cases)	DS TB notification (2019)
<b>Private</b>							
Pharmacies	30,260	3,320*		52%			
Individual general practitioners	70,000	5,354*	262*	19%	19%	15%	1%
Group general practitioners/ Clinics	9,146	6,766*				6%	
Hospital	1,853*	1,311*	934*	3%	11%	21%	19%
<b>Subtotal</b>		<b>16,751</b>	<b>1,196</b>	<b>74%</b>	<b>30%</b>	<b>42%</b>	<b>20%</b>
<b>Public</b>							
<i>Puskesmas</i>	10,142*	10,050*	9,497*	19%	36%	27%	59%
Hospital	998*	878*	701*	5%	34%	27%	20%
<b>Total</b>		<b>10,928</b>	<b>10,198</b>	<b>24%</b>	<b>70%</b>	<b>54%</b>	<b>79%</b>

\*2019 - Source: Patient Pathway Analysis 2017. Indonesia Health Profile 2019. Total Active TB Notifications 2019 from NTP Surveillance data. Hospitals & Clinics Primary data 2019 from Health Services Directorate information Centre. NTP Primary Data 2019. JKN data from BPJS.

More recently, private provider contributions were strengthened in districts assisted by USAID (Challenge TB, in 16 districts) and the Global Fund (Implementing Organization Public Private Mix, in 37 districts). In 2019, private providers in these project areas contribute 29% of total DS TB notifications in each area. As a result, the total private sector contribution to case notification in CTB's districts nearly doubled in absolute numbers, increasing from 12,325 in 2015 to 24,595 DS TB cases in 2017. Meanwhile, the total private sector contribution to case notification in IO PPM's districts tripled in absolute numbers, increasing from 15,081 in 2017 to 50,644 in 2019, due to active surveillance activities mainly in private hospitals.

Nationally, private TB notifications in 2019 nearly doubled from 58,633 DS TB cases to 109,017 DS TB cases. These achievements are based principally on defining the district responsibility to engage hospitals and devolving the responsibility to engage general practitioners to health center staff at the sub-district level. Although Challenge TB assisted with establishing the initial engagement model, the ongoing engagement is carried on by government staff. This "district-based PPM" model is in line with the decentralized governance of Indonesia and is now national policy. Several activities were conducted to improve the engagement of both public and private providers, specifically: establishment of KOPI TB (coalition of professional organizations) at national, provincial and district levels; workshops for health facilities -- especially private hospital, GPs and private clinics -- to strengthen TB service linkages both internally and externally; implementation of WIFI TB, a mobile application as a simplified recording and reporting system for GPs and clinics; piloting integration of hospital information system/SIMRS and TB information system/SITB in 94 health facilities; advocacy to hospital management and hospital associations to support the TB program; and active surveillance in public and private hospitals.

Since 2020, PPM interventions have emphasized: the engagement of health provider associations, professional organizations and national health insurance/BPJS-K; the integration of BPJS-K's information system and SITB; routine visits for GP/clinics and private hospitals especially in 12 high TB burden provinces; and placement of additional staff to manage PPM activities at provincial level. Further rollout is prioritized under the Global Fund financing and is further supported under TB Private Sector (TBPS), a USAID-funded project dedicated to TB private provider engagement in Indonesia. A mobile application for private provider notification called WiFi TB<sup>34</sup> and a reduced data requirement from private providers should also assist in this process. The government, with technical assistance from the USAID-funded Health Financing Activity (HFA) project, is also preparing to pilot modified social health insurance purchasing arrangements to better support TB notification and care.

## Myanmar

The 2018 Myanmar TB Prevalence Survey found that 33% of those with TB who sought care did so with private general practitioners and a further 26% with pharmacies. It is estimated that 19,000 of the 32,000 medical doctors in the country practice in the private sector, and many of those in the public sector also have part-time private practice.

Private general practitioners have been engaged at some scale since 2003. The initiative was taken by PSI/Myanmar, which integrated TB diagnosis and treatment into the range of services offered within its "Sun Quality Health" (SQH) social franchise network. Of more than 1,200 General Practitioners in the SQH network, 800 are actively involved in TB diagnosis and treatment, as well as 2,000 community health workers. The other main partner for the NTP in this work is the Myanmar Medical Association through whom the national TB programme engages private hospital.

The national programme has been engaging with the private sector to ensure mandatory case notification since 2018. Notifications from private for-profit providers have fallen from 27,000 in 2012 (19% of the total) to 18,000 in 2019 (14% of the total), although because incidence has been declining over this period these private notifications have consistently represented about 11% of incidence. A further 8,000 cases (7% of the total) were referred from private clinics and pharmacies to the public sector for notification and treatment in 2019. The National Strategic Plan for TB (2016–2020) envisioned relatively modest increases in case detection and in the contribution of private providers, for which the target was 22% of total case notifications in 2020. Advocacy and training programmes has been rolled out by the NTP for private health care providers.

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34 Notification through WiFi TB application. See [https://pdf.usaid.gov/pdf\\_docs/PA00SWTN.pdf](https://pdf.usaid.gov/pdf_docs/PA00SWTN.pdf)

The 2019 Joint Monitoring Mission noted a number of challenges in private provider engagement. Only about 3,500 of perhaps 20,000 GPs, and 1,000 of perhaps 9,000 pharmacies, have been successfully engaged. Engagement has thus far been externally funded and the government has not put in place systems for strategic purchasing; pilot initiatives are under way to design a social health insurance scheme, but they have not included TB. While TB notification is mandatory, tools, systems and incentives need to be put in place to take it to scale. Contact investigation and preventive therapy are rarely performed for privately managed patients. Myanmar is also in the process of expanding TB preventive treatment through private sector care providers with partners.

## Nigeria

Nigeria has the lowest treatment coverage rate amongst high-burden countries, at just 27% of estimated incidence in 2019. While data on the private healthcare sector in Nigeria are particularly scarce and unreliable, 60% of Nigerians first seek health services in the private sector which include private hospitals, pharmacies, patent medicine vendors (PMVs) and community facilities.

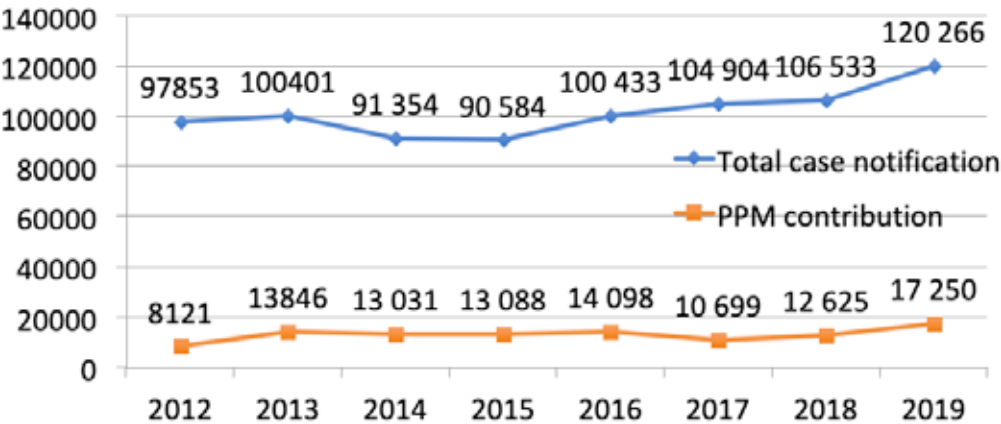
The PPM scheme in Nigeria commenced in 2006 and PPM guidelines were developed that same year.

Although its PPM steering committee was established in 2006, this committee was largely inactive as a result of inadequate funding. In 2017, USAID and WHO supported the development of a PPM Action Plan (2018–2020), with a target of 30% PPM contribution towards national case notifications.

As figure 11 shows, private notifications have driven the recent improvement in notifications in Nigeria, increasing from 8% of the total in 2012 to 15% in 2019, but they still represent only 4% of estimated incidence.

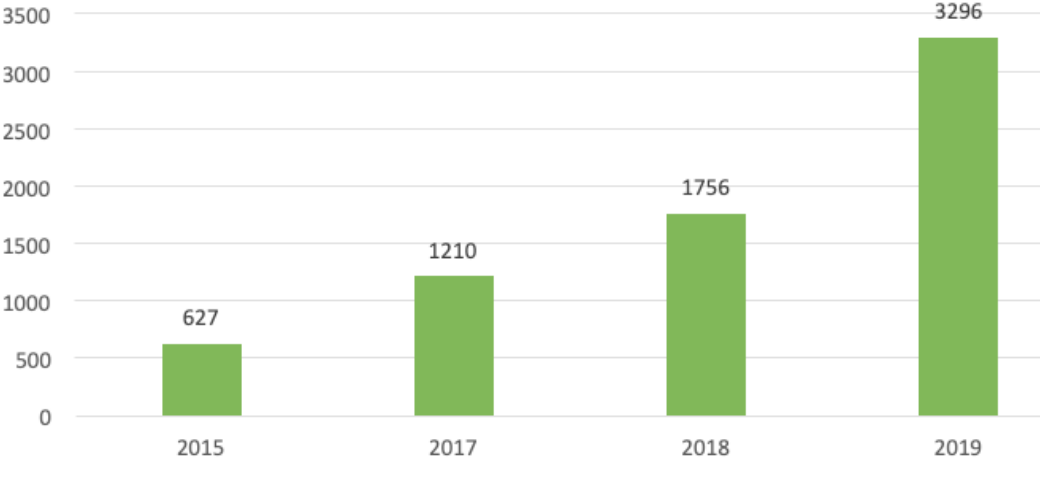
In 2019, faith-based organizations (FBOs) which made up 17% of private health facilities engaged for TB service provision, accounted for 53% of TB cases notified (9,135), while private for-profit facilities which forms the bulk of private facilities engaged (83%) accounted for 47% (8,101) of the TB cases notified. The average yield in 2019 was 22 TB patients per notifying FBO and 4 per notifying for-profit facility.

**FIGURE 11: TOTAL AND PRIVATE TB NOTIFICATIONS IN NIGERIA, 2016-2020**



There has been a steady increase in the number of private facilities providing TB services from 627 in 2015 to 3296 health facilities in 2019 (see figure 12). This scale up of engagement was undertaken to ensure increased access to TB services, as the private sector is usually the first point of care for those ill with TB.

**FIGURE 12: PRIVATE FACILITIES PROVIDING TB SERVICES IN NIGERIA<sup>35</sup>**



The coverage of TB services in FBOs increased from 51% in 2017 to 76% in 2019, while that of private for-profit health facilities increased from 5% in 2017 to 15% in 2019. Support from USAID and the GlobalFund grant has also driven the increase in TB case notifications from 23 states. USAID funded SHOPS-PLUS<sup>36</sup> project supports the implementation of TB case finding in Kano and Lagos states while Global Fund through the private sector principal recipient (IHVN) is implementing PPM activities in 21 States. The engagement of private sector was tremendously advantageous during the national lockdown due to the COVID-19 pandemic with private health facilities providing TB services during that period. The PPM contribution to national case finding during quarter 2 of 2020 when the lockdown was in effect was 23%.

USAID in 2020 supported two large, five-year Local Organization Network (LON) projects for TB; one for US\$35 million implemented in 14 states by KNCV Foundation Nigeria and 9 partners, the other for US\$ 15 million implemented by IHVN and 8 partners in 4 south-eastern states. Both projects include activities to sustain and expand engagement of PMVs and private hospitals (both for-profit and non-profit), along with other activities designed to increase coverage and quality in the public sector.

The Institute for Human Virology, Nigeria (IHVN) began implementation of a Global Fund grant to engage private healthcare providers for TB across 21 states in January 2019, working with 6 NGO Sub-Recipients. By mid-2020 they had engaged nearly 20,000 community pharmacists/PMVs, 400 private laboratories, 400 faith-based facilities and 2,000 private hospitals. The grant is expected to be renewed for the period 2021-23.

The scope and potential for private provider contributions to the national TB programme in Nigeria remain immense, as are the needs. Over the medium and long term, it will be important to integrate these activities into national public financing arrangements, and the initial steps to include TB into nascent and planned state-sponsored health insurance schemes need to continue<sup>37</sup>. In the near term, the following issues need to be addressed as private provider engagement is scaled up:

- Effective engagement of an increased proportion of private providers, of all types;
- Functional and geographic coordination between the major USAID- and Global Fund-supported activities, each of which involves multiple implementing partners, to minimize redundancies and gaps while maximizing synergies;

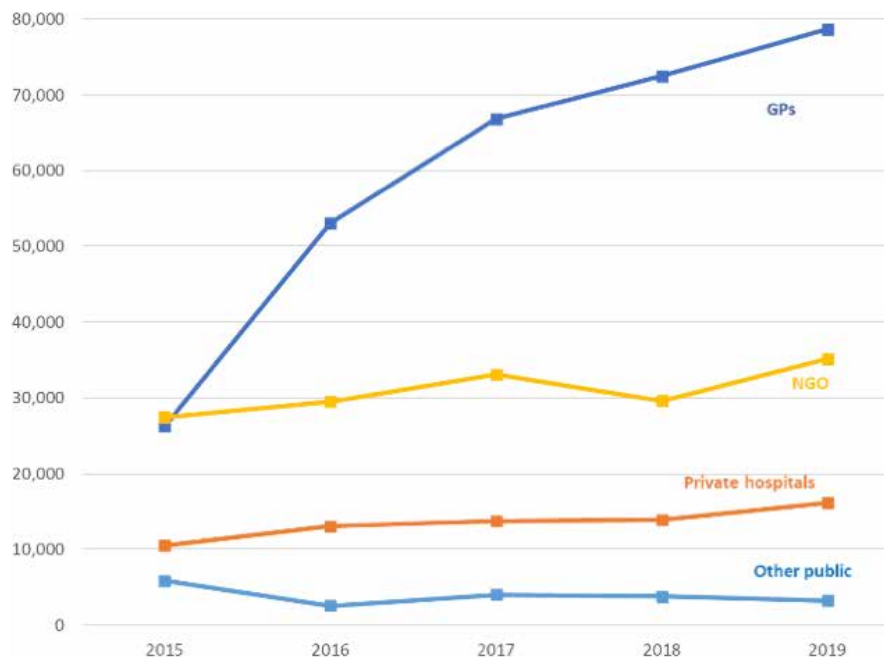
<sup>35</sup> Sustaining Health Outcomes through the Private Sector Plus (October 2020) Annual Report

- Continuity of the activities and relationships built up under the SHOPS Plus project, and retention of that expertise and of those lessons learned within ongoing projects;
- Improving real-time data on case finding, patient management and provider-wise performance, including eventual harmonization of the various digital systems that have been developed by individual partners and projects (such as MATS, CommCare, STARR).

## Pakistan

In Pakistan, 84% of initial healthcare seeking is estimated to take place in the private sector: 24% with informal providers and 61% with formal providers, especially GPs<sup>36</sup>. Private healthcare providers include at least 100,000 GPs, over 67,000 pharmacies, thousands of laboratories, and around 5,000 hospitals. While they are concentrated in urban areas, GPs and informal providers (drug sellers, ‘hakims’) mostly serve small towns in rural areas. The volume of anti-TB drugs sold in the private market in Pakistan was estimated to be equivalent to 164,000 patients in 2018, or 34% of the total<sup>37</sup>. The market leader is *Myrin-P* (Wyeth/Global Pharmaceuticals Ltd) sold in FDC formats, with a full 6-month treatment course costing a total of around Rs 6,000 (US\$ 38) for the average adult.

**FIGURE 13: TB PPM NOTIFICATIONS IN PAKISTAN, 2015-2019**



There are four main models of Public-Private Mix for TB PM in Pakistan: PPM1 for GPs, PPM2 for NGOs, PPM3 for private hospitals, and PPM4 for parastatal or other public hospitals. The total number of TB case notifications from PPM increased from 70,124 (22% of the total) in 2015 to 133,205 (41% of the total) in 2019. The contribution of private for-profit providers (PPM1 and PPM3) increased from 36,817 (11% of the total) to 94,819 (29% of the total) over the same period. The major scale up and biggest increases have come from the GPs since 2016. Still, less than 5% of private primary care providers are actively engaged with the NTP, and some large public and private hospitals are not screening for TB in OPD or effectively linked with the Program.

<sup>36</sup> Patient Pathway Analysis; Report of National Workshop on Data and Evidence for Policy Actions Towards Ending TB in Pakistan; Jan 2019

<sup>37</sup> IQVIA (2019), “Estimation of adult TB patients treated in the private sector in Pakistan through ATT medicine sales.” Note that this represents a reduction from previous estimates (cross reference Table 5)

**Table 15: Private healthcare providers in Pakistan engaged for TB, 2019**

Provider type	Estimated number in Pakistan	Number actively engaged for TB	% actively engaged for TB
Hospitals	5,000	167	3%
General practitioners	100,000	4200	4%
Pharmacies	67,000	1000	1%

Source: Pakistan PPM Strategy and Action Plan for Tuberculosis Control, NTP, August 2020

Pakistan's NTP has very strong NGO partners to help with engaging private providers. Greenstar Social Marketing (GSM) and Mercy Corps (MC) --with its 6 NGO sub-recipients-- implement very similar models of GP engagement (PPM1) in 20 and 65 districts, respectively. They deploy one field worker to support an average of 15 GPs. The approach consists of: mapping and selection of providers; short training for GPs and their paramedical staff; engagement and equipment for private labs; provision of free NTP drugs for notified TB patients; payment of small incentives for GPs and lab staff; deployment of NGO field staff who carry much of the reporting and recording burden; and quarterly review and data validation meetings with the District or Provincial Programme. A published study demonstrated a 71% increase in case notifications by GPs after the introduction of cash incentives in 2015. GSM and MC report treatment success rates among patients treated by private providers in excess of 90%, whereas a published study reported 81% treatment success amongst 883 TB patients treated by private providers in Lahore in 2015<sup>38</sup>.

Since 2015, Community Health Solutions (CHS) has developed a network of 61 *Sehatmand Zindagi* TB diagnostic and treatment centers, supported by 20 vans equipped with digital x-ray for mass screening. In 2018, the centres that had been in operation for the full year detected an average of 22 cases per center per month. Each center drew presumptive cases from an average of 58 GPs and diagnosed cases from an average of 24 GPs. In 2018, 54% of cases were referred from private providers, 25% came from screening camps, and 21% were walk-ins. CHS case finding increased to 19,863 in 2020.

Private hospitals have made steady contributions of around 15,000 cases per year in recent years, while the contribution of parastatal facilities has been small. The leading contributors are the Gulab Devi Hospital in Lahore and Indus Hospital Network (IHN), based in Karachi. The NTP has recently begun to strengthen partnerships with the Agha Khan Development Network, which operates over 450 clinics, 5 secondary hospitals, and the flagship AKUH in Karachi<sup>39</sup>.

IHN, CHS, GSM and MC invest considerable resources in a variety of mass screening camps, often with digital x-ray and Xpert, at hospitals, outside GP clinics, or in communities and worksites. In 2018, they conducted 4,667 screening camps of various kinds, and found 5,838 cases. Analysis for the JPRM in 2019 suggested that these resources could be more effectively deployed to expand passive case finding in private facilities.

Most provinces and the Federal Government have passed Mandatory Notification Acts, which states: "Within a week of examining the patient, a registered medical practitioner shall submit a complete Notification Form to the District Health Officer. Failing which a penalty of imprisonment of up to two years or a fine of 500000 PKR or both shall be imposed". A pilot project of mandatory notification has been initiated in five districts of two provinces. The preliminary results of 2020 shows that 90 providers notified 703 cases. This intervention does not include any cash incentive for the private providers but non-monetary incentives like orientation about TB, free diagnosis, access to free rapid molecular testing, and provision of free drugs is being offered through district TB programs. The corner stone of this intervention

38 The study also reported 64% initial loss to follow-up, but acknowledged that it was not able to account for patients treated at public facilities or at private facilities not included in the study, so the degree of overestimation is unknown

39 Agha Khan Development Network. See <https://www.akdn.org/where-we-work/south-asia/pakistan/health-pakistan>



is the introduction of electronic systems through a call center and use of an android application for case notification and paperless notification, which addresses the major barrier to engagement with TB program. This intervention is complemented by the development of an online training portal by NTP Pakistan which can be accessed at <http://training.ntp.gov.pk/>. The online training is accredited with a public sector university which will award 6 credit hours on successful completion of the course. The course is totally free of cost. It is expected that a large number of health care providers will use this portal in view of Mandatory TB Case Notification Act.

The 2019 JPRM concluded that Pakistan will not achieve the End TB goals and targets unless it prioritizes a major expansion of PPM, based on a spirit of genuine partnership. It recommended that the proportion of private primary care providers actively engaged in the TB program should be increased from <5% to >20%, and that the number of privately-managed TB patients receiving the full package of publicly-funded TB services should double within three years. Specific recommendations included increasing private patients' access to Xpert, making full use of modern digital technologies, and increasing engagement of private labs, pharmacies and informal providers. The base line of 2019 from all models of PPM is 38% which is likely to increase to 52% in 2023.

In NFM III grant, Mercy Corps will be managing all models of PPM and aims to engage 14, 500 GPs (three-time increase), 282 large private and NGO hospitals in addition to 12,500 pharmacies , and country wide implementation of mandatory case notification.

The National Strategic Plan for Tuberculosis Control, 2020 – 2023, set a target of 192,956 cases to be notified via PPM in 2023 (41% of the total), while the PPM Strategy and Action Plan (August 2020) set a more ambitious target of 223,000 cases in 2023 (60% of expected total notifications). The strategy builds on current partnerships to drive further scale up of engagement of GPs and hospitals and a renewed attention to pharmacies, with a particular focus on digital systems and non-monetary incentives to implement mandatory notification regulations.

## Philippines

The Philippines has long been considered an exemplar of private provider engagement. It was an early success story, with engagement focused on specialists and hundreds of hospitals – the hospital engagement, in particular, was a well-organized effort conducted at national scale. By contrast, efforts to work with general practitioners, laboratories and pharmacies have been sporadic, small and short-lived, and very little is known about the 7000–15 000 private general practitioners engaged. The 131 096 private notifications / referrals in 2019 represent 32% of total notifications and 22% of estimated incidence.

There were important lessons but also fatigue in the Philippines from 15 years of project-based support from five USAID projects and four rounds of Global Fund, and the desire for a more institutionalized approach. Furthermore, a number of the models remained discouraging for private providers (see below). Hence, the country has recently settled on a pathway towards more provider-friendly models and greater sustainability and aims to use outsourced government financing to support a more sustained version of private provider engagement.

Islam et al analyzed IMS data and estimated that private sales of 4 fixed-dose combination medications were sufficient for the intensive phase of treatment for 250 000 TB patients per year 2007–2011 (in addition to 3 fixed-dose combination medications and loose drugs that are harder to analyze), which is consistent with the earlier estimate by Wells et al and substantially higher than the 195 560 cases registered by the NTP that year. On the other hand, the 2016 National Prevalence Survey found that 21% of those who had taken anti-TB drugs since 2011 and 22% of those currently on treatment took them from private sector sources.

The two main NGO partners for the TB Program are the **Philippines Coalition Against Tuberculosis (PhilCAT)** and **Philippines Business for Social Progress (PBSP)**. Founded in 1994, **PhilCAT** describes itself as “a 69-member coalition of government and non-government organizations, academe, medical and non-medical professional societies, research organizations, patient and advocacy groups, corporate



foundations and pharmaceutical companies"<sup>40</sup> It organizes an annual TB Convention and World TB Day events. It has also led many PPM activities with successive grants funded by USAID and Global Fund. **PBSP** was founded in 1970, with 255 member companies, as of February 2021, ranging from small to large businesses. Income in 2019 was at PhP2.1 billion coming from grant contributions from donors (80), non-member and member companies. Health is just one of several major areas of work for PBSP. It also implements projects in education, environment, and livelihood. It has been a Principal Recipient for Global Fund since 2010 and it implemented the USAID "IMPACT" project.

USAID supported the development of a National Action Plan for TB PPM in 2017 and awarded two new large TB projects in 2018. Both of these projects will address private provider engagement, amongst other priorities, and support the new direction from the NTP as outlined above.

A mandatory TB case notification system was introduced in 2018. Under the Global Fund grant, 150 notification agents were deployed in three highly regions to help providers comply with the mandatory notification laws. Through this work, private physicians who do not refer their TB cases to designated TB facilities for treatment were able to directly report their diagnosed TB cases to local health authorities through paper-based or electronic (web-based) reports. In 2019, such providers contributed as much as 18% of the total country TB case notifications, though 97% of these cases were clinically diagnosed TB and treatment outcomes were not reported.

The national social health insurance program, PhilHealth, covered 93.5 million people at the end of 2016, or 91% of the population. It mainly provides inpatient hospital benefits, but since 2003 it has also provided an outpatient TB DOTS package. Accredited providers can be reimbursed PhP 4000 (US\$ 78) per TB case managed: US\$49 on completion of the intensive phase, and US\$29 on completion of the continuation phase. The amount was based on a 2003 estimate of public sector costs and has not been adjusted since. The USAID Health Policy Development Program (HPDP) estimates that it should now be PhP 15,000 (US\$294). PhilHealth TB DOTS claims payments have doubled in the last three years to US\$ 2.7 million in 2016. About 38 000 intensive phase claims were paid in 2016, corresponding to 11% of total cases notified that year; claims paid for the continuation phase are only about 75% of claims paid for the intensive phase.

Constraints to PhilHealth impact on TB have been well-recognized for years and include: its influence on public facilities is limited by the fact that claims are paid to Local Government Units, which rarely pass them on directly to facilities or staff; its influence on private facilities is constrained by cumbersome accreditation and claims processes and by the low value of the benefit; patients have no incentive to present their PhilHealth card because drugs and consultations are supposed to be free anyway; only 150 (8%) private facilities are accredited for the TB package, and 46 of them are hospitals; most private hospitals have only a referral and not a treatment role for TB; the TB treatment model required under PhilHealth is rigid and demanding for both patient and provider, leading most to opt out; and there is no PhilHealth package for the programmatic management of drug-resistant TB. A 2016 USAID-funded review of TB payment systems made 17 specific recommendations to improve the contribution of PhilHealth to TB prevention and care (87). Many of these recommendations are dependent on larger changes in PhilHealth, including major political decisions about how much of the national budget to channel through PhilHealth, and thus to date there has been little progress on implementing these recommendations.

Meanwhile In 2019, the Universal Health Care Act was passed. The act makes a clear distinction between population-based services, to be funded by DOH, and individual services, to be funded by PhilHealth. Provinces and cities will establish Special Health Funds to pool PhilHealth claims payments with resources from LGUs and DOH. Special Health Funds will contract with new Service Delivery Networks, comprising public and private facilities from primary to tertiary levels. The reforms are to be implemented initially in 33 provinces/cities, and the changes can be expected to play out over several years. Implementing regulations were issued at the time of the JPR (October 2019), but many important issues remain to be resolved. These reforms will have substantial implications for how private provider engagement is best pursued in the Philippines.

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40 Philippine Coalition Against Tuberculosis. See <https://philcat.org/>



# 4 THE WAY FORWARD

## Principles for change in mixed health systems<sup>41</sup>

### Public financing and stewardship

The role of the private sector in healthcare is often controversial. The first premise of the current document is that the problems and opportunities of private providers in TB prevention and care can only be effectively addressed by applying public funds to private healthcare. One need be neither “pro”-private healthcare nor “anti”-private healthcare: one can be agnostic as to the ownership of the facilities and staff who deliver the services that will achieve programme goals, and recognize that efficient, effective and equitable care can be and is delivered by a wide range of providers in different settings. But most health economists are not agnostic as to private or public financing; funding for TB prevention and care must increase and most of that funding must be public or philanthropic if goals of equity, efficiency and effectiveness are to be achieved.

Theory and experience both rule out the two alternatives in most high-burden settings. For more than 20 years, NTPs and their international supporters have tried to compete with the private sector. The current 71% case notification rate indicates both the potential and the limitations of this approach. It has worked well in many countries but in others – including most of those with the highest burden – it has failed to achieve universal coverage.

The second alternative – improving the quality of privately-financed, privately-delivered TB care – should also be rejected. For reasons well understood and documented by health economists, voluntary and out-of-pocket financing are not conducive to effective, equitable and efficient healthcare. The problems of existing privately financed and delivered TB care have been documented. In the world’s most advanced health systems, public and compulsory funding sources account for 75%-85% of total health expenditure and voluntary and out-of-pocket contributions are minimized. Challenges in applying public funding to private healthcare are daunting: public funding for health is limited in low- and middle- income countries, and systems for strategic purchasing are complex. Nevertheless, especially recognizing the role of path dependence in health systems development, our efforts should be designed to facilitate the emergence of the only kind of solution that we know to work at scale in the long term.

The implication of this premise is that efforts to engage private providers in TB should be designed to facilitate and maximize application of public funding to improve private healthcare.

### Complex, adaptive, emergent systems

A second set of premises derive from our understanding that public-private mix in TB delivery and financing is an outcome of complex adaptive systems that are local – albeit open to external influences

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41 The term “mixed health systems” acknowledges the fact that a range of actors (public, private for-profit, faith-based, non-government and community-based) are involved in the provision and financing of health services, and that boundaries between them are sometimes blurred.

– and determined by political economy. Implications for interventions are many. While the key features of a vision may be articulated, specific mechanisms may take many forms that can't be predicted and the ability to posit milestones along the path to better private provider engagement is limited. Even sequencing may be hard to predict. The process is emergent. It is an example of a complex problem, to be explored rather than managed. It's not like building a bridge.

Efforts to engage private providers for TB may draw on the latest thinking about market systems (88), which itself has roots in longstanding ideas about participatory development. External funders often like to develop an innovation and then catalyze scale up and replication. While there are clearly elements of this paradigm in advancing private provider engagement (which involves innovative business models and enabling technologies), this mental model often leads to attempts to export inappropriate models that may appear to work but lack the foundations required for institutionalization and amplification. Barriers to private provider engagement are profound: it has the characteristics of a "disruptive" innovation that is resisted by the current system. As governments move to govern the whole health sector, rather than just the public health sector, one key intervention is the conscious development of new institutional relationships encompassing Ministries of Health, Finance, and Planning, plus national health insurance and regulatory agencies. It is important to remember the need to nurture the capacities of the actors in the system to focus on the problem, innovate and adapt through "deductive tinkering".

Interventions must be multi-faceted, attuned to complex upstream and downstream dependencies, and designed to catalyze local institutional dynamics. It is important to be comfortable with adaptation, exploring pathways towards a vision rather than implementing a deterministic plan. Furthermore, the "right" solution will change over time. What works for a donor-funded project may be different from what works for domestic financing, and what works for a low-income setting with many informal providers may be different from what works for a more developed and consolidated health system.

## Proximate and distal points of leverage

There are trade-offs between predictable impact on the one hand, and scope and sustainability on the other. Direct donor funding of private provider engagement can lead to gratifying results obtained in a limited health market over a specific period of time. But it is often unclear if the dynamics that are set in motion will be sustained if external funding is withdrawn, because underlying reasons for non-engagement may not have been addressed by facilitating the emergence of different local institutions. There can be little confidence that the experience will inspire similar efforts elsewhere. In short, "amplification" (scale and replication) is elusive.

Alternatively, attention could be focused on underlying factors. Such approaches might: nurture organizations representative of private providers and facilitate forums for dialog between public and private sectors; support the emergence of think tanks and networks of local researchers exploring mixed health systems; sponsor learning visits by future parliamentarians to other countries to shape their attitudes; develop public-private partnership units in ministries of health and support training in strategic purchasing; encourage TB activists and journalists to increase coverage of these issues in local media; and support situation analyses and plans. Such interventions reflect an understanding of the underlying dynamics, but often amount to "pushing on string". Moreover, there can be a two-way interaction between proximate and distal determinants: interventions in the enabling environment may facilitate the success of engagement projects, but successful engagement projects can also have an impact on the enabling environment by creating a new local reality.

The implication is that interventions must be designed to strike the right balance, deploying resources and influence at multiple points of leverage to create momentum, empower champions, remove obstacles and create enablers, all at the right time and to a sufficient extent (given threshold effects or tipping points).

## Vertical vs integrated

Vertical efforts to improve engagement and strategic purchasing for one disease may fail to gain traction or realize economies of scope. Yet TB cannot wait for the development of modern health systems and

could lead development of capacities (such as accreditation, claims management, quality assurance, digital monitoring) that are applicable to other health issues. A number of projects have been successful in developing health system capacities in general but using TB as a pathfinder and as a tracer for overall performance (which brings some discipline to efforts that may otherwise be somewhat nebulous in their impacts). Efforts to develop technology and engagement platforms should be alert to opportunities for leveraging similar platforms for other conditions without allowing integration to delay progress. TB-specific private provider engagement may set an example and contribute to the development of system capabilities that facilitate broader health system reforms.

## Points of intervention for catalyzing systemic change

Theory and evidence from multiple fields, including diffusion of innovations, disruptive innovation, evolutionary and institutional economics, and market systems reform, suggests a number of levers that can be applied to facilitate the emergence of institutional momentum in favor of sustained and systemic private provider engagement. These include:

- Attending to the interactions between physical technologies (such as new diagnostics), social technologies (such as rules and norms) and business models (such as group practices and health insurance), rather than any one of them in isolation;
- Identifying and empowering strategically placed champions, or change agents, that may be both individuals and organizations;
- Recognizing that individuals and organizations are driven by a range of intangible factors (such as professional self-esteem and reputation) as well as more easily observable or rational calculations of self-interest;
- Ensuring that innovations are “owned” by local actors rather than externally driven;
- Generating and disseminating compelling data and evidence on both the nature of the problem and efforts to address it, but also actively deploying that evidence through strategic advocacy and communications rather than assuming that it will change behavior;
- Supporting the emergence of positive, inspiring models, through processes of locally driven exploration, experimentation and evolution (“deductive tinkering”);
- Nurturing or developing systems of accountability, such as global scorecards;

Realigning incentives by attending to the financial underpinnings of organizational behavior.

## Developments likely to improve prospects for private provider engagement

Private provider engagement for TB is likely to be facilitated by the following developments.

*Digital revolution:* The digital revolution is finally reaching TB. The transition from paper-based summary data to digital, case-based systems, coupled sometimes with call centers, reduces one of the major barriers to engagement of private providers: their aversion to record keeping. Such systems enable additional innovations that further facilitate private provider engagement at scale, such as digital payment of incentives and enablers to both patients and providers, adherence monitoring technologies, and digital vouchers for drugs and diagnostics. The continued rapid development of information and communication technologies constitutes a powerful enabler of improved private provider engagement: case notification; recording and reporting; adherence monitoring; payment of incentives and enablers; distance learning; overall performance management. India, in particular, is demonstrating the potential. NTPs have tended to be late adopters of these technologies.

*UHC/Social health insurance:* UHC reforms often include major changes in the way healthcare is financed, as private out-of-pocket expenditures are overtaken by publicly funded or mandatory mechanisms in which the state assumes a strategic purchasing function towards private and public providers. Social health insurance has helped engage private providers in Mexico and Korea. Such programmes in Indonesia and Philippines are approaching full population coverage but have not yet been used to

drive quality of TB care in the private primary sector. If the focus is on public financing with mixed public and private provision, backed up by strong technology-based systems for quality assurance and financial protection in both sectors, some of the ideological tensions around private providers may be minimized. Progress is slow, but dozens of countries are moving in this direction. It may be the only long-term solution to scale and sustainability, although it is far from an automatic solution, as illustrated by the experiences of China, Thailand, Philippines and Indonesia. NTPs are clearly ill-equipped to capitalize on this opportunity but building links to those with the relevant skills and experience is a major pathway forward.

*New TB drugs and diagnostics:* New diagnostics (e.g., Xpert) and drugs (shorter regimens) help to win over skeptical private providers, create a value proposition for their involvement with national programmes, and make it easier to find and correctly manage private cases. It is a priority to develop a solution for wide-scale use of Xpert (and any other new TB technologies) at affordable prices in the private sector (91).

*Broadening of the intermediary base:* There has been a slow increase in the number of organizations, individuals and consultants with experience in this area. The last ten years has seen the emergence of a few southern-based alternatives (BRAC, Greenstar, WHP, IRD) to the usual international NGOs and contractors.

*Improved data and evidence:* While the importance of private providers has been known for decades, recent advances in the evidence base (Patient Pathway Analysis, Standardized Patient studies; market research on drug sales), combined with evidence that “business as usual” is clearly ineffective, has increased momentum for alternative approaches.

*Policy change:* In India, the current NSP for TB is far more ambitious and strategic in this area than any of its predecessors and is backed by increased financial resources and a supportive new National Health Plan. NSPs and Global Fund proposals in some other countries (Bangladesh, Pakistan, Kenya, Nigeria, United Republic of Tanzania) also seem to indicate a greater willingness to engage private providers.

*Trend towards active investment of international funding for TB:* Much of the limited progress to-date has been supported by international funders, but the main source of international financial assistance for TB (Global Fund) was designed to be responsive to local government priorities. The new Catalytic Funding mechanism in the Global Fund may be indicative of a trend towards stronger guidance, especially in countries where investments over the last 15 years seem to have had limited success (such as Nigeria).

*Urbanization:* While private providers can be found in both urban and rural areas, urban areas tend to have a greater concentration of private providers, especially those that are better qualified. Public sector TB services often struggle to perform as effectively in urban areas as in rural areas, due to greater population mobility. Africa and Asia are urbanizing faster than the other regions: their urban populations are projected to increase from 40% and 58% currently to 56% and 64%, respectively, by 2050.

*COVID-19:* While the Covid-19 pandemic has set back TB programmes, including those designed to engage private providers, its long-term impacts are not yet clear. Over the medium and long term, the response to COVID-19 could strengthen private provider engagement in various ways: by establishing patterns of public-private engagement that are sustained in some form beyond the emergency period; by stimulating accelerated progress in the development and diffusion of digital technologies; by strengthening molecular diagnostic capabilities that attract private providers and their patients; by accelerating the emergence of new diagnostic technologies appropriate to private settings; and by strengthening systems for household contact investigation. On the other hand, controversies about the role of private providers during the pandemic could set back relations between the sectors. While the impacts are hard to predict, they are likely to vary considerably from one country to another.

## Recommendations

Improved private provider engagement is critical to successfully reach the targets of the End TB Strategy and the Sustainable Development Goals. It is time for Ministries of Health in countries with high burdens of TB and pervasive private healthcare sectors, and those who support and fund their TB programmes, to set ambitious goals that align funding of quality-assured TB services with patient care-seeking



preferences. External funders and technical agencies must recognize that these are difficult, disruptive reforms that can only be encouraged by simultaneous, locally based support on several fronts, embracing short-term adaptation towards a medium-term vision.

TB programmes must move from acknowledgement of the issue to genuine prioritization, which will be manifest in strategies, budgets, data collection and accountability systems.

The vision is that private healthcare providers' role and contributions to TB care will be commensurate with their role in overall healthcare delivery. Systems of strategic purchasing will underpin government-led stewardship and regulation to ensure that every presumptive TB patient is promptly evaluated, and all TB cases are properly managed, with minimal financial burden on patients, making maximum use of the latest diagnostics and treatment regimens. National TB programmes will be empowered to assume stewardship functions for all presumptive and confirmed TB patients. Patients, their families, providers and system managers will all be empowered by digital technologies that facilitate case notification, adherence management, social support and accountability. In each country, unique configurations of internationally connected local institutions will have evolved to drive dynamic processes of innovation, learning, accountability and adaptation, based on timely and insightful data. For high-burden countries with large private healthcare sectors<sup>42</sup>, the following recommended actions would reflect appropriate prioritization of private provider engagement:

1. NTPs and their partners should build an understanding about patient preferences, private sector dynamics and the rationale for engaging all providers. They should gather and use new kinds of data, including:
  - the amount and proportion of funds dedicated to engaging private for-profit and non-profit providers, calculated using a consistent approach;
  - the number, location and basic characteristics of all private providers, formal and informal;
  - patterns of care-seeking behavior and its determinants, disaggregated by socio-economic group;
  - patterns of provider behaviors related to TB, and their determinants;
  - referrals, notifications and treatment outcomes by sector (private for-profit, private non-profit and public) and level (primary and secondary/tertiary); and
  - levels, trends and composition of anti-TB drug sales in private markets.
2. NTPs should set high-profile targets for aligning TB referrals and notifications with early patient care-seeking behaviors and ensuring quality outcomes for all TB patients, regardless of where they seek care. In line with recent directions in the monitoring of universal health coverage, targets should capture effective coverage: the number of privately notified and managed TB patients who complete treatment, perhaps expressed as percent of estimated incidence broadly in line with the private share of general healthcare. Other targets should address key aspects of quality of care, financial protection and social support. The level of ambition should reflect the role of the private sector in health services.
3. NTPs and their partners should advocate for political commitment, action and investment in private provider engagement. They must: build high-level commitment to "business unusual" approaches to TB care and prevention; create an environment in which all health care providers are motivated to provide quality-assured TB care in partnership with the National Programme; and increase population-level demand for accredited TB care and associated support services from all providers. It will be important to ensure an appropriate place for private provider engagement in the agendas of national TB commissions and high-level working groups that are being formed as a result of increasing global commitments on TB. Civil society and media can play a critical role in raising awareness of the roles of different healthcare providers, and of new initiatives to partner with them, while community-based organizations can mobilize popular demand for quality TB services.
4. NTPs and major funders of TB prevention and care should substantially increase the allocation of funding to efforts to engage private for-profit providers. This includes establishing the policy basis and skills to channel public money to the engagement function (through either outsourced contracts or dedicated public sector human resources for private engagement). Capitalizing on social health insurance and

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42 In particular, India, Indonesia, Philippines, Nigeria, Pakistan, Bangladesh, United Republic of Tanzania, Kenya, and Myanmar (i.e. more than Setting 5 in the Global Plan to End TB)

other health financing reforms towards Universal Health Coverage, Ministries of Health should develop systems of strategic purchasing to link the income of public and private providers to their performance in meeting the TB needs of the populations they serve while protecting patients from financial shocks.

5. NTPs should develop long-term partnerships with organizations that have the capacity to engage private providers at scale on their behalf. They may include NGOs, faith-based networks and professional associations, as well as emerging private chains and hospital networks. In many cases it will be necessary to invest in building the capacity of intermediary organizations so that they can maximize results on behalf of the Program.
6. Ministries of Health should establish a conducive policy environment for engaging private providers. Policies and regulation can help drive engagement with private health providers and other unlinked public sector providers; they can also constrain effective engagement when poorly designed. Some of the health systems and policy foundations of effective private provider engagement for TB include: overall national policy on PPM for TB; policy, regulations, enablers (such as simplified digital systems) and enforcement mechanisms for notification of TB cases; policy, regulations and enforcement mechanisms regarding sales of anti-TB drugs and inappropriate diagnostics; policy and systems for quality assurance of healthcare practitioners and facilities (licensing, certification, registration, accreditation); and policy, systems and specialist staff dedicated to contracting and to purchasing of packages of health services.
7. Recognising that there is no single approach to working with private providers, NTPs and their partners should adapt models of engagement to local context and in the light of data and experience. While successful interventions share common generic features, there is no single implementation model because health markets differ. Even within one health market, models should be adapted continuously over time to maximize performance. Whereas standardization was important in the previous era of TB prevention and care, it would limit the scale and effectiveness of private provider engagement. Implementers need to work with national programmes to adapt and adjust, both between health markets and over time. The focus should be on outputs and outcomes rather than inputs and processes.
8. NTPs should harness the power of digital technologies and accelerate the deployment of case-based digital data systems for notifying TB cases and monitoring their care. Recent experiences have demonstrated that digital technologies can not only facilitate case notification from private providers but also enable additional innovations that further facilitate private provider engagement at scale, such as digital payment of incentives and enablers to both patients and providers, adherence monitoring technologies, distance learning, and digital vouchers for drugs and diagnostics. Such systems require substantial, continuous investment and access to outstanding technical resources.
9. NTPs and intermediary organizations must deliver a range of financial and non-financial incentives and enablers to sustain private provider engagement over time. Private providers should be confident that they can rely on the programme or partner to deliver on their commitments – that drugs will be made available, that diagnostic test results will be informed promptly, and that any payments will be made in full and on time. Trust is earned and develops over months and years of successful collaboration.
10. WHO should lead NTPs and their partners in continuous efforts to monitor and evaluate the contributions of private providers in relation to the specific objectives and targets set by the NTP. This will help inform resource allocation, build accountability, and fine-tune operations and target resources effectively. NTPs, with partners and any intermediary agencies, should be in a position to routinely monitor progress and take action accordingly, using timely and valid data that captures both coverage and quality. Analysis of coverage yield, and sustainability of provider engagement requires access to a reasonably complete and up-to-date facilities register covering all types of healthcare provider, and it implies case-based TB registers that consistently identify providers. Efforts should be made to measure referrals as well as notifications. Analysis of quality of care requires that TB outcomes be tracked by type of provider. WHO should facilitate the development and maintenance of dashboards to facilitate accountability. Proper monitoring and learning in this area is likely to require increased resources, in line with its higher priority.

Sustained and systemic engagement of private providers, on a scale commensurate with their role in health systems, will be based on a fundamental reappraisal of attitudes towards the private sector and the stewardship role of the state, together with an appreciation of processes of change in complex adaptive systems and the disruptive nature of business model innovation.

# Annex 1. Private for-profit provider engagement for TB in 7 priority countries

Issue	India	Indonesia	Nigeria	Philippines	Pakistan	Bangladesh	Myanmar
Private practitioner notifications	680 948	107 640	17 250	131 096	94 819	79 990	18 432
% of total notifications	31%	19%	15%	32%	29%	27%	14%
% of incidence	26%	13%	4%	22%	17%	22%	11%
Increase 2013–19	x 17.6	x 4.1	x 1.4	x 6.6	x 3	x 1.3	0.7
% PPM in primary care	50%	11%	n/a	small	80%	87%	~90%
Main implementing partners for PPM	<ul style="list-style-type: none"> <li>• CHAI</li> <li>• PATH</li> <li>• FIND</li> <li>• WHP</li> </ul>	<ul style="list-style-type: none"> <li>• Professional associations, district and sub-district Ministry of Health</li> <li>• Yayasan KNCV Indonesia</li> <li>• FHI 360</li> </ul>	<ul style="list-style-type: none"> <li>• SHOPS+</li> <li>• KNCV</li> <li>• IHVN</li> </ul>	<ul style="list-style-type: none"> <li>• PBSP</li> <li>• PhilCAT</li> </ul>	<ul style="list-style-type: none"> <li>• Greenstar,</li> <li>• CHS</li> <li>• Mercy Corps,</li> </ul>	<ul style="list-style-type: none"> <li>• BRAC,</li> <li>• Damien Foundation,</li> <li>• ICDDR,B,</li> <li>• MSH,</li> <li>• IRD</li> </ul>	<ul style="list-style-type: none"> <li>• PSI/Myanmar</li> <li>• Myanmar Medical Association</li> </ul>
Plan and targets	<p>Top priority, targets (2020):</p> <ul style="list-style-type: none"> <li>• 2 million notifications (56% of total)</li> <li>• 90% DS</li> <li>• treatment success</li> <li>• 80% patients DBT financial support</li> <li>• 80% private patients get programme drugs (or reimbursement)</li> </ul>	<ul style="list-style-type: none"> <li>• Low priority but far more visibility post-plan development)</li> <li>• No targets for private provider case notification</li> </ul>	<ul style="list-style-type: none"> <li>• Low priority</li> <li>• PPM Action Plan 2018–2020 sets modest target</li> <li>• 15 455 private practitioner notifications (2% of total)</li> </ul>	<ul style="list-style-type: none"> <li>• NSP 2017–22: No case targets for private provider engagement</li> <li>• PPM Action 2018–2020: target: 136 000 private practitioner notifications (24% of total)</li> </ul>	<ul style="list-style-type: none"> <li>• NSP target 121 000 PP notifications (32% of total) by 2020</li> </ul>	<ul style="list-style-type: none"> <li>• Low priority in NSP, though NTP embraces NGO contributions.</li> <li>• PPM Action Plan 2016–2020 targets modest increase to 83 000 PP notifications (36% of total)</li> </ul>	<ul style="list-style-type: none"> <li>• Modest targets</li> <li>• Private notifications to reach 22% of total, or 34 599, in 2020</li> </ul>



Issue	India	Indonesia	Nigeria	Philippines	Pakistan	Bangladesh	Myanmar
Social health insurance	<ul style="list-style-type: none"> <li>Expansion ~20%</li> <li>40% planned under Pradhan Mantri Jan Arogya Abhiyan (PM-JAY) but no outpatient package</li> </ul>	<ul style="list-style-type: none"> <li>JKN ~90% coverage includes outpatients and contracts 10 000 general practitioners but not yet aligned for TB performance</li> </ul>	<ul style="list-style-type: none"> <li>&lt;5% coverage</li> </ul>	<ul style="list-style-type: none"> <li>PhilHealth 92% coverage includes TB OP package, but many weaknesses and few private practitioner</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>	<ul style="list-style-type: none"> <li>Piloting though TB not strongly involved</li> </ul>	<ul style="list-style-type: none"> <li>Piloting a possible scheme with SQH network, including TB</li> </ul>
IT	All struggle to shift from paper summary reports to electronic, case-based notification. Various systems and apps have been tried and are in different stages of testing and scale up. All are aware that it is a priority.						
Opportunities	<ul style="list-style-type: none"> <li>GOI commitment to strategic purchasing and digital inclusion</li> <li>Increased budget</li> <li>US\$400 million World Bank credit.</li> <li>Nikshay digital systems</li> </ul>	<ul style="list-style-type: none"> <li>Planned pilot initiative to test alternative TB payment systems within JKN</li> <li>Commitment of NTP (and catalytic funding) to district PPM</li> </ul>	<ul style="list-style-type: none"> <li>Underutilized social marketing organization (SFH)</li> </ul>	<ul style="list-style-type: none"> <li>Commitment to expand and improve PhilHealth</li> </ul>	<ul style="list-style-type: none"> <li>NGO clinic ("social enterprise") model</li> <li>Strong partners</li> <li>Renewed Global Fund resources for private provider engagement 2021-2023</li> </ul>	<ul style="list-style-type: none"> <li>Strong partners</li> <li>Underutilized social marketing organization (Social Marketing Company)</li> </ul>	<ul style="list-style-type: none"> <li>Engage pharmacies</li> <li>Strengthen community-based case finding</li> <li>Potential for insurance-based financing</li> </ul>
Challenges (in addition to digital systems)	<ul style="list-style-type: none"> <li>Improve treatment outcomes amongst private notified cases</li> <li>Develop contracting, purchasing systems that use GOI funds</li> </ul>	<ul style="list-style-type: none"> <li>Prioritize private primary care providers</li> <li>Develop effective partners</li> <li>Revise JKN payments for TB</li> <li>Integrate JKN and TB data</li> </ul>	<ul style="list-style-type: none"> <li>Develop mission-driven partners capable of engaging private practitioners at scale</li> <li>Prioritize budgets for TB and for PPM</li> </ul>	<ul style="list-style-type: none"> <li>Understand and engage with private primary care sector</li> <li>Expand PhilHealth primary care coverage</li> <li>Attract more secondary care providers to an improved PhilHealth TB package</li> </ul>	<ul style="list-style-type: none"> <li>Engage informal private providers and pharmacies</li> <li>Engage informal private providers, drug sellers</li> <li>Start to develop models for sustainable financing for TB</li> </ul>	<ul style="list-style-type: none"> <li>Slight decline in private notifications in recent years</li> <li>Transition to public purchasing</li> <li>Nascent social health insurance</li> </ul>	

# Annex 2. Potential Performance Indicators for Private Provider Engagement

Category	No	Indicator*	Data needs	Data source	Rational/use
Private notifications	1	Private notifications as % of estimated incidence	No. of private notifications; estimated incident cases	TB surveillance database; WHO	Assess progress of private provider engagement
	2	Private notifications as % of total notifications	No. of private notifications; total notifications	TB surveillance database	Assess progress of private provider engagement
	3	% of private providers actively engaged	No. of private providers notifying TB cases during period; total number of private providers	TB surveillance database; mapping or other estimates of private providers	Indicates effective coverage of private provider engagement
	4	TB drug sales to privately notified cases in programme as % of total private TB drug sales	Drug sales to privately notified cases in programme can use no. of privately notified cases as proxy; total TB drug sales	Drug sale data to privately notified cases in programme; IMS drug sale data	Indicates effective coverage of programme to engage private providers
Quality of private provider services	5	% of privately notified pulmonary cases with laboratory-confirmed TB	Diagnostic information on each privately notified case	TB surveillance database	Assess quality of diagnosis for private patients
	6	% of privately notified pulmonary cases successfully treated	Treatment outcome on each privately notified case	TB surveillance database	Assess quality of treatment for private patients
	7	% of privately notified pulmonary cases with confirmed result on rifampicin sensitivity	Diagnostic information on each privately notified case	TB surveillance database	Assess quality of diagnosis for private patients
	8	% of privately notified pulmonary cases with sputum testing for TB	Diagnostic information on each privately notified case	TB surveillance database	Assess quality of diagnosis for private patients
	9	% of TB patients diagnosed by private providers that are notified	TB patients diagnosed by private providers based on inventory study; number of private notifications	Inventory studies of private providers	Proxy for effectiveness of private provider engagement
	10	% of private providers who correctly manage presumptive TB cases	Actual private provider behavior (weighted by estimate of patient workload)	Standardized patient (SP) survey Prescription audits and provider-level trends in diagnostics use	Capture actual quality of care by private providers

Category	No	Indicator*	Data needs	Data source	Rational/use
Alignment with patient care-seeking	11	<b>Ratio of private provider notifications as % of estimated incidence to % of private provider share of initial care-seeking</b>	Private notifications as a share of estimated incident cases; estimates of private provider share of initial care-seeking	TB surveillance database and WHO; DHS, TB prevalence or other surveys	Captures degree of alignment between patient care-seeking preference and availability of private provider engagement
	12	Average number of care-seeking visits prior to initiation of TB treatment	Patient recall of care-seeking pathway	Sample interview of notified patients	Proxy measure of diagnostic and treatment delays
Funding for private provider engagement	13	<b>% of TB budget dedicated to private provider engagement</b>	TB budget information classified by ultimate service channel	Annual analysis of budgets	Allocation of funds is the most important indicator of priority
	14	% of TB expenditures used for private provider engagement	TB expenditure information classified by ultimate service channel	Annual analysis of expenditures	Expenditure indicates both funding priorities and ability to use funds
	15	% of privately notified cases experiencing catastrophic health expenses for TB	Patient recall of medical expenses along care-seeking pathway; information on household income	Sample interview of notified patients; see WHO patient cost methodology	Captures information of health shock for private patients
	16	% of privately notified TB cases for which >90% of direct medical expenses for TB are covered by public or mandatory benefits package	Patient recall of medical expenses along care-seeking pathway; information on medical expenses covered by public or mandatory benefits package	Sample interview of notified patients	Indicates coverage of social health insurance or similar strategic purchasing schemes

\* Priority indicators are in bold



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