Getting to Zero Accelerator Pack

A guide to using a **comprehensive approach** for TB in domestic, Global Fund and other donor investments



Introduction

Tuberculosis (TB) is an airborne disease that is both curable and preventable, yet more than 1.5 million people around the world died from the disease in 2014. An estimated 9.6 million people became sick with TB in the same year; a total that includes 1 million children as well as 480,000 people with multidrug-resistant TB (MDR-TB) requiring treatment with second-line anti-TB drugs. Although almost everyone who becomes sick with TB can be treated effectively, the number of new TB cases has declined at an unacceptably slow pace of just 1.5% per year since 2000.

Making real progress against the global TB epidemic will require a paradigm shift as called for by the Global Plan to End TB 2016 – 2020. It will require new strategies to search for and diagnose everyone who is sick with TB, to treat them promptly and effectively, and to prevent future TB cases by stopping the transmission of TB infection. It also urgently requires funding that is intentionally and strategically focused on a comprehensive approach to tackling TB. A comprehensive approach integrates three simultaneous strands of activities: Search – Treat – Prevent. The aim of this document is to summarize this approach and provide evidence-based arguments for implementing it urgently in the fight against TB.

What this guide is

The Getting to Zero Accelerator Pack is a guide for applicants to the Global Fund and other donors to invest in accelerating impact in the fight against TB and to reach elimination by using a comprehensive approach. This approach is necessary to create "islands of TB elimination" and any plan short of comprehensive will permit TB to remain a global health problem for hundreds of years to come.

The core tenets of a comprehensive approach, Search – Treat – Prevent are broken into distinct, evidence-based activities that can be incorporated to national strategic plans, national or local guidance, and funding requests. In order to move toward this comprehensive approach, we have included information on appropriate activities and questions that can help:

- Identify existing activities, programmatic frameworks and financing streams that fit this
 approach including local, community-level programming
- Guide domestic investments to be more strategic
- Direct funding requests to the Global Fund and other donors for maximum impact

The questions found here are more than an exercise – they are designed to guide stakeholders in making a strong case for realistic and evidence-based approach to reach TB elimination.

Throughout the text, references to Global Fund applications can be found. The Global Fund's 2017-2019 funding model employs use of "differentiated funding requests" and this guide seeks to support applicants of each funding request type to develop requests that showcase a comprehensive approach to TB elimination in a given setting.

Who this guide is for

This guide is designed to informative and helpful to:

- Contributors to national strategic plans, national or normative guidance, and grant applications to the Global Fund and other investment opportunities
- Reviewers of national strategic plans, national guidance, and funding requests to the Global Fund and other investment opportunities

How to use this guide

This booklet includes technical, evidence-based guidance on the components of a comprehensive Search – Treat – Prevent approach.

Readers can use the following legend to navigate this document.

Each component of guidance is followed by guiding questions to help applicants and reviewers consider how this approach can be used to strengthen existing programs.



As mentioned earlier, excerpts and links from Global Fund materials can be found throughout the text. In 2016, the Global Fund continued to implement its allocation-based funding model, but changed its



application materials to "differentiate" between the needs of the varied countries it serves. In the 2017-2019 funding cycle, there are multiple application types for allocation funding, as well as application materials for above allocation funding. All applicants were informed of their allocation approach in December 2016 through the allocation letter. The primary application approaches are as follows:

- Program continuation: A simplified and streamlined funding request process to ensure well-performing programs with no material change needed can continue implementation with minimal distraction:
- Tailored review: A funding request process with documentation requirements that are appropriately designed for challenging operating environments, for countries preparing to transition out of Global Fund financing, for national strategic plan-based approaches, for results-based financing or other innovative financing approaches, and for material reprogramming in defined areas;
- **Full review:** A comprehensive and overall review of a program's approach and strategic priorities.

While the evidence-based Search – Treat – Prevent strategy should be applied in all operational contexts, examples of ways to apply this strategy in response to questions asked in specific applications are included throughout the text. This is, by no means, an indication that a certain element of Search – Treat – Prevent can only be used in that application type or in response to that particular question, but rather an example.

The Global Fund accepts and reviews funding request submissions in different windows throughout its funding cycle. As some countries have already submitted Global Fund applications in the 2017-2019 funding cycle, this document also includes feedback from the first set of funding requests from the Technical Review Panel (TRP) debrief on review window 1. The TRP has provided feedback on specific technical elements it wished to highlight to different stakeholders, including applicants and technical partners of the Global Fund.

In addition to references to Global Fund application materials, case studies are also included throughout the text. All elements of the Search – Treat – Prevent strategy are evidence-based and have been proven to be effective in implementation as well as studies. The examples included have been determined to be "best practices" but their methods should be adapted to the challenges of any specific implementation context.

TRP LESSONS LEARNED

In its debrief on review window 1, the TRP highlighted the following for future applicants to keep in mind:

Details on TRP lesson learned



A presentation format of this material is also available in PDF.

Contents

Checklist for a comprehensive program

Search

Search Actively - Test Properly

Delays in diagnosis contribute to the spread of TB

Targeted active case-finding finds more TB cases earlier

Global Fund | Prioritized Above Allocation Request for Matching Funds

TRP Lesson Learned | Missing TB cases

Case study | Localized strategies for TB in Dhaka, Jakarta and Karachi

Active case-finding requires proper testing and diagnostic tools

TRP Lesson Learned | Diagnostics: GeneXpert and digital radiography

Global Fund | Past implementation and lessons-learned from Global Fund and other donor investments

Active case-finding can reduce the global burden of TB

Global Fund | Co-financing

Case study | Innovative financing strategies in Chennai with REACH

Treat

Treat effectively - Support through treatment

Effective TB treatment rapidly reduces infectiousness

Global Fund | Looking beyond national systems in national strategic plans

TRP Lesson Learned | MDR-TB program expansion

Widespread testing for drug resistance can ensure effective treatment

Strengthening health systems can reduce treatment delays

Global Fund | Resilient and sustainable systems for health

Patients need to be supported throughout treatment

TRP Lesson Learned | Human rights and gender: An area for improvement

Case study | Social support in Tomsk (source)

Prevent

Prevent Exposure - Treat Exposure

Global Fund | Key risks

Protecting people from exposure prevents future TB cases

Case study | MDR-TB infection treatment in children: Experience from Cape Town

Preventive therapy for high-risk groups reduces new TB cases

Shorter preventive therapy regimens can reduce the treatment burden

Case study | Shortened regimen

Preventive therapy can also reduce new MDR-TB cases

Resources and references

Checklist for a comprehensive TB program

Search Actively - Test Properly

☐ Diagnose untreated TB patients in a timely way							
	Educate the population on TB symptoms						
	Ensure universal access to care						
	Dut in place on active acceptioning strategy to find more popular with TD coding						
	Put in place an active case-finding strategy to find more people with TB earlier						
	Employ a targeted active case-finding strategy to focus on key populations and groups with high exposure, such as:						
	Contacts of people who have TB, including children						
	People living with HIV						
	People who seek care at health facilities in areas where TB is prevalent						
	Other populations based on local epidemiologic data						
	Employ proper testing and diagnostic tools to support active case-finding						
	☐ Move away from reliance on sputum smear microscopy						
	☐ Move toward using more sensitive diagnostic tools such as:						
	☐ Radiography (chest x-ray)						
	☐ Mycobacteriological culture						
	☐ Molecular diagnostic tests (such as the Xpert MTB/RIF test)						
	Clinical algorithms						



Checklist for a comprehensive TB program

Treat Effectively - Support Through Treatment

Pro	Provide effective, evidence-based treatment for all TB cases						
	Reduce delays between diagnosis and treatment						
lmp	Implement widespread testing for drug resistance						
	Implement drug resistance testing prior to beginning standard first-line drug regimens						
	Ensure national guidelines cover standardized risk criteria to guide decisions about treatment for drug-resistant TB in cases where tests for drug resistance are unavailable or test results are pending						
Strengthening health systems can reduce treatment delays							
	Ensure all clinics are able to collect accurate contact information for patients ate first						
	diagnostic vision						
	Support health facilities to optimize the process of receiving, accessing and communicating						
	results to patients						
Sup	pport patients throughout treatment						
	Follow up actively with people who do not start treatment						
	Provide incentives and enablers for patients to start treatment						
	Monitor patients during treatment						
	Provide transportation assistance and/or food assistance as needed						
	Provide social support through treatment supporters and patient support networks						
	Provide cash transfers to natients and/or their families						



Checklist for a comprehensive TB program

Prevent Exposure - Treat Exposure

Protect people from exposure to prevent future TB cases				
Ensure a robust airborne infection control strategy is in place for health facilities as well as for other congregate settings in high-burden areas				
Treat high-risk groups with preventative therapy to reduce new TB cases				
Define high-risk groups and test for TB infection, and treat TB infection with appropriate preventative therapy				
Implement shorter preventive therapy regimens to reduce the treatment burden of drug-susceptible and drug-resistant TB				
 Use shorter preventative therapy regimens to minimize the length of treatment and potential side effects 				
Consider mass preventive therapy for certain high-burden populations to have a broad impact				
Use preventive therapy in low and high-income countries as a cost-effective means of having a large population-level impact to TB burden and the amount spent on costly and ineffective TB control programs				





Search Actively - Test Properly

A person who is infected with TB bacteria can become sick with active TB disease. This can happen as quickly as within a few weeks after infection or as long as decades later. People with TB infection who become sick can transmit the infection to other people in their families, communities and places of work. Therefore, one of the fundamental tenets of good epidemic control for tuberculosis is to actively search for people who are sick with TB or who have TB infection and treat them.

Of the 9.6 million people who became sick with TB in 2014, only 6 million were recorded and reported by countries to the World Health Organization (WHO). This is consistently the situation for the last 8 years – yearly, more than 3.6 million people sick with TB and MDR-TB (3.6 million cases) were "missed" by health systems. Missed cases are people sick with TB who are never diagnosed or treated or were treated in the private sector and were not recorded to national or international registers. Those that are not diagnosed or treated continue to transmit the infection in their families, communities and places of work. The large proportion of missed people with TB is a major cause of the slow progress in stopping the global TB epidemic.

Delays in diagnosis contribute to the spread of TB

In most of the world, people with TB are diagnosed with the disease only after they seek care for their symptoms at a health care facility. A person can have TB for a long period without noticeable symptoms or with symptoms that are not severe enough for them to seek care. By the time people are sick enough to seek care, they may have been infectious for a long time.



GUIDING QUESTIONS

Delays in diagnosis contribute to the spread of TB

- To date, what efforts have been made to better understand a patient's path from diagnosis to treatment completion?
- What diagnostics tools are currently being used for TB? Have these tools been updated recently as a part of a wider initiative to promote prompt and correct diagnosis? Have there been any initiatives from either a municipal coalition or a national strategy to incorporate new diagnostic tools or algorithms for TB?
- What are some of the barriers to which delay prompt diagnosis? What are some strategies that have been or could be employed to reduce the time it takes for a patient to be correctly diagnosed?
- How can these barriers be addressed within the structure of the existing program? What innovations could healthcare providers make to address barriers to prompt diagnosis?

Targeted active case-finding finds more TB cases earlier

Targeted active case-finding involves actively seeking out and screening people who are at higher risk of becoming sick with TB. The strategy reduces transmission rates because it finds more people with TB and diagnoses them earlier, so that people who are infectious can be removed from their communities for treatment before they transmit TB to more people.



GUIDING QUESTIONS Targeted active case finding

- How are high-risk groups defined in your setting? What guidelines have been used to determine which groups are high-risk?
- Has there been any efforts to map hot spots at a community or municipal level for TB?
- Are there strategies currently being used to actively search for TB in identified high-risk groups? If so, what are they?
- Have there been any operational research projects that have included household contacts or other high-risk groups in active case finding strategies?

- Are there resources currently being put toward screening these high-risk groups? If so, what are they?
- What are some of the lessons learned, challenges and successes from active case finding and screening?
- What local strategies for screening and active case finding be supported in future programs?



GLOBAL FUND APPLICATION MATERIALS Prioritized Above Allocation Request for Matching Funds

All Global Fund applicants are encouraged to prepare a prioritized above allocation request that can be assessed for unfunded quality demand. In this allocation cycle, some countries are eligible for "matching funds". In the "Guidance on Matching Funds: Tuberculosis – Finding the Missing People with TB" published by the Global Fund, it is explained that:

"Matching funds are one of three catalytic investment streams approved by the Global Fund Board for the 2017-2019 allocation period... The objective of matching funds is to incentivize eligible countries to align their allocations towards the strategic priorities that are critical to driving impact and achieving the Global Fund Strategy 2017-2022."

Countries eligible for TB matching funds have been determined by the Global Fund and partners and were notified in 2016. Matching funds for TB must go toward "finding missing TB and drug-resistant TB cases" and must match one-to-one investments in the allocation request.

On the next page, please find an excerpt from the template for requesting matching funds as well as guidance to help applicants determine what information should be considered in response. The "guiding questions" on page X may also be used.

Excerpt from the Matching Funds funding request template for applicants with a full or tailored application:

- a) Referring to relevant modules and interventions within your allocation funding request,
- Describe how programming of the allocation supports each strategic priority for which you are applying for matching funds;
- Specify whether the allocation budget invested in each strategic priority area is higher than for the previous allocation cycle (2014-2016).

Excerpt from the Matching Funds funding request template for applicants with a program continuation application:

b) For program continuation applicants,

- Explain, as applicable, which modules and interventions within your existing program support each strategic priority for which you are applying for matching funds;
- Describe, as applicable, any reprogramming that you plan to undertake to increase the investment of allocation resources in the strategic priority areas.

Eligible countries for matching funds, therefore, are advised by the Global Fund to include activities in their allocation and above allocation requests:

- Intensified TB screening and diagnosis at health facilities
- Systematic screening of high-risk groups
- Universal drug-susceptibility testing, DR-TB diagnosis and treatment
- Programs and approaches to address access barriers, including community-based and integrated services
- Intensified TB screening among people living with HIV and enhanced collaboration between TB and HIV programs
- Engaging private sector providers in TB diagnosis, treatment, prevention, and monitoring and evaluation
- Management of co-morbidities

TRP LESSONS LEARNED Missing TB cases

In its debrief on review window 1, the TRP highlighted the following for future applicants to keep in mind:

- The TRP encourages all applicants to use lessons from TB REACH projects that can be adopted.
- The TRP recommends the role of communities and information technology be strengthened for case finwding, retention in care and contact management.
- The TRP encourages those eligible for matching funds to come early and be willing to try innovative ideas
- The TRP suggests that applicants search and reapply positive examples of finding missing cases

Interactive Research & Development (IRD), a Pakistan-based organization that works with TB, explored the ideas of construing cities as pillars of interventions for TB control and seeking ways to harness existing capacities in the private sector. By looking at data from Pakistan, where 2% of the gross annual health expenditure for interventions is from donors, IRD reevaluated the erroneous assumption that TB control programs are paid for by donors and sought out ways to leverage that 2% and turn it into more effective healthcare. Because so many patients prefer to seek private sector healthcare, rather than travelling to national TB treatment sites, IRD suggested that efforts in the Global Fund-financed program be focused on working with private sector providers to develop sustainable models of healthcare delivery in the private sector to can improve TB control.

The first intervention, in Karachi, focused on verbal symptom screening for patients in private clinics and hospitals, and offered performance-based incentives for screeners. The second project expanded to include Dhaka, and targeted verbal screening at private-sector laboratories and diagnostic centers, coupled with rapid TB testing using GeneXpert. Jakarta was included in the third phase, which employs a social business delivery model to scale up GeneXpert testing in the public and private sectors.

As of January 2015, nearly 2 million people have been screened through the TBXpert programs in Dhaka, Jakarta, and Karachi; almost 13,000 cases of MDR-TB have been detected in those three cities using the programs' GeneXpert testing. Khan noted that the majority of those people were found in the public sector, but the preponderance is shifting toward the private sector over time. Turning to treatment rates for the MDR-TB cases detected in the programs, IRD reported the following outcomes (Table 1).

TABLE 1 TBXpert project in public private mix facilities: Summary of treatment [start date] to 31 January 2015

	Tests performed	MDR-TB cases detected	MDR-/RR-TB cases detected	% on treatment of MDR-TB cases detected	% on treatment of MDR-/RR-TB cases detected
Dhaka	33,714	2,327	130	90%	86%
Jakarta	28, 357	4,600	363	47%	15%
Karachi	33,794	5, 969	432	86%	90%

CASE STUDY QUESTIONS Localized strategies for TB

While this example demonstrates some unique strategies for active case-finding, these are not
the only ones that can be used. What are other effective methods for active case-finding in a city
or geographically defined area that could be replicated? What are some of the major obstacles
to carrying these interventions out on a large scale? What might be some of the strategies for
overcoming some of these challenges in your particular setting?