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Impactful Financing for TB:

Scoping of Role for the Bill & Melinda Gates Foundation

October 2018

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Recommended Citation:

Boonstoppel, L., A. Sutkowski, M. Qiu, Y. Madan, M. Coe, D. Silver, and Y. Rajkotia. 2018. *Impactful Financing for TB: Scoping of Role for the Bill & Melinda Gates Foundation*. Washington, DC: ThinkWell.

This report was produced by ThinkWell, with funding from the Bill & Melinda Gates Foundation.

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ABBREVIATIONS

DOTS	directly observed therapy-short course
ESI	Employees' State Insurance (India)
GDF	Global Drug Facility
GFATM	The Global Fund to Fight AIDS, Tuberculosis ; and Malaria
HBC	high-burden country
MDR-TB	multi-drug resistant tuberculosis
MIC	middle-income country
MSBY	Chief Minister's Health Insurance Scheme (India)
NGO	nongovernmental organization
NHIS	National Health Insurance Scheme (Nigeria)
NTG	National Treatment Guidelines
NTP	National Tuberculosis Program
PBF	performance-based financing
PHI	public health insurance
PPM	public-private mix
PPP	public-private partnership
TB	tuberculosis
UCHS	Universal Coverage Scheme (Thailand)
USAID	United States Agency for International Development
WHO	World Health Organization

OBJECTIVE

Despite widespread use of private providers for the diagnosis and treatment of tuberculosis (TB), the quality of TB care in the private sector is hindering national efforts to improve TB outcomes. Across the top 30 high-burden countries (HBCs) for TB, the private sector plays a significant role in the diagnosis and treatment of patients with both drug-sensitive and drug-resistant TB.¹ Approximately 60% of patients seek initial care from the private sector, varying from 49% in sub-Saharan Africa to 81% in Asia. Yet quality of TB care provided in the private sector is inconsistent and inadequate, negatively influencing national TB outcomes.

The Bill & Melinda Gates Foundation (the Foundation) can fundamentally alter the way the private sector delivers quality TB care. This report offers a global review of high-level programmatic challenges seen in private sector TB care and the ways financing mechanisms can be used to address these challenges, drawing from lessons learned from other health areas. It identifies gaps in the status quo and proposes a theory of change to systematically influence how TB care is delivered in the private sector. Catalytic investment in supporting governments to use strategic purchasing mechanisms, coupled with deliberate investment to purchase high-quality TB services from targeted private providers in alignment with national quality and regulatory standards, will lead to improved TB outcomes.

PROGRAMMATIC CHALLENGES TO PROVIDING HIGH-QUALITY TB CARE IN THE PRIVATE SECTOR

Although most patients initially seek care in the private sector, limited access to needed TB resources in these facilities results in many patients failing to receive a proper diagnosis or treatment. Most patients initially seek care in the private sector for a quick, low-cost consultation and for medicines to treat early and mild symptoms, such as a persistent cough. As private providers are less likely to be included in national training and national quality supervision plans, many private providers have poor knowledge of TB and TB symptoms. In addition, there is almost no access to appropriate and quality diagnostic services among private providers, particularly among low-level providers as community-based providers and pharmacies. Within the limited number of private facilities that report diagnostics, the equipment tends to be non-recommended and less accurate. Concessionary pricing of GeneXpert technology is largely unavailable for the private sector, which limits its availability. Therefore, many patients fail to receive an accurate and timely diagnosis. Treatment at the location of initial care-seeking is also limited in the private sector, and when it is offered, the quality is worse than in the public sector as adherence to World Health Organization (WHO)-recommended treatment regimens is lacking.^{2,3,4,5,6}

Government systems are rarely designed to incentivize appropriate behaviors among private providers. Private providers that cannot provide diagnostic services lack incentives to refer patients to facilities that can. Referring patients to public facilities often means that private providers lose the opportunity to treat a patient, resulting in a financial loss. Even where referral fees should officially be paid to the referring facility, these often do not materialize, and low-level private providers, including pharmacies and community care providers, are generally excluded from such referral policies

¹ WHO. (2017).

² Quy, et al. (2003).

³ Chengsorn, et al. (2009).

⁴ Nshuti, et al. (2001).

⁵ Khan, et al. (2017).

⁶ Lonroth, et al. (2003).

altogether. For similar reasons, reporting by private providers is also poor, and enforcing reporting requirements is challenging.

Root causes for the poor quality of TB care provided by private providers have been identified as:

- **Limited, if any, investment in building capacity among private providers in line with care-seeking behaviors.** Because private providers are much less likely to be included in national training plans and quality supervision programs, most private providers have been found to have poorer knowledge of TB symptoms, treatment regimens, National Tuberculosis Program (NTP) guidelines, the directly observed treatment-short course (DOTS) protocol, and referral procedures.⁷
- **Limited investment in improving access to high-quality equipment and medicines among private providers.** Concessionary pricing for diagnostic equipment, such as the GeneXpert machine, and for NTP-endorsed fixed-dose combination TB medicines is typically offered only to the public sector. Private providers have been found to rely on cheaper, less accurate diagnostics and medicines of varying dosage and quality.
- **Inadequate or inappropriate motivation for private providers to comply with NTPs.** Referring patients for proper testing and care potentially results in loss of income for private providers, while reporting confirmed cases to their NTP requires time away from income-generating patient consultations. Incentives to report or refer TB cases are lacking or not adequately designed or implemented.
- **Fragmentation across private sector providers, especially among lower-level providers.** Initial care-seeking largely takes place at low-level private providers, such as pharmacies and drug shops. Because of their large numbers, coordinated engagement efforts are difficult. Without consolidated networks, the high-volume numbers and different levels of private providers are largely excluded from NTPs.

THE RESPONSE TO DATE

Donors increasingly recognize the need for health system-strengthening efforts across low- and middle-income countries, yet the private sector is often not the focus. Large investments are being made to increase the capacity and knowledge of providers as well as improve the regulatory and policy environment and alignment of incentives across stakeholders. Yet these efforts continue to focus primarily on the public-sector facilities and providers. There are few documented large-scale attempts for comprehensive market systems strengthening across the private sector, including supply chain, provider capacity and motivation and the creation of a favorable operating and regulatory environment. Donor funding for the private sector has been limited in scale and scope, with a focus on direct service delivery and not on systematic and long-term market shaping and strengthening.

Although donors and governments are engaging more with private providers over the last decade, the enormous potential of these providers remains largely untapped. With the launch of WHO's Stop TB Strategy in 2006, systematic engagement of private sector providers in TB care and control became the recommended strategy for tackling TB.⁸ The WHO strategy proposes public-private mix (PPM) approaches to improve case detection and case management by bringing all patients managed by all

⁷ Bell, et al. (2011).

⁸ WHO. (2006).

health care providers under DOTS.⁹ Almost all HBCs are currently implementing such activities, with support from such major donors as the Global Fund for AIDS, TB, and Malaria (GFATM) and the U.S. Agency for International Development (USAID). However, private sector engagement is overestimated as nongovernmental organizations (NGOs) are considered to be part of the private sector, leading many PPMs to ultimately function as public-public partnerships.

PPMs are typically time-bound, small scale, and dependent on donor funding. Although successes may be achieved during the lifetime of the project, many donor-funded PPMs are not continued after donor funding ends, and there are very few PPMs initiated or sustainably maintained through domestic resources. For one PPM in Ghana, as soon as funding for the project ended and expectations for infrastructure upgrades were not met, many private facilities withdrew from the partnership.¹⁰ Agreements between the NTP and private providers are often largely informal and verbal.¹¹ A 2014 literature review found 48 existing PPM programs in 16 countries, the majority of which were short-term pilots or were implemented at the district level.¹² Identified barriers to scaling PPMs include lack of sustained funding, insufficient political commitment, no effective governance structure, and poor communication between the participating private and public actors.

THE OPPORTUNITY

STRATEGIC PURCHASING OF TB SERVICES FROM PRIVATE PROVIDERS

Governments have used strategic financing mechanisms to address the challenges of capacity, quality, and motivation seen in the private health care sector. Commonly used financing mechanisms in health care include contracting out, performance-based financing (PBF), and public insurance schemes.¹³ Table 1 below defines these mechanisms and summarizes their characteristics, their main objectives, and the programmatic challenges they address. These mechanisms have not been systematically leveraged to include or improve private-sector TB care. The subsections that follow provide a more in-depth explanation of how these mechanisms have or have not been used for TB and explore their potential for improving private-sector TB outcomes.

⁹ WHO. (2010).

¹⁰ Amo-Adjei (2013).

¹¹ Lönnroth, et al. (2006).

¹² Lei, et al. (2015).

¹³ Additional resources on how other health areas have used these mechanisms can be made available upon request

Table 1: Financing mechanisms commonly used in health

FINANCING MECHANISMS	
Contracting out	<p>Definition: A formal agreement between a government, as the financier, and a private sector or autonomous government provider for a mutually agreed set of services, in a specified location, over a defined period.¹⁴ The contractor takes on responsibility for delivery of the services for the defined location and also maintains responsibility for its own staff.¹⁵</p> <p>Main objective: To improve access to and availability of services for which public facilities have inadequate capacity or in geographic areas where the public sector has insufficient presence.</p> <p>Challenges addressed: Capacity, Quality</p>
Performance-based financing	<p>Definition: A form of contracting where payment is linked to results. The World Bank defines it as “a form of incentive where health providers are, at least partially, funded on the basis of their performance to meet targets or undertake specific actions. It is defined as fee-for-service-conditional-on-quality.”¹⁶</p> <p>Main objective: To maximize health outcomes while increasing provider autonomy in determining how agreed-upon targets are achieved.</p> <p>Challenges addressed: Motivation, Quality</p>
Public health insurance	<p>Definition: Public health insurance (PHI) is one of the possible organizational mechanisms to raise and pool funds to finance health services.¹⁷ PHI schemes pool funds from member contributions and government taxes to purchase a package of health services for its members. They allow the financial risks of paying for health care to be shared across the healthy and sick segments of a population.</p> <p>Main objective: To provide equitable coverage to health services for all people, including poorer population segments, by systematically purchasing health services from a wide range of providers.</p> <p>Challenges addressed: Capacity, Quality</p>

Contracting out

How contracting out has been used in TB

Various PPM initiatives have included contracting out for TB services with private providers, but most are part of time-bound, donor-funded projects involving mainly nonprofit providers. For-profit private sector engagement is largely limited to large hospitals and clinics. An example of a donor-funded project that included private sector providers existed in Myanmar. Private providers were operating under a social franchise to provide TB care under national treatment guidelines (NTGs), including WHO-endorsed diagnostics and the administration of DOTS.¹⁸ In exchange, participating providers were reimbursed at a flat rate by the NTP and given access to subsidized prices for high-quality TB medicines. However,

¹⁴ Taylor, RF. (2003).

¹⁵ Grittner, A. (2013).

¹⁶ World Bank. “Performance-Based Financing.”

¹⁷ Doetinchem O, Carrin G, and D Evans. (2010).

¹⁸ Tun, Sun. (November 2012).

literature on purely government-funded contracting arrangements with the private sector for TB was not found.

Potential for private sector TB care

Contracting out as a purchasing mechanism could be used more strategically to improve the quality of services, particularly among low-level providers such as pharmacies and other for-profit providers. By requiring contracted providers to use approved diagnostics and medicines as well as notify NTPs of cases, contracting can help improve quality of care in the private sector. Health areas that are generally considered more suited for contracting out are single services related to a specific disease that are technically simple, with clear practice standards and strong correlation to health outcomes.¹⁹ This suggests diagnostic tests and DOTS administration are strong candidates for contracting out to private providers, while the complexities and high level of care required for multi-drug-resistant TB (MDR-TB) may not be suitable.

Performance-based financing (PBF)

How PBF has been used in TB

There are many examples of PBF for private providers in TB, though projects are almost always donor-driven and funded. In most HBCs, PBF involving private sector providers for TB has only been implemented through donor-funded PPM initiatives. In addition, as a result of the large administrative burden to involve small frontline providers, they are mostly excluded. Examples of such donor-funded PPM initiatives include payments for providers who refer presumptive TB patients to public facilities to improve linkages between public and private providers, which has been done on a small scale in Vietnam, Pakistan, and elsewhere.^{20 21} Taiwan presents one successful example of domestic funding involving private providers through PBF, where private TB facilities received extra payments from the National Health Insurance program when patients completed TB treatment.²² Several NTPs²³ have also instituted a form of PBF on the demand side whereby in the public sector, patients are given incentives such as food, travel subsidies, and clothing if they do not interrupt their DOTS treatment.

Potential for private sector TB care

The potential of PBF to improve private sector care has been largely untapped. PBF programs are typically aimed at only one point in the patient pathway, such as referrals or treatment, instead of systematically driving linkages and improvements across the entire care continuum. A programmatic application of PBF on a national level has not been instituted for private providers. As donors have aided and catalyzed the use of PBF in many HBCs, both for TB care and other health areas, the capacity to initiate and manage PBF arrangements has been institutionalized in many places. Governments can explore comprehensive PBF to include the entire continuum of care for TB, including linkages and referrals.

¹⁹ Liu X, et al. (September 2004).

²⁰ Khan et al. (2012).

²¹ Quy HT, et al. (2003).

²² Cheng-Yi, L et al. (2015).

²³ Tajikistan and Russia

Public health insurance

How insurance has been used in TB

Currently, many public insurance schemes in middle-income countries (MICs) have at least some TB services in their benefit package, but it's often unclear which TB services are included. Often, the public health insurance scheme does not support all TB control objectives, such as for active case finding and social support²⁴ and for MDR-TB. Objectives that are funded are typically funded separately by NTPs. This lack of cohesion between covered services can result in inconsistent availability of services depending on the funding source; if NTPs engage only with public providers, the services covered under these programs may not be provided for patients seeking care from private providers. (See Annex 1, which provides an overview of TB services included for selected HBCs and MICs.)

Including private providers in TB care through a public health insurance mechanism can help improve the availability and quality of TB services across providers. Most public health insurance schemes do work with private providers, but usually only with hospitals and large clinics in urban areas. Because small pharmacies often do not meet the requirements to become an accredited TB DOTS provider, they cannot be reimbursed by the public health insurance scheme for the referral of TB patients or the provision of TB treatment. Because such frontline private providers are often the patient's first point of care, their exclusion from public health insurance schemes signals a major missing link.

Potential for private sector TB care

Public health insurance schemes that are being developed or are in place already can provide a platform for governments to systematically and strategically engage with private providers of TB care. Integrating TB services into public health insurance can improve the engagement of private providers by tapping into existing channels, such as accreditation requirements, reimbursement mechanisms, accountability and reporting systems, and referral networks. By purchasing services from providers that follow NTP guidelines, inclusion in public health insurance schemes can offer a widespread incentive for private providers to deliver high-quality TB care.

Targeted investment to prepare both public and private sectors for increased collaboration

Additional investments to lay the groundwork for successful collaboration between the public and private sector must be made. To best position any efforts to formally engage private providers, investments must be made in both public sector capacity and private sector readiness. This includes supporting governments to engage with the private sector and to ensure that the fragmentation seen in the private sector is addressed. Additionally, with improved capacity and readiness, large-scale formal collaboration through public-private partnerships (PPPs) can be introduced.

Building government capacity to engage with the private sector

Governments must build their capacity to design and implement partnerships with private providers. As with any collaboration between the public and private sector, a functional platform needs to exist where the government can formally engage private sector providers. Countries need to have regulatory and legal policies in place for working with the private sector to deliver health services. This may require rule-making or updating existing procedures to ensure compliance. Governments must have the political will to engage with the private sector and be able to commit the necessary time and resources to be

²⁴ Social support is defined as "information leading the subjects to believe that they are cared for and loved, esteemed, and members of a network of mutual obligations."

viewed as a trustworthy partner. Also necessary is investing in PPP units and capacity within relevant government agencies. Where these exist, they can be strengthened for TB care and alignment with NTP. Where they do not exist, it is important to identify the best agency for managing private sector partnerships. There is also a need to review and update existing PPP guidelines and frameworks on TB care through private providers, especially lower-level providers such as pharmacies and drug shops, but also diagnostic centers.

Investing in consolidation of private providers to achieve private sector readiness

Fragmentation of low-level providers must be addressed to allow for systematic engagement by governments. While strategic purchasing mechanisms have significant opportunity to address the programmatic challenges of quality, motivation, and capacity that plague the private sector, the overarching challenge of fragmentation requires additional work to address the interface between the strategic purchasing mechanism and disparate private providers. Patients seek and receive care in multiple locations, and with thousands of low-level providers, government agencies have struggled to interface with the private sector efficiently and effectively. In the face of these challenges, consolidation and aggregation models have emerged in health care as a means of effectively engaging with otherwise disparate provider networks.

Investment is needed in aggregation models to prepare the private sector for systematic engagement with national governments. Examples of aggregation models used in other health areas span the range from ownership to franchising as well as intermediary models implemented by different organizations, including NGOs, donors, private companies, and accrediting bodies. Intermediaries manage relationships between governments, vendors, providers, and patients, and can facilitate increased coordination, greater cost savings, and better continuity of care.²⁵ Table 2 below provides a definition of each of these models and their intended objectives. To maximize the impact of any strategic purchasing mechanism or partnership between the public sector and private providers, aggregation models must be sufficiently supported.

Table 2: Models to address health sector fragmentation

MODELS TO ADDRESS HEALTH SECTOR FRAGMENTATION	
Ownership	<p><i>Definition:</i> An organized, coordinated network that links providers via ownership or contract; is accountable, both clinically and fiscally, for clinical outcomes; and has systems in place to manage and improve these outcomes.²⁶</p> <p><i>Main objective:</i> To manage a high-quality and efficient network through centralized operations and oversight mechanisms.</p>
Franchising	<p><i>Definition:</i> A network of private sector health care providers or vendors that deliver health services under a common franchise brand. A “franchisor” manages the brand and oversees the administration of the program. The private providers (“franchisees”) implement the franchisor’s operating model, and are not employees of the franchise, but pay fees for franchise-provided products or services. Franchisees are held to protocols and quality standards. Franchisors may provide training, marketing materials, and products that conform to the shared brand identity.²⁷ In full franchising, the franchisor has extensive control over all aspects of the franchisee’s business.</p>

²⁵ Results for Development Institute. (2016).

²⁶ Enthoven, Alain C. (2009).

²⁷ The Global Health Group, UCSF. (2016).

	<i>Main objective:</i> To use a common brand to ensure service quality standards and management oversight.
Intermediaries	<p><i>Definition:</i> Intermediary organizations “form networks between small-scale private providers in order to interact with governments, patients, and vendors while performing key health systems functions that are challenging for individual private providers to do on their own.”²⁸ This can take various forms, including digital aggregation, fractional social franchising, and accreditation.</p> <p><i>Main objective:</i> To act between small-scale private providers and governments, patients, and vendors to improve product quality, service quality, or data capture and reporting.</p>

Using public-private partnerships (PPPs) to address poor quality of drugs and diagnostics

PPPs can leverage private sector capabilities to address public sector challenges with capital and capacity. Once government capacity is established and private providers have been sufficiently aggregated, country-specific PPPs should be explored to address the unique bottlenecks to accessing high-quality drugs and diagnostics in HBCs. By nature, PPPs are long-term agreements between public and private partners; this is an important shift in approach, as government engagement with private providers has historically been through discrete short-term PPM initiatives. The unique attributes of a PPP—particularly the ability to risk share and leverage each partner’s unique capabilities over an extended time period, coupled with increasing numbers of health infrastructure PPPs—suggest that they can be explored for private sector TB care. While public facilities can allocate budgets to public health infrastructure needs, private providers do not have the same ability; a PPP can be used to usher in funding for high-capital infrastructure projects.

PPPs can be established to address the inconsistent quality of TB medicines seen in the private sector. Governments can introduce subsidies of certain medicines to private providers meeting certain regulatory and quality standards. These subsidies can be used as a financial incentive for private providers to procure, prescribe, and sell quality-assured medicines, helping to crowd out inferior products. In exchange, governments can require participating providers to report their patients to NTPs and follow NTGs.

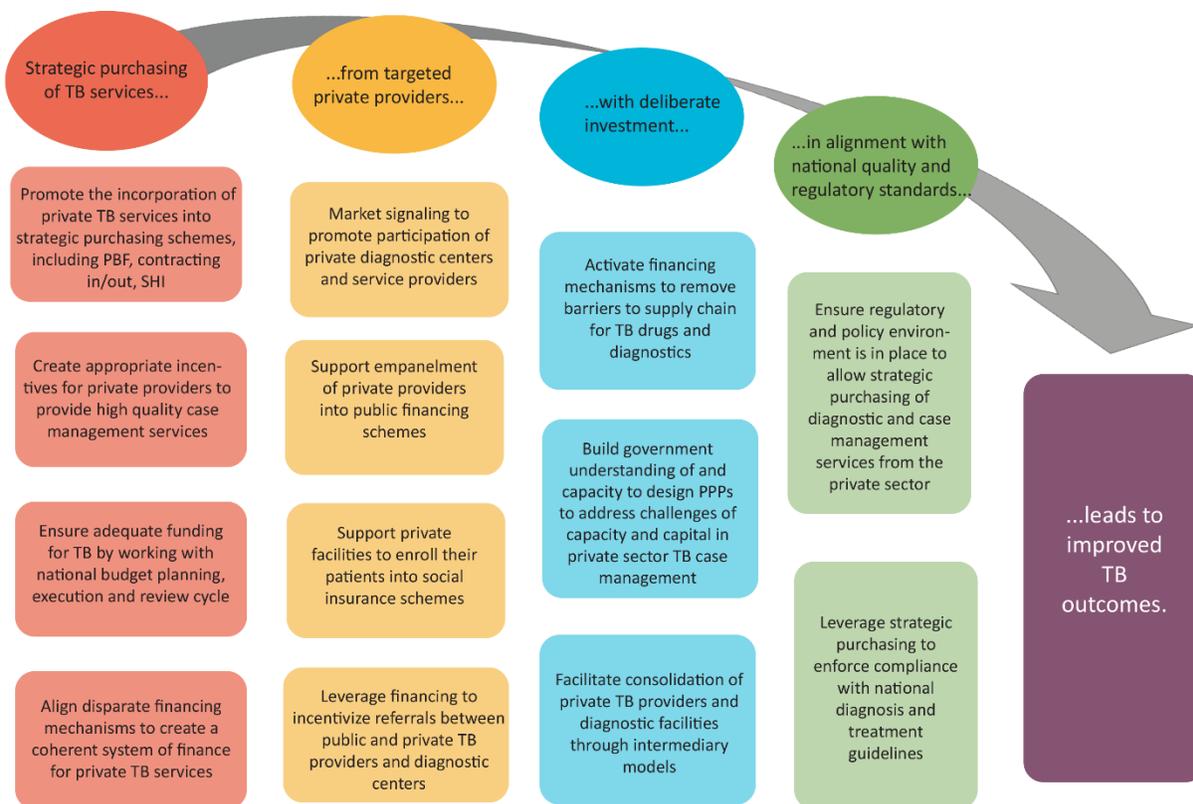
Through a PPP, existing diagnostic facilities in the private sector can be upgraded and new diagnostic facilities can be established to improve access to high-quality diagnostics in the private sector. HBC governments generally struggle to justify investing in private sector facilities, particularly when the capital needs are high, as would be the case for a costly GeneXpert machine. A PPP would provide an opportunity for the public and private sectors to share the risks and financial burden over an extended period of time. Private capital can be used to upgrade, equip, and maintain GeneXpert machines at private diagnostic facilities wherever the public sector’s machines are overwhelmed or inconveniently located. In return, the private facilities could formalize linkages with lower-level providers to guarantee patient volumes as a means of generating financial returns.

²⁸ Results for Development Institute. (2016).

PROPOSED STRATEGIC APPROACH

The Bill & Melinda Gates Foundation is uniquely positioned to advance a bold, structural redesign of how the private sector is incentivized to deliver TB care. Based on lessons learned from the use of financing mechanisms to harness private providers for a range of other health areas, there is significant potential to address gaps within the ecosystem of TB financing for the private sector. ThinkWell proposes that the Foundation make catalytic investments to promote use of strategic purchasing mechanisms to improve TB outcomes. Implementing this vision can fundamentally move the needle on improving TB outcomes in the private sector worldwide and can be accomplished through four interconnected workstreams, shown below, each of which requires implementing associated activities.

THEORY OF CHANGE FOR IMPROVING PRIVATE SECTOR TB OUTCOMES



THEORY OF ACTION

Workstream 1: Leverage strategic purchasing to strengthen delivery of TB services

Activity 1: Promote the incorporation of private TB services into strategic purchasing schemes, including performance-based financing, contracting in or out, and public health insurance.

Strategic purchasing mechanisms are increasingly being used to drive engagement and improve quality outcomes with private providers. Existing mechanisms must be supported to activate private TB

providers to improve the quality of TB diagnosis and treatment. Catalytic investment is needed in a global initiative to support public health insurance programs, where they exist, to incorporate private TB services into benefits packages. This ensures that private providers are engaged through accreditation requirements, reimbursement mechanisms, accountability and reporting systems, and referral networks. Such an initiative would support countries in landscaping, identifying specific mechanisms and opportunities, building capacity, and providing support across all government and market actors, and would be grounded in specific country needs and contexts.

Alternative financing models should be pursued in countries without public health insurance. These models include contracting in or out and performance-based financing based on existing in-country experience across health areas and interest in these TB care mechanisms. Recognizing that HBCs are at different stages of readiness to employ different strategic purchasing mechanisms, countries can implement different financing mechanisms depending on their specific context. For example, a country already employing strategic purchasing mechanisms for other health areas may find that fewer institutional or legal steps are needed to begin strategic purchasing for TB care in the private sector. Governments should be supported to deploy these financing tools strategically and at scale, particularly targeting for-profit and low-level providers.

Activity 2: Create appropriate incentives for private providers to provide high-quality case management services.

Countries should thoughtfully design and implement incentive programs to drive private provider compliance with NTGs. In countries with strategic purchasers already in place, appropriate payment schemes for providers that align with NTP objectives should be introduced across the entire continuum of care. In countries where strategic purchasing is nascent, other financing mechanisms should be introduced or redesigned to incentivize alignment with NTP objectives.

Activity 3: Ensure that privately provided TB services are incorporated in domestic TB budgets by working with national budget planning, execution, and review cycles.

To integrate privately provided TB care into national health budgets, key decision makers from ministries of health, ministries of finance, and the legislature must be convened. This integration will also require strengthening public financial management systems, including budget process improvements and tracking of expenditures and resources.

Activity 4: Align disparate financing mechanisms to create a coherent system of finance for private TB services.

Currently, many HBCs have different financing mechanisms in place for private TB services ranging from line-item budgeting to PBF schemes to contracting mechanisms or inclusion in social health insurance. Further complicating this ecosystem, PPMs in HBCs often implement different financing mechanisms for a set group of providers that differ from national financing schemes. Greater coherency around existing financing mechanisms in the private sector is needed. Policymakers must be supported to improve coherence across purchasing mechanisms and to understand their existing systems. This work will include full mapping of financing flows and deep dives into existing incentives within systems so that they can be re-designed to align with the goals of national TB programs.

Workstream 2: Drive targeted private sector engagement

Activity 1: Market signaling to promote participation of private diagnostic centers and service providers.

In most MICs, investments in TB are lagging compared to economic growth and investments in other sectors. Strategic purchasers should be supported to increase funding for TB from both public and private sources. As purchasers set desirable reimbursement rates and offer training on NTGs, this market signaling will show that providing high-quality services is a good business investment. Such investments can be self-funded or utilize private capital and involve actors previously on the sidelines of health care investing.

Activity 2: Support empanelment of private providers into public financing schemes.

To establish and communicate processes that support the empanelment of private providers into public financing schemes, a multi-pronged approach is needed. Advocacy campaigns should be designed to educate provider networks on the benefits of enrolling their members in these schemes. Governments must be supported as they institutionalize reimbursement systems for facilities meeting the empanelment criteria. This may include system upgrades and investment in capacity to ensure that the facilities can meet their obligations.

Activity 3: Support private facilities to enroll their patients in public insurance schemes.

As countries seek to scale up universal health care, efforts to facilitate citizen enrollment in public health insurance schemes are needed. Purchasers should be supported to design provider payment systems that encourage facilities to help their patients enroll, and to account for the additional administrative burden. Communication and advocacy strategies should also be developed to encourage patients to enroll at points of care-seeking.

Activity 4: Leverage financing to incentivize referrals between public and private TB providers and diagnostic centers.

Financing mechanisms can encourage improved coordination of care and patient tracking between public and private sector facilities. Purchasers must design incentives to encourage private providers to refer presumptive patients to NTP-approved diagnostic facilities at the first point of care. Conversely, incentives must be developed for higher-level providers that refer patients back to accredited private providers for cases that can be managed at a lower level.

Workstream 3: Make deliberate investments in the private and public sectors

Activity 1: Activate financing mechanisms to remove supply chain barriers for TB drugs and diagnostics.

Subsidized TB medicines and diagnostic tools are widely provided to the public sector but are often unavailable or prohibitively expensive for the private sector. Subsidies should be deployed to increase private provider incentives to procure, prescribe, and sell quality-assured medicines. Additionally, extending concessional pricing for GeneXpert machines, which are inconsistently available to the private sector, could have a tremendous impact on the quality of diagnostic services and significantly reduce the time to a TB diagnosis. The foundation should build on lessons learned from ongoing work in India through the Initiative for Promoting Affordable and Quality TB Tests to extend this concessionary pricing approach more broadly to private diagnostic centers.

Activity 2: Build government knowledge and capacity to design PPPs to address challenges of capacity and capital in private sector TB case management.

PPPs remain poorly understood and underutilized for private sector TB services. By pairing public sector knowledge and capacity with private capital, PPPs can be designed to improve outcomes for TB care while simultaneously offering a compelling business case for private providers of high-quality services.

Activity 3: Facilitate consolidation of private TB providers and diagnostic facilities through intermediary models.

Governments working with the private sector are challenged by the fragmentation of private providers. Investment is needed in intermediaries or aggregation models to streamline government interactions with the private sector. Models commonly used to reduce health sector fragmentation include ownership, franchising, and intermediary models such as digital data aggregation and accreditation. Use of these models can maximize the potential patient impact of these activities globally.

Workstream 4: Ensure adherence to national quality and regulatory standards

Activity 1: Ensure that the regulatory and policy environment is in place to allow strategic purchasing of diagnostic and case management services from the private sector.

Public and private sector collaboration requires that regulatory and legal policies are in place to allow the government to engage private sector providers. Policymakers and stakeholders must collaborate to create new policies or support the updating of existing ones. Lessons should be gleaned from experiences both from TB and other health areas to help governments analyze current policies and identify gaps.

Activity 2: Leverage strategic purchasing to enforce compliance with national diagnosis and treatment guidelines.

Financing mechanisms can be implemented within public health insurance programs or NTPs to promote high-quality care in accordance with national guidelines. Purchasers must find and dedicate sufficient resources for compliance enforcement. Additionally, incentives should be established for providers that meet quality standards as well as financial penalties for providers who do not comply.

HOW TO ENGAGE

Principles of engagement

To achieve the goal of improving national TB outcomes, each of the activities described above should be guided by the following principles of engagement:

- **Comprehensive workstreams:** Each of these workstreams should be pursued in a systematic and aligned way to maximize overall cohesion and results.
- **Alignment with existing contexts:** These proposed workstreams cannot and should not be implemented in a vacuum. Each component of this vision can and should leverage existing funding streams and capacities from both domestic and donor stakeholders. Country contexts should be considered when identifying which mechanisms of strategic purchasing to pursue.
- **Catalytic investments:** Investment in these workstreams can catalyze ongoing efforts to consolidate the private sector as well as build the capacity of domestic agencies. These are important and complementary tasks that will ultimately bolster the effectiveness of strategic purchasing mechanisms for TB. Investments in these areas should not be ignored.
- **Niche approach:** This vision and associated workstreams represent a new approach to an age-old problem. To date, there has been no systematic global initiative to use financing to advance TB outcomes in the private sector. As a thought leader in strategic purchasing and programmatic TB challenges on a global level, the foundation is ideally positioned to move this work forward.

Creation of a global initiative

To introduce strategic purchasing of TB services from targeted private providers—with deliberate investment in alignment with national quality and regulatory standards, a global initiative to support this work is needed. The Bill & Melinda Gates Foundation can support countries to assess which financing mechanisms should be pursued, grounding this assessment in local contexts and national TB priorities. This includes building deep and comprehensive understanding with governments of current funding flows and incentives embedded in current systems. In addition, the foundation can work to build government capacity for private sector engagement to be more than transactional. Investing in a PPP resource center and catalyzing existing investment efforts to consolidate private providers would support governments looking to meaningfully engage with the private sector to drive improvements in TB outcomes. In addition, a learning agenda and a way to share lessons learned across countries are needed to create a network that is truly global. The foundation can support countries to design and implement local approaches to addressing private sector TB challenges. By leveraging its existing position as a leading advocate for accelerating the decline in TB incidence, the foundation can advance this global initiative to the forefront of the global TB agenda and fundamentally alter the landscape of private sector TB care.

WHERE TO ENGAGE

To move forward, a thorough assessment of country needs and contexts must be conducted. As discussed above, each of the workstreams and subsequent activities will require a thorough assessment to determine which financing mechanisms to employ, through which channels, based on country context. This will require a full situational analysis for each prospective country to determine the status of a country’s strategic purchasing mechanisms and its investment readiness level. Activities should be designed and implemented in accordance with country goals and capacity. Drawing on ThinkWell’s ongoing work on strategic purchasing with the Bill & Melinda Gates Foundation, Table 3 below provides a high-level assessment of HBCs to inform the implementation approach to be taken.

Table 3: Assessment of strategic purchasing and investment readiness level for selected countries

Country	Strategic purchasing readiness level	Investment readiness level
Angola	Low	Low
China	High	Moderate-High
DRC	Low	Low
Ethiopia	Moderate-High	Moderate-High
India	High	High
Indonesia	Moderate	Moderate
Kenya	Moderate	Moderate

Mozambique	Low	Low
Myanmar	Moderate	Moderate-High
Nigeria	Moderate-High	Moderate-High
Papua New Guinea	Low	Low
Philippines	Moderate-High	Moderate-High
South Africa	High	Moderate-High
Thailand	High	Moderate
Zimbabwe	Moderate	Moderate

ANNEX 1. A SUMMARY OF TB COVERAGE PROVIDED BY NATIONAL INSURANCE SCHEMES IN SELECTED HBCS

HIGH-BURDEN COUNTRIES			
People	Providers	Package	Payment
Thailand: Universal Coverage Scheme (UHCS) ²⁹			
Thai citizens not covered by the civil servant or social security scheme (approximately 75% of total population as of 2013). ³⁰	Under the UHCS, beneficiaries are limited to mostly public providers, which includes district hospitals and health centers. ³¹	Comprehensive benefit package available that covers DOTS program: diagnostics (laboratory testing for follow-up, including chest x-ray, sputum examination, sputum culture, and drug susceptibility testing); treatment (first- and second-line TB medication); and active case finding. ³²	Providers treating patients for TB receive payment via capitation (per patient), as well as payment per specific TB service delivered: laboratory testing, active case finding, DOTS monitoring, data recording, and provision of drugs. ³³
India (national): Employees' State Insurance (ESI)			
For formal sector workers and those below the poverty line. Population coverage is 1.4% (4.9% out of all households that have insurance). ³⁴	Providers include hospitals constructed by ESI, hospitals owned by the state government, and contracted private facilities. ³⁵	Routine TB services (such as prevention and case finding) are mostly excluded; treatment is covered for up to two years. ^{36,37}	Public providers: salary for staff, global budgets for public hospitals. Private providers: fee-for-service (paid out of pocket).
India (Chhattisgarh state) ³⁸ – RSBY insurance program & Chief Minister's Health Insurance Scheme (MSBY)			
RSBY is for families below the poverty line and	Both public and private providers can be	RSBY is limited to inpatient coverage only.	Output-based payments: lump sum fee is

²⁹ Evans, et al. (2012).

³⁰ Tangcharoensathien, et al. (2015).

³¹ Tangcharoensathien, et al. (2015).

³² Ningsanond (n.d.).

³³ Ningsanond (n.d.).

³⁴ Indian Ministry of Labor and Employment (2017).

³⁵ Ministry of Health and Welfare, Government of India (2018).

³⁶ USAID. (April 29, 2013).

³⁷ Indian Ministry of Labor and Employment (2017).

³⁸ Kundu, D., et al. (2018).

<p>some categories of non-unionized workers. Population coverage is 9.7% (33.9% out of all that have insurance) or 41m out of 65m eligible families.³⁹</p> <p>MSBY is for non-poor informal sector workers and the formal sector. Both schemes have subsidized premiums.</p>	<p>empaneled under RSBY, provided they meet accreditation and quality requirements. Empaneled facilities include both hospitals and community health centers, but do not include informal providers.</p>	<p>RSBY and MSBY have four distinct insurance packages related to TB: pre-treatment evaluation, consisting of relevant diagnostic tests, including chest x-ray; follow-up evaluations, consisting of tests, including chest x-ray and creatinine; hospital stay, including bed charges, doctors' consultation fees, and ancillary drugs; and fixed medical package that covers up to 10 days of inpatient stay related to medical hospitalization as a result of confirmed TB.⁴⁰</p>	<p>reimbursed as per the MDR-TB benefit package rates.</p>
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Nigeria: National Health Insurance Scheme (NHIS)⁴¹

<p>Offers programs for the formally employed, urban self-employed, tertiary students, armed forces, some pregnant women, children under five, and such populations as the disabled and prison inmates. Population coverage is about 3%.⁴²</p>	<p>More than 60% of registered facilities are privately owned.⁴³</p>	<p>NHIS operational guidelines specifically exclude TB, giving the rationale that TB control activities are covered under the NTP.⁴⁴</p>	<p>For other services besides TB: capitation for primary health facilities, fee-for-service, and per diem for secondary and tertiary facilities.</p> <p>N/A for TB</p>
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Peru: Comprehensive Health System (SIS) and Social Health Insurance (EsSalud)⁴⁵

<p>SIS covers the poor (population coverage 24.7%).⁴⁶</p> <p>EsSalud covers the formal sector, pensioners, and voluntary enrollment for</p>	<p>SIS: Since 2012, expanded to include some private facilities, and can contract EsSalud facilities.</p> <p>EsSalud: Only offered at EsSalud-owned and</p>	<p>Both schemes provide nominal comprehensive coverage for all forms of TB, weak coverage for community-level services.</p>	<p>Fee-for-service for both public and private providers.</p>
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³⁹ Karan, et al. (2017).
⁴⁰ Kundu, et al. 2015.
⁴¹ Ukwana, et al. (September, 2013).
⁴² Dutta and Hongoro, (2013).
⁴³ Department of Public Health, Nigeria (2014).
⁴⁴ Department of Public Health, Nigeria (2014).
⁴⁵ Class, et al. (2013).
⁴⁶ Instituto Nacional de Estadística e Informática (2014).

independent workers (population coverage 40.6%).

operated health facilities (mainly in urban areas).

OTHER MICs			
People	Providers	Package	Payment
Vietnam: Social Health Insurance ⁴⁷			
25 different categories covering everybody but informal sector workers. Population coverage was 70% in 2014. ⁴⁸	Scheme includes some private providers. TB is managed outside of the scheme, with limited or no formal follow-up or referral between insurance providers and the NTP. ⁴⁹	Broad, unspecific benefit package excludes TB because it's managed nationally, and preventive care is not included.	Public: Line item and global budgets for primary care facilities, fee-for-service and capitation in public hospitals. Private: Fee-for-service and capitation at clinics and hospitals.
Taiwan: National Health Insurance (NHI) ⁵⁰			
Around 99% coverage, though if uninsured, patients are covered through the TB control system.	Patients can receive their anti-TB medication in any public or private clinic or hospital through the NHI program.	Comprehensive package of TB services, and TB patients are exempt from paying contributions.	Pay for performance: No-notification-no-reimbursement policy, case notification-fee policy, and treatment success fee resulted in a prompt increase in notified TB cases. ⁵¹

⁴⁷ Van Tien, et al. (August, 2011).

⁴⁸ Department of Planning and Finance and Health Insurance, Ministry of Health of Vietnam (June 6, 2016).

⁴⁹ Ekman, et al. (July, 2008).

⁵⁰ Chiang, et al. (2002).

⁵¹ Lee, et al. (2012).

ANNEX 2. POTENTIAL IMPACT OF STRATEGIC PURCHASING FINANCING MECHANISMS ON IMPROVING PRIVATE SECTOR TB CARE

	Contracting out	PBF	SHI
Opportunity for TB			
	Scale up contracting arrangements with private providers qualified to provide TB DOTS.	Link contracts to performance to improve the completion of treatment, referral, and reporting behavior at private facilities.	Integrate TB services and private providers into advanced public health insurance programs to harmonize incentives.
Potential impact on private sector TB care			
Increased availability of high-quality drugs and diagnostics in the private sector.	Moderate Potential	Low Potential	Moderate Potential
Access to correct and timely diagnosis (through referrals to the public sector or private providers themselves).	Moderate Potential	High Potential	High Potential
Adherence to treatment regimens (through referrals to the public sector or private providers themselves).	High Potential	High Potential	High Potential
Better integration between providers in all sectors and at all levels	Moderate Potential	Moderate Potential	High Potential

	Low Potential
	Moderate Potential
	High Potential

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