

# From Policy to Practice:

HOW THE TB-HIV RESPONSE IS WORKING



“The HIV community must place much more focus on TB co-infection than it has done to date. TB takes the lives of over 1000 people living with HIV every day, a number which is absolutely unacceptable. This report highlights that TB doesn’t have to be a death sentence for people living with HIV, but we need more action. By joining forces, the HIV and TB community can finally give this deadly issue the attention it deserves.”

– Mike Podmore, Director STOPAIDS

### Author

Mandy Slutsker

### Contributors

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### Acronyms

<b>AIDS</b>	acquired immunodeficiency syndrome	<b>IPT</b>	isoniazid preventive therapy
<b>ART</b>	antiretroviral treatment	<b>NGO</b>	non-governmental organization
<b>CHW</b>	community health worker	<b>PEPFAR</b>	U.S. President’s Emergency Plan for AIDS Relief
<b>COP</b>	Country Operational Plan	<b>STI</b>	sexually transmitted infection
<b>CPT</b>	co-trimoxazole preventive therapy	<b>TB</b>	tuberculosis
<b>DfID</b>	UK Department for International Development	<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS
<b>GHESKIO</b>	The Haitian Group for the Study of Kaposi’s Sarcoma and Opportunistic Infections, an HIV/AIDS NGO	<b>WHO</b>	World Health Organization
<b>HIV</b>	human immunodeficiency virus		

## From Policy to Practice: How the TB-HIV Response Is Working

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Photo credit: Tom Maguire.

Last year, TB (tuberculosis) surpassed HIV as the world's leading infectious killer, in part, because progress against both epidemics has been held back by a failure to coordinate. The two epidemics fuel each other, but the global response has missed opportunities to use that linkage to catalyze faster progress against the “deadly duo” of TB-HIV.

Building on ACTION's 2014 report *From Rhetoric to Reality*, this analysis details the steps that governments of countries with high burdens of TB-HIV and their donor partners have taken to turn a coordinated response to TB-HIV into reality at the country level, as well as the remaining gaps. Using the World Health Organization's (WHO) list of 12 evidence-based priority coordinated activities as a guide, ACTION used document reviews and stakeholder interviews to assess how the global response can take the next step from policy to practice.

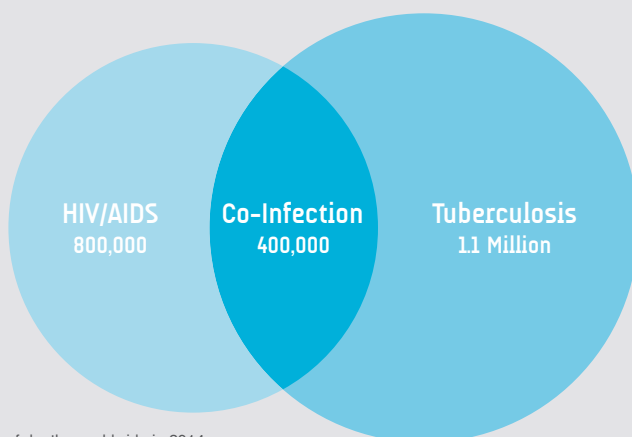
## Summary of Recommendations

- **Global partners**—governments, donor agencies, civil society, and the private sector—must work together to address key gaps, such as human resource capacity and the development and scale-up of appropriate tools, in the prevention, diagnosis, and treatment of HIV-associated TB.
- **The governments of high-burden countries** should develop joint national TB and HIV strategic plans (like those South Africa has successfully pioneered), hold national HIV programs accountable for results from TB-HIV collaborative activities, prioritize and scale up investments in underfunded TB programs and health worker support, engage civil society and private sector stakeholders, and improve data collection and reporting on TB-HIV.
- **Global Fund to Fight AIDS, Tuberculosis and Malaria** (Global Fund) should ensure that single TB-HIV concept notes (a requirement that grant funding applications include both TB and HIV) result in joint programming, by encouraging national HIV and TB program budgets to more accurately reflect the cost of carrying out joint activities, and continuing to invest in innovative programs, such as community extension workers and improved data collection.
- **UK Department for International Development** (DfID) should clearly and publicly commit itself to a specific role in promoting TB-HIV integration and ensure that investments in health systems include appropriate TB-HIV collaborative activities.
- **U.S. President's Emergency Plan for AIDS Relief** (PEPFAR) should continue to be a leader in investing in high impact TB-HIV interventions and work with governments and other donors to ensure sustainability of programming in areas outside HIV “hot spots.”
- **World Bank** should continue to support governments with critical infrastructure investments, particularly laboratory capacity, and promote best practices in TB-HIV coordination within health systems by strengthening investments and technical assistance.

# Progress against a Deadly Duo

TB and HIV have been called a “deadly duo” because each epidemic heightens the risk, intensifies the damage, and thwarts efforts to end the other. TB remains the leading killer of people with HIV, causing one in three AIDS-related deaths.<sup>1</sup> Last year, new data released by WHO showed TB surpassing HIV as the world’s leading infectious killer, in part, because the response to co-infection did not receive the same funding or attention that drove faster progress against HIV/AIDS.

## TB Now the World’s Leading Infectious Killer



Number of deaths worldwide in 2014, according to the 2015 WHO Global TB Report

Like the diseases themselves, treatments for TB and HIV are inextricably linked. When programs fail to appropriately integrate or link TB and HIV services, crucial opportunities are missed to find people in need of HIV and TB treatment and save lives. While antiretroviral treatment (ART) reduces the risk of TB infection among people living with HIV by 65 percent,<sup>2</sup> undiagnosed and untreated TB has been shown to worsen or accelerate HIV progression.<sup>3, 4</sup>

Countries’ responses to the deadly duo are governed by national guidelines and strategic plans, which draw on recommendations published at a global level by WHO. National responses are funded, in part, by global development partners. In 2004, WHO established interim guidelines on addressing HIV-associated TB, which emphasized the necessity of better linking TB and HIV services, and outlined a set of collaborative activities.<sup>5</sup> Four years later, that policy evolved into the “Three I’s” strategy—intensified case-findings, isoniazid preventive therapy, and infection control—to scale up detection and prevention of TB among people living with HIV with enhanced ownership of collaborative activities by HIV stakeholders.<sup>6</sup> WHO updated the policy recommendations in 2012, giving greater clarity on 12 specific activities needed to improve health services and health outcomes for people with, and at risk of, TB and HIV.<sup>7</sup> In 2014, ACTION investigated whether the guidelines had been translated into commitments at global and national levels and produced the report *From Rhetoric to Reality*.

ACTION found that, while bold policy steps had been taken to fight both TB and HIV, much more was needed.

As global guidelines to combat TB-HIV were updated and formalized, countries did begin moving from rhetoric to reality, adapting WHO’s recommendations to country realities and expanding lifesaving TB-HIV collaborative activities. For example, in 2014, 77 percent of people living with HIV who were also diagnosed with active TB were placed on ART.<sup>8</sup> However, at the same time, opportunities were still being missed: only 47 percent<sup>9</sup> of people on ART were screened for TB, only 51 percent<sup>10</sup> of people diagnosed with TB were tested for HIV, and only half of the estimated



# Progress against a Deadly Duo

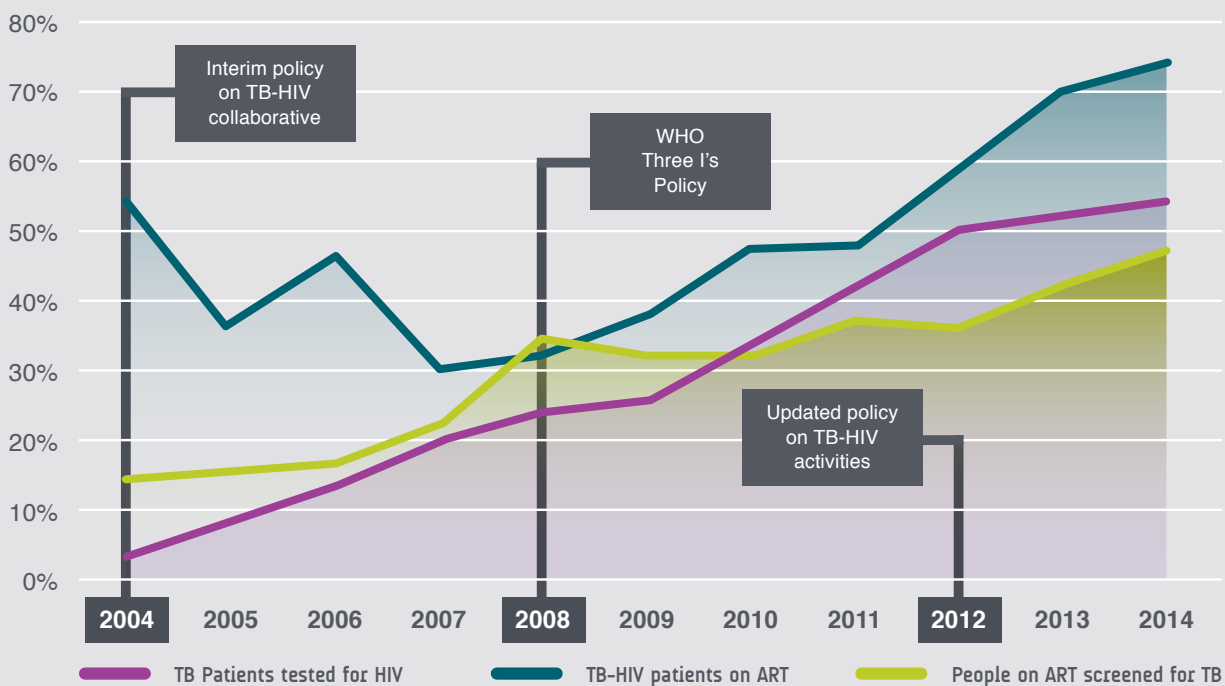
number of people living with HIV who developed TB were diagnosed and provided with TB care.<sup>11</sup>

ACTION's analysis in 2014 found that WHO's recommendations for the 12 high impact TB-HIV collaborative activities had not been embraced equally across high burden countries or by donors. In addition, despite having fewer resources, TB programs carried out the majority of joint TB-HIV efforts, while HIV programs often neglected the recommended collaborative activities. To address these gaps, ACTION recommended that national HIV strategic plans prioritize TB-HIV collaborative activities—with a specific focus on screening all people living with HIV for TB—to ensure access

to TB prevention, testing, treatment, and care. ACTION emphasized that these services should be monitored and reported on annually. The recommendations also encouraged national TB programs to reduce barriers to care due to out-of-pocket costs, as well as detailing suggestions for international actors:

- The leadership in countries with high TB-HIV burdens should comply with Global Fund guidelines, established in November 2013, that require applications submitted for funding include TB and HIV together—single (joint) TB-HIV concept notes.

## Updates in Global Guidelines and Improvements in Lifesaving TB-HIV Activities



Sources: Data on TB patients tested for HIV and TB-HIV patients on ART from WHO Global TB Program database, 16 June 2016. Data on the TB screening numerator come from WHO's Global Tuberculosis Report 2015 "WHO TB burden estimates" [dataset, variable name "HIV\_TBSCR"], retrieved from <http://www.who.int/tb/country/data/download/en>. Data on the TB screening denominator, the number of people on ART, were retrieved from the following UNAIDS publications: UNAIDS AIDSinfo database indicator "Number of people receiving ART, 2010-2015," retrieved from <http://aidsinfo.unaids.org>; 2004 data, retrieved from [http://www.who.int/3by5/pr\\_en.pdf?ua=1](http://www.who.int/3by5/pr_en.pdf?ua=1); 2005-2009 indicator "People accessing treatment," retrieved from [http://www.unaids.org/sites/default/files/en/media/unaids/contentassets/documents/epidemiology/2013/gr2013/20130923\\_Fact-Sheet\\_Global\\_en.pdf](http://www.unaids.org/sites/default/files/en/media/unaids/contentassets/documents/epidemiology/2013/gr2013/20130923_Fact-Sheet_Global_en.pdf).

# Progress against a Deadly Duo

- PEPFAR should expand its rollout of GeneXpert (a rapid 2-hour diagnostic test for TB that detects TB DNA and drug resistance in sputum samples).
- DfID should conduct a thorough review of health programs in high TB-HIV burden countries.
- The World Bank should provide countries with specific guidance on TB-HIV interventions in the context of their health investments.

Two years later, ACTION is evaluating whether or not progress has been made by high burden countries or donors to address the gaps.

Two new ambitious global policy targets must be taken into consideration as ACTION evaluates progress since the 2014 report. In October 2014, UNAIDS adopted the 90-90-90 treatment targets, which aim to get 90 percent of people living with HIV diagnosed, get 90 percent of those diagnosed

on treatment, and get 90 percent of those on ART virally suppressed.<sup>12</sup> Following UNAIDS' lead, the Stop TB Partnership adopted complementary 90-90-90 targets in *The Global Plan to End TB 2016 – 2020*, aiming to “reach 90 percent of all people who need TB treatment, including 90 percent of people in key populations, and achieve at least 90 percent treatment success.”<sup>13</sup> For either of these sets of ambitious goals to be met, TB-HIV collaborative activities must go not only from rhetoric to reality but from policy to practice.



Photo credit: David Bryden.



ACTION's analysis in 2014 was based on the premise that, because WHO guidelines on TB-HIV collaborative activities are so clear, governments and donors should have been able to translate the recommendations into their relevant policy and implementation documents within a year or two. Since TB and HIV are such serious public health threats, the report also made the assumption that the public should expect policy, project, and grant documents to be easily accessible, and that these documents should make clear to interested citizens or advocates what the government or donor is committing to do to address each disease and co-infection.

Therefore, in 2014, ACTION analyzed whether WHO's global guidelines on TB-HIV had been translated into real commitments and policies by countries and donors.<sup>14</sup> ACTION began by looking at countries where collaborative activities could make the most difference for TB outcomes, and thus focused on 32 countries with the highest percentage (20 percent and higher) of co-infection among people with TB. Within these countries, ACTION looked for mentions of the 12 WHO-recommended TB-HIV collaborative activities in national TB strategic plans, national HIV strategic plans, and country plans of major donors.<sup>i</sup>

To assess progress two years later, ACTION decided to look more broadly at the full TB-HIV disease burden. Therefore, using WHO's most expansive definition of 41 countries with a high burden of TB-HIV, ACTION looked again at publicly available documents for active policies and projects to determine whether collaborative activities were more visible or prominent than in 2014.<sup>ii</sup>

Because the analysis now includes a different set of countries (41 countries instead of the 32 analyzed in 2014), ACTION developed new 2014 baselines against which to compare the 2016 analysis. To complement the document reviews, six very different country settings were selected for qualitative research to contextualize the document review findings, examine what barriers remain to expanding TB-HIV collaborative activities, and view to what extent the policies on paper match the reality of patients' experience.

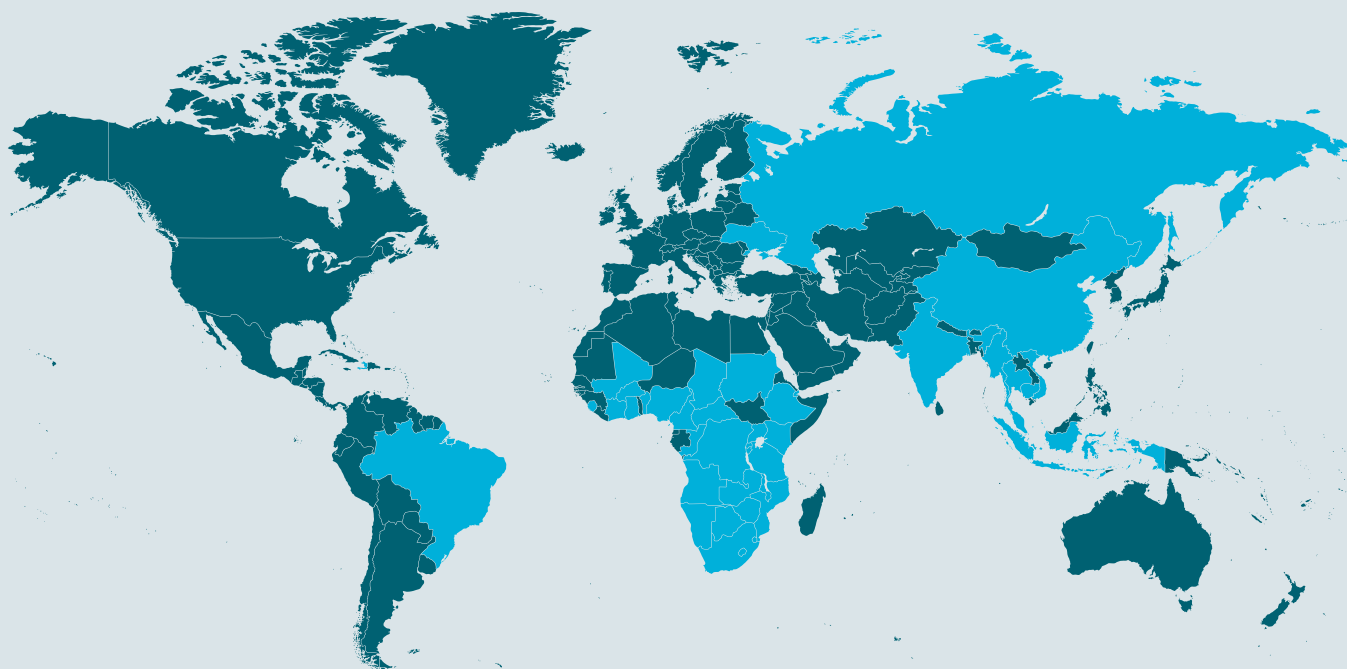
Both this report and the 2014 analysis focused on major public actors (governments and donor agencies) in order to inform advocacy and influence their policies. Although it is outside the scope of this study, other actors, including WHO itself and the private sector, have important roles to play in shaping both policy and practice.

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i Though it is difficult to track specific TB-HIV financing, the selection of major donors to analyze was based on the scale of their HIV or TB funding, as well as potential to scale up TB-HIV funding based on government commitment to overseas development assistance.

ii WHO's list of TB-HIV high burden countries for the period 2016–2020 has decreased from 41 countries to 30 countries. However, the report here used the list of 41 countries defined as priority TB-HIV countries from 2009 through 2015. This same group of 41 countries was used from 2009 until the end of 2015, including to report TB-HIV statistics in WHO's Global Tuberculosis Report 2015. Additionally, the list of 41 countries was used by the Global Fund to determine which countries need to submit single joint concept notes for TB and HIV.

## WHO's High Burden TB-HIV Countries, 2009-2015



Angola	Cambodia	China	Ethiopia	Kenya	Myanmar	Sierra Leone	Thailand	Zambia
Botswana	Cameroon	Congo	Ghana	Lesotho	Namibia	South Africa	Togo	Zimbabwe
Brazil	Central African Republic	Côte d'Ivoire	Haiti	Malawi	Nigeria	Sudan	Uganda	
Burkina Faso	Chad	Djibouti	India	Mali	Russia	Swaziland	Ukraine	
Burundi		DR Congo	Indonesia	Mozambique	Rwanda	Tanzania	Vietnam	

### Documents Reviewed

- 26 - TB national strategic plans
- 36 - HIV national strategic plans
- 35 - Global Fund TB grants
- 60 - Global Fund HIV grants
- 13 - Global Fund TB/HIV grants
- 12 - UK DfID programs
- 28 - U.S. PEPFAR Country Operational Plans (COPs)
- 21 - World Bank projects

### Interviews Conducted

- 17 - interviews in Haiti
- 15 - Interviews in South Africa
- 11 - interviews in Ukraine
- 10 - interviews in Kenya
- 9 - interviews in Côte d'Ivoire
- 8 - interviews in Indonesia

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of ACTION or its country partners concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

ACTION's review of national strategic plans and relevant donor agency documents found more evidence of commitment to TB-HIV collaborative activities that were readily available for citizens and advocates to draw on and demand implementation. It is also clear that the neglect of certain collaborative activities is still present and continues to hold back progress against the deadly duo of TB and HIV.

Countries have taken steps in the right direction since 2014, but challenges remain. Specifically,

the burden to support key TB-HIV activities still falls heavily on under-resourced TB programs, lack of appropriate tools undermines the TB-HIV response, policy improvements have not all been translated into changes at the facility level, and more investment in human resources is needed to achieve an effective TB-HIV response. Furthermore, donor assistance does not fill all of the identified gaps in TB-HIV collaborative activities.

## TB-HIV: Integration or Collaboration?

The overarching goal of WHO's guidance, of country plans, and of donor assistance is to "decrease the burden of TB and HIV in people at risk of, or affected by, both diseases."<sup>19</sup> Interviews of people in six countries show that there are many possible models by which to achieve this goal, falling along the spectrum of collaboration on specific activities to full integration of services. What works in one setting may not work in another. At the end of the day, what matters most is the patient's experience and the feasibility of receiving care and services for two diseases.

Some people interviewed for this report spoke of "one-stop shops," where a single care provider provides both TB and HIV services to patients, as the gold standard of successful TB-HIV integration. The one-stop shop model is already happening in many rural clinics by default; when there is only one clinic and one care provider in a community, that person handles everything from antenatal care and diabetes to TB and HIV.

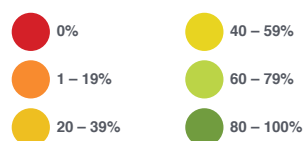
However, while the one-stop shop model may sound ideal, it does not make sense in all facilities or situations. Other interviewees pointed out that facility deficiencies—including poor ventilation and poor infection control measures—can pose a major barrier to integrating TB and HIV services in the same physical space. Many HIV clinics do not have infrastructure adapted to control TB infection, leaving health workers fearful of contracting TB. Facility managers simply do not want to put immunocompromised patients and expectant mothers in a waiting room with people coughing. In many of the clinics visited as part of this research where infrastructure posed this challenge, the solution was to provide TB and HIV services under one roof, but in different rooms. While it may be annoying and time consuming for patients to wait in line to receive their ART and then queue up again to be tested for TB, this is often meant to protect people not already sick with TB from getting infected.



# Findings

## The Evidence for TB-HIV Collaborative Activities

When it comes to diagnosing, treating, and preventing TB and HIV, the science is clear. Early identification and treatment of TB and HIV increases chances of survival, improves quality of life, and reduces transmission of both diseases. Therefore, it is critical that all people living with HIV are routinely screened for TB and all people with active TB disease are tested for HIV—as an entry point for treatment and care. There is strong evidence for prevention: once a person living with HIV begins ART, it reduces the risk that they will become sick with active TB;<sup>15</sup> and isoniazid preventive therapy (IPT) reduces risk of active TB infection. Combined, ART and IPT can reduce TB risk by up to 90 percent.<sup>16, 17</sup> Co-trimoxazole preventive therapy (CPT), a broad spectrum antibiotic used to prevent infections, has also been shown to improve health outcomes in people living with HIV who are suffering from active TB disease.<sup>18</sup> To achieve the greatest impact, these interventions should be addressed as part of a joint response offering a holistic approach to people with TB-HIV.



## Analysis of National Strategic Plans

Includes latest publicly available national strategic plans written in English or French from the 41 high burden TB-HIV countries

12 collaborative activities		TB national strategic plans	HIV national strategic plans
		(26 total)	(36 total)
A.1	Set up and strengthen a coordinating body for collaborative TB-HIV activities, functional at all levels	73%	33%
A.2	Determine HIV prevalence among TB patients and TB prevalence among people living with HIV	58%	33%
A.3	Carry out joint TB-HIV planning to integrate the delivery of TB and HIV services	88%	72%
A.4	Monitor and evaluate collaborative TB-HIV activities	100%	83%
B.1	Intensify TB case-finding and ensure high quality anti-tuberculosis treatment	100%	78%
B.2	Initiate TB prevention with isoniazid preventive therapy and early antiretroviral therapy	88%	56%
B.3	Ensure control of TB infection in healthcare facilities and congregate settings	85%	42%
C.1	Provide HIV counseling and testing to patients with presumptive and diagnosed TB	100%	53%
C.2	Provide HIV prevention interventions for patients with presumptive and diagnosed TB	42%	19%
C.3	Provide co-trimoxazole preventive therapy for TB patients living with HIV	88%	44%
C.4	Ensure HIV prevention interventions, treatment, and care for TB patients living with HIV	42%	31%
C.5	Provide antiretroviral therapy for TB patients living with HIV	81%	58%

## Analysis of Donor Documents

(Includes donors' active projects and policies for the 41 high burden TB-HIV countries)

	Global Fund TB grants (26 total)	Global Fund HIV grants (60 total)	Global Fund TB-HIV grants (13 total)	UK DfID projects (12 total)	U.S. PEPFAR COPs (28 total)	World Bank projects (21 total)
<b>A.1</b> Set up and strengthen a coordinating body for collaborative TB-HIV activities, functional at all levels	6%	0%	0%	25%	7%	11%
<b>A.2</b> Determine HIV prevalence among TB patients and TB prevalence among people living with HIV	6%	0%	0%	17%	7%	16%
<b>A.3</b> Carry out joint TB-HIV planning to integrate the delivery of TB and HIV services	31%	5%	8%	42%	64%	32%
<b>A.4</b> Monitor and evaluate collaborative TB-HIV activities	91%	57%	54%	33%	86%	63%
<b>B.1</b> Intensify TB case-finding and ensure high quality anti-tuberculosis treatment	100%	43%	62%	50%	93%	58%
<b>B.2</b> Initiate TB prevention with isoniazid preventive therapy and early antiretroviral therapy	23%	13%	23%	8%	75%	0%
<b>B.3</b> Ensure control of TB infection in healthcare facilities and congregate settings	31%	2%	0%	8%	71%	32%
<b>C.1</b> Provide HIV counseling and testing to patients with presumptive and diagnosed TB	83%	27%	31%	8%	86%	16%
<b>C.2</b> Provide HIV prevention interventions for patients with presumptive and diagnosed TB	0%	2%	0%	0%	0%	5%
<b>C.3</b> Provide co-trimoxazole preventive therapy for TB patients living with HIV	23%	3%	0%	0%	82%	0%
<b>C.4</b> Ensure HIV prevention interventions, treatment, and care for TB patients living with HIV	6%	2%	23%	0%	14%	5%
<b>C.5</b> Provide antiretroviral therapy for TB patients living with HIV	63%	32%	38%	0%	93%	5%

## Finding 1: Burden to support key TB-HIV activities still falls heavily on under-resourced TB programs

Two years after ACTION's initial assessment of the TB-HIV response, the burden to implement collaborative activities still falls heavily on TB programs. The analysis of high burden countries and donors shows a mix of modest backsliding and weak progress. While both national HIV and national TB programs demonstrated slightly higher commitment to including TB-HIV collaborative activities in their strategic plans, HIV strategic plans still lag significantly behind their TB counterparts. National HIV strategic plans mention an average of 6 TB-HIV collaborative activities compared to national TB strategic plans' average of 10 activities.

1. Setting up and strengthening a coordinating body for collaborative activities (mentioned in only 33 percent of HIV plans)
2. Joint TB and HIV prevalence surveys (33 percent)
3. Infection control (42 percent)
4. HIV prevention interventions for people with TB (19 percent)
5. CPT (44 percent)
6. Treatment and care for TB patients living with HIV (31 percent)

“The most important measure of integration is what’s happening for the client...if someone is infected, how easy is it for them to access the care that they need?”

– South African civil society leader

The exception is South Africa, which developed a joint strategic plan for TB, HIV, and STIs (sexually transmitted infections) that includes all 12 of the high-impact collaborative activities. This joint strategic plan is the only one of its kind among high burden TB-HIV countries.

Six important activities were missing from the majority of the 36 HIV strategic plans reviewed:

While HIV prevention interventions, such as behavior change and male circumcision, were routinely included in HIV strategic plans, they were not clearly referenced for people with TB-HIV. This was also true for HIV treatment and care, which was listed as part of the HIV program, but not specifically as a TB-HIV response.

WHO recommends that all adults living with HIV be given CPT in settings where malaria and severe bacterial infections, including TB, are present.<sup>20</sup> Because CPT is supposed to be given to all people living with HIV in those settings, one might expect national HIV programs to prioritize CPT in their plans. However, less than half do; instead, 88 percent of national TB plans mention the activity. While not reflected in HIV policy priorities, CPT is being administered where needed. For example, despite Tanzania's failure to include CPT in its HIV



strategic plan, the country put 97 percent of people with TB who were enrolled in HIV care on CPT.<sup>21</sup>

In addition to CPT, joint planning of the TB-HIV response was largely the responsibility of national TB programs: of these programs, 73 percent included setting up and strengthening a TB-HIV coordinating body in their strategic plans and 88 percent included joint planning. There are lessons about how to address this disparity from countries where both TB and HIV strategic plans included joint planning to ensure better coordination between

programs. For example, interviewees explained how the shift has happened in Kenya. There had always been a TB-HIV coordinator situated within the national TB program. However, in early 2016, Kenya's national AIDS and STI control program hired a counterpart TB-HIV coordinator. Both coordinators will work within and across their respective departments to increase communication and ensure that the national strategic plans for both TB and HIV are being correctly implemented.

## Average Number of Collaborative Activities per Document

Average number of TB-HIV collaborative activities mentioned in public documents

High burden country or donor	2014	2016
TB national strategic plans	9	10
U.S. PEPFAR COPs	8	7
HIV national strategic plans	5	6
Global Fund TB grants	5	5
Global Fund TB-HIV grants	-	2
World Bank Projects	2	2
Global Fund HIV grants	2	2
UK DfID projects	1	2

## HIV programs reluctant to take on TB activities

There are a number of reasons why HIV programs might be reluctant to take on what they view as TB activities, particularly the fear that scaling up TB-HIV interventions would come at the expense of other HIV activities. One technical advisor in southern Africa explained that, “when the HIV program [was] doing their budget...I was pushing that the budget for [Gene]Xpert should come from HIV funds because [they’re the] biggest consumer for Xpert. They seemed very reluctant.” Despite the apparent reluctance of national HIV programs, PEPFAR is using its leverage as a leading global HIV donor to shift attitudes and practice, so that HIV programs do see TB-HIV collaborative activities as their responsibility. Over the last few years, PEPFAR has prioritized the scale up of GeneXpert, using what are often designated as HIV funds to procure the GeneXpert diagnostic machines and cartridges that are well suited to diagnosing TB among people living with HIV.

Another factor causing HIV care providers to take a more limited role in TB-HIV activities may be the persisting stigma and misinformation around TB. Interviewees described situations in which fear stemming from a lack of education on infection control led health workers to avoid TB patients. While trepidation of treating people living with HIV has been largely overcome as the result of education campaigns, TB may be overlooked in health worker education. “Health professionals who work in the non-TB center are afraid of TB and therefore are reluctant to test people,” explained a Côte d’Ivoire civil society stakeholder. “We had the same problem at the beginning of the HIV infection when doctors or nurses were putting on three pairs of gloves before doing an exam on HIV-positive pregnant women.”

The tendency for national TB programs to carry out the majority of TB-HIV collaborative activities can also be explained by HIV programs focusing on scaling up ART, the backbone of the 2014 UNAIDS 90-90-90 targets. Since early ART is also a critical strategy for minimizing TB infection risk, HIV programs could have seen increasing their patients’ access to ART as their main contribution to the TB-HIV response, rather than prioritizing other collaborative activities over it. However, only 58 percent of national HIV strategic plans mentioned providing ART for people with active TB, far behind the 81 percent of national TB strategic plans that did so. More emphasis is needed on prioritizing ART for people with active TB disease.

## TB programs remain chronically under-resourced

Despite including more collaborative activities in their strategic plans, national TB programs have far fewer resources with which to carry out these activities. In 2014, \$19.2 billion was spent on HIV programs in low- and middle-income countries, roughly three times the \$6.6 billion spent on TB.<sup>22</sup> Although the cost structures of HIV and TB programs are different, the TB response remains massively under-resourced, with an annual gap of \$1.4 billion worldwide.<sup>23</sup> At the country level, many of the high TB-HIV burden countries are experiencing substantial funding gaps in their national TB programs. Indonesia’s and Kenya’s TB programs remain chronically underfinanced, with 66 percent and 45 percent of their respective TB program budgets unfunded.<sup>24, 25</sup>

Implementing countries rely on donors, such as the Global Fund, to fill gaps in national TB budgets. The Global Fund’s Technical Review Panel cited the chronic underfunding of national TB programs

as a serious problem in its latest report.<sup>26</sup> Although underfunded, countries did not propose higher allocations to TB in their concept notes. To address chronic underfunding, the Technical Review Panel suggested applicants “reconsider their program splits...to reallocate more funds to TB.”<sup>27</sup> However, reallocating funding may be difficult for country coordinating mechanisms to manage, given political realities within the different ministries of health, the fact that HIV programs are themselves often not fully funded, and the Global Fund’s funding cap for TB at 18 percent of its total grant portfolio. A national TB program manager from one of the countries interviewed said that, despite joint planning, “when they put the budget together, the larger part ends up being the HIV budget, not the TB budget.”

Despite having 4 times more funding than TB grants and despite TB being the leading cause of death for people living with HIV, HIV grants were still 59 percent less likely to fund TB-HIV collaborative activities.



### Côte d'Ivoire: Match ambitious plans with resources to achieve TB-HIV outcomes

Côte d'Ivoire is one of the countries in West and Central Africa most affected by HIV and TB; nearly one in four people with TB is co-infected with HIV. Some progress has been made regarding TB-HIV—75 percent of people with TB-HIV are on ART<sup>28</sup>—but much more remains to be done. TB-HIV integration in Côte d'Ivoire is largely driven by the TB national strategic plan, which includes CPT and ART for TB patients, but the two strategies are not mentioned in the country’s national HIV strategic plan. Côte d'Ivoire shows the same global trend of underinvestment in TB. The country’s TB program is largely underfinanced (56 percent of the TB budget is unfunded): it is only 0.69 percent of the total health expenditure and 1/10 of the national HIV program (6.3 percent).<sup>29,30</sup>

While Côte d'Ivoire’s TB and HIV programs have historically worked independently of each other, the government has made conscious steps toward better integration in its national strategic plan for HIV 2016–2020 (which was not publicly available during the time of ACTION’s review). The plan will integrate the treatment of TB and HIV and emphasizes early diagnosis through extended HIV testing and access to ART for TB patients, as well as increasing TB screening among people living with HIV. Efforts have also been made to improve the data collection system for TB and HIV, and ensure these monitoring systems are available in all HIV and TB clinics. While improvement of TB-HIV policies has been slow, progress is being made. However, more investment by the government and donors will be needed to convert these policies into practice.



## Finding 2: Lack of appropriate tools is a barrier to scaling up the TB-HIV response

Lack of appropriate drugs, diagnostics, and vaccines for TB pose a major barrier to scaling up the TB-HIV response. Years of neglect, lack of resources, and an absence of political will has led to a situation where there is no effective vaccine to prevent the most common form of TB, no rapid point-of-care diagnostic accessible, and no simple, short (10-day) course of antibiotics available to treat the disease. While there have been recent breakthroughs in new drugs and regimens for drug-resistant TB, most health workers and people living with TB are still forced to fight the disease with outdated tools.

In the two areas where better tools are now available, GeneXpert and data from timely studies on disease prevalence, national TB and HIV programs have been able to improve TB diagnosis:

- The scale-up of GeneXpert since 2014, in particular, shows the difference that appropriate tools can make. One previous gap—only 68 percent of national HIV plans mentioned intensified case-finding for TB among people living with HIV in 2014—has closed more dramatically than other gaps, so that today intensified case-finding is the collaborative activity most emphasized by national HIV programs (78 percent of HIV strategic plans).
- The Global Fund's Technical Review Panel acknowledged that additional data from USAID- and Global Fund-financed TB prevalence surveys, plus improved data published by WHO, have driven some of the new emphasis on intensified case-finding.<sup>31</sup>

Making an appropriate tool, such as GeneXpert, available has measurably aided progress in dealing with TB-HIV. In the past, HIV programs struggled to scale up screening for TB; in 2004 only 14 percent of people receiving ART were screened for TB.<sup>32</sup> While this number had slowly been increasing, the rollout of the new GeneXpert technology, which is particularly useful for diagnosing TB in people living with HIV, enabled HIV programs to prioritize TB diagnosis. In 2012, USAID, UNITAID, PEPFAR, and the Bill & Melinda Gates Foundation reached an agreement with GeneXpert's manufacturer to reduce its cost in developing countries by 40 percent, to \$10 per cartridge.<sup>33</sup> Over six million GeneXpert cartridges are procured annually in the public sector at this discounted rate.<sup>34</sup> ACTION's 2014 report recommended that PEPFAR expand rollout of GeneXpert machines. In the last two years, PEPFAR has moved from pilot-testing on a small scale to financing a robust scale-up of GeneXpert as a means to diagnose HIV-associated TB.

In addition to seeing GeneXpert mentioned more often in the policy documents reviewed, many clinicians interviewed indicated that, where available, GeneXpert was the primary method of diagnosing TB in people living with HIV. This was especially true in the *South Africa National Strategic Plan for TB, HIV, and STIs*, which emphasizes TB screening and diagnosis. The South African health system translated this policy into practice: the country has utilized three-quarters of the world's GeneXpert cartridges procured to date.<sup>35</sup>

©The Global Fund to Fight AIDS, Tuberculosis and Malaria. Photo Credit: John Rae.

Unfortunately, GeneXpert machines are not always available or accessible in the areas most in need, which may explain the remaining gap in countries whose HIV strategic plans do not yet make a commitment to increasing TB diagnosis. This may be due to lack of government prioritization in acquiring GeneXpert machines through domestic resources or donor funds. The government of Indonesia, for example, has acquired only 376 GeneXpert machines, despite its vast geography encompassing thousands of islands.<sup>36</sup> Because the machines are few and far between, samples must be transported to and from laboratories, which undermines one of the tool's key advantages—its ability to diagnose TB in 90 minutes. Countries also need to ensure they have a full suite of diagnostic tools appropriate to various settings; for example, in people who are seriously ill with HIV and for

whom other diagnostics have not provided concrete results, the WHO recommends using LAM, a point-of-care urine test.<sup>37</sup> Chest X-rays can also identify abnormalities in the lungs that a microscopy test might miss in a person living with HIV.<sup>38</sup>

New tools can only overcome barriers if deployed effectively, which includes creating an appropriate regulatory environment and training health workers in their use. In some cases, failure to train and support health workers has led to care providers being uncomfortable using the new GeneXpert technology. “Many are unfamiliar with the machine... and have not embraced GeneXpert technology,” explained a care provider in Kenya. Unlike the experience in South Africa, interviewees in Haiti, Côte d’Ivoire, Kenya, Indonesia, and Ukraine indicated that more should be done to increase the uptake of this new tool to drive universal access to



## Ukraine: Extreme disparity between TB and HIV services

In response to an HIV epidemic fueled by drug use, the Ukrainian government and its donors prioritized the response to HIV at the expense of other health issues, including TB. There are stark differences between TB dispensaries and HIV clinics in the country. Some TB facilities have not been upgraded since the collapse of the Soviet Union, and multiple patients interviewed for this report said they felt unsafe going to the TB clinics. A woman living with HIV, who had been treated for TB, described her TB clinic as “a very, very, very strange place...it’s really dark, it’s very old dirty place. I don’t know any clean places for TB. It’s really dangerous.”

Despite the challenges, Ukraine has taken positive steps to integrate HIV and TB services for people who use drugs. In some parts of the country, opioid substitution therapy (OST) sites now include TB and HIV services so a person can receive treatment for TB, HIV, and drug dependence at one place. “If you don’t take your TB drugs, you don’t get to see your other [OST] doctor. It’s a very successful program; pretty much 100 percent [of] OST-TB patients finish their TB treatment,” said a member of Ukrainian civil society.

While there has been an effort to increase integration for key populations, there remains a lack of coordination at all levels of government and the TB and HIV programs operate on separate vertical systems. Ukraine is in the process of making some changes to its national health system, but there is a lot of confusion around regulation and responsibilities. This lack of coordination filters down to the local governments and creates greater instability. Particular worries have been voiced about the sustainability of TB and HIV programs supported by donor funding, with the poor coordination and human resources fueling the fire.

fast and accurate TB diagnosis, particularly as an element of intensified case-finding.

In order to increase diagnosis, countries also need to prioritize and routinize screening for TB, where health workers ask patients a short series of questions to determine if they should be tested for TB. The Global Fund’s Technical Review Panel cited lack of TB screening among people living with HIV as an issue for concern.<sup>39</sup> ACTION’s 2014 recommendations to national HIV programs also identified TB screening in people living with HIV as an area to scale up. Modest gains have been made overall, with TB screening rising from 36 percent of people on ART in 2012 to 47 percent in 2014 (the last year for which data was available).<sup>40</sup>

Despite increased emphasis on intensified case-finding and scale-up of GeneXpert, 3.6 million people with TB were “missed” by health systems in 2014, meaning they were undiagnosed or unreported.<sup>41</sup> Some of these “missed” cases include HIV-associated TB, which is more likely to be diagnosed if care providers screen patients for TB signs and symptoms at each clinical visit.

### Finding 3: Policy improvements in the TB-HIV joint response have not all translated into changes at the facility level

Interviews showed that, despite gains at the policy level and increased awareness about integration or collaboration, progress has not adequately translated into changes at the facility level. This could be due to multiple factors, including the time it takes to implement any new national policy, the lack of resources or priority dedicated to implementation, or disagreement and confusion over who is responsible for scaling up the TB-HIV response. One technical implementer from Indonesia lamented that, after years of work to update and improve policies, they were only beginning to embark on the real challenge in scaling up the TB-HIV response: implementation.

#### Global Fund Single Concept Notes

In 2013, the Global Fund took the bold step of requiring countries with high TB-HIV burdens to submit single concept notes that included TB and HIV together when applying for grant funding. Of WHO's list of 41 high TB-HIV burden countries, 38 were eligible for TB and HIV funding under the Global Fund's new funding model.<sup>42</sup> In its 2014 analysis, ACTION recommended that the Global Fund work closely with country leadership to help them comply with the new guidelines for single TB-HIV concept notes. The Global Fund has since worked with 30 countries to develop single TB-HIV concept notes, which are at varying stages of the grant process. Although many more are in the pipeline, as of May 2016, the Global Fund had 18 active TB-HIV grants; 13 were reviewed for this analysis, because only their grant documents were complete and available.

Developing single (joint TB-HIV) concept notes for the Global Fund helped start a conversation in eligible countries, but systematic impact remains to be seen. TB-HIV grants themselves failed to mention many of the 12 recommended collaborative activities. These grants mentioned an average of only two collaborative activities—the same as HIV-only grants—and far less than active TB-only grants (five activities), which were administered in the years before the single concept notes. Many of the TB-HIV grants seemed to be more focused on HIV-specific activities, rather than a joint TB-HIV response.

Five of the recommended collaborative activities, including infection control and CPT, were missing from every TB-HIV grant reviewed. Most surprisingly, only 62 percent of joint TB-HIV grants mentioned intensified case-finding. This gap was noted by the Global Fund's Technical Review Panel, which called for countries “to strengthen screening for TB among people living with HIV” in a review of concept notes submitted in the third and fourth windows of the new funding model in 2014.<sup>43</sup>

In November 2015, WHO, UNAIDS, and the Global Fund Secretariat held a consultative meeting to draw lessons from the development, approval, grant making, and implementation of single concept notes. While participants agreed that joint TB and HIV programming should be prioritized, they concluded that there was no “one size fits all” approach. Rather, single concept notes should be viewed as a tool by which countries can ensure joint programming and focus on enhancing efficiencies and impacting the lives of patients.<sup>44</sup>

The interviews ACTION conducted helped shed light on why the grants resulting from single concept notes did not score better in the review. A few of the people interviewed indicated that, despite formally developing the concept note together, national TB and HIV programs did not actually sit down together and think critically about how to combat both diseases in their country. “Some of the grants...[are] literally taking a TB concept note and HIV concept note, cutting and pasting, and saying here’s our one [joint] concept note,” a technical advisor working across multiple Southern African countries explained. Others said that TB and HIV programs worked well together on the concept note development, but that TB-HIV activities got lost in the actual financing and administration of the grant. In Kenya, for example, the Ministry of Health established a joint TB-HIV Interagency Coordinating Committee to develop the single concept note, but according to interviewees, once the concept note was submitted to the Global Fund, TB and HIV separated once again. One member of Kenyan civil society explained, “When it came to the allocation of funds...we again separated the diseases.” Another civil society advocate shared, “The moment we submitted our application and the grant came...the funding split. TB got 18 percent [of the resources allocated].”

## Siloed Programs Reluctant to Integrate

While the Global Fund’s single concept note requirement aimed to improve collaboration, national TB and HIV programs overall remain siloed, and this separation trickles down to the facility level in many ways:

- **Monitoring and evaluation:** Across all six countries where ACTION conducted stakeholder interviews, nurses and government officials complained that separate systems made it difficult to track co-infected patients and nearly impossible to know the true burden of the epidemic. “When we receive data from [the] HIV service and from [the] TB service, we can’t even compare them because they’re too different,” said a member of Ukrainian civil society. A coordinator in Côte d’Ivoire’s National TB Program explained that, even when collaborative activities are happening, records of the activities are not being reported.

South Africa is taking steps to integrate the TB and HIV reporting structures. “The two different reporting mechanisms have fueled the two different program structures,” explained someone from a donor agency. “So I think [now that steps are being taken to integrate reporting] that it will start improving.”

- **Drug procurement:** In Côte d’Ivoire, a technical advisor explained that, while the procurement of HIV medicines is integrated into many countries’ broader medicine procurement systems, TB remains separate.
- **Lack of policy guidance to facilities:** Another reason that integration is not happening at the facility level is due to a lack of information. “At the national level, [officials are] well informed. But when it comes to district areas, there are a lot of [people] uninformed about the regulations,” said one program manager in Indonesia.



- **Scheduling:** In many countries, TB clinics operate on different days than HIV clinics, even if they are located at the same health facility. “The ARV clinics are on Mondays and the TB clinics [are] on Thursdays. Then [on the days] in between, the officer for them is not in the clinic, but is in the field doing other things. So even if [patients] come, they wouldn’t get services,” explained a technical partner in Kenya.

In addition to separate structures, in some situations there appeared to be reluctance to integrate by individuals. “Integration starts and stops with the facility manager,” explained a researcher in South Africa. In his experience, if a facility manager is not on board with integration or does not prioritize it, integration simply will not happen. More than one interviewee in Haiti, Ukraine, and Indonesia gave the same response, even mentioning care providers who were reluctant to follow national or international guidelines. “The policy exists, but it is not respected,” noted a physician from Haiti. In Indonesia and South Africa, several people interviewed said that doctors do what they want and there is no consequence for not following guidelines.

The same can be true at the district level, especially in countries undergoing decentralization of their government or health systems, such as Kenya, Indonesia, and Ukraine. A member of a Ukrainian non-governmental organization (NGO) clarified, “The oblast [district] councils don’t realize the priority of TB-HIV or the TB programs. They have many medical, many health problems to finance besides TB and HIV, and there is a big risk that they will not consider us a priority.”



## Indonesia: Fighting an uphill battle

Although in Indonesia only 6 percent of new TB cases were among people living with HIV, the large population of the country makes the absolute TB-HIV burden substantial. Furthermore, Indonesia tops the list of “missing” TB cases, with an estimated 680,000 people either going untreated or whose treatment goes unreported to the national TB program. Many of these missed cases may actually be treated in the unregulated private sector, which operates disjointedly from the public sector.

Given the country’s focus on finding the missing TB cases and its lower percentage of HIV co-infection, TB-HIV integration appears to have moved to the bottom on the list of TB priorities. Interviewees at both district and facility levels showed a general lack of knowledge and understanding of the relationship between TB and HIV or of the collaborative activities for the two diseases. The lack of awareness appeared more prominent in rural areas. “The farther you get from Jakarta, the less policies are followed,” noted one physician.

Additionally, efforts to capture information on the TB-HIV response have been incredibly weak. In 2014, only 5 percent of new TB cases were tested for HIV and no data was reported on TB screening among people living with HIV.<sup>45</sup> People interviewed said the decision not to integrate TB and HIV monitoring and evaluation was intentional, citing confidentiality of people living with HIV.

Indonesia’s Ministry of Health has responded to these difficulties with a renewed policy focus on addressing TB-HIV. Attempts are being made to strengthen TB-HIV working groups at both province and district levels. The Ministry of Health is also reaching out to private health providers about TB-HIV and working to involve them in planning meetings. To combat problems with reporting, the Ministry has begun working with districts and the University of Oslo to create a TB-HIV dashboard that links key data from the separate TB and HIV reporting systems as part of a Health Systems Strengthening grant from the Global Fund.<sup>46</sup> While the challenges of combating TB-HIV in Indonesia are enormous, efforts are being made to remove barriers to care and improve coordination, service delivery, and reporting.

## Finding 4: To achieve an effective TB-HIV response, more investment is needed in human resources

Although the recruitment, training, and retention of human resources are not included as a stand-alone activity in the WHO TB-HIV guidelines, they are critical to achieving an effective TB-HIV response and deserve more emphasis from implementing country governments and donors. Lack of adequate human resources—from staffing and training, to retention and compensation—were prominent in all six countries where ACTION conducted stakeholder interviews.

Most nurses and physicians interviewed indicated that community health workers (CHWs), who provide the link between communities and health facilities, were critical to the success of their program. One physician in Kenya remarked, “If this linkage [is] broken, then the war against TB and HIV will have been lost.” For example, in Kenya and South Africa, CHWs transport patient sputum samples to and from laboratories. Some programs had funding to compensate CHWs for their time or pay for their transportation. However, nearly all people interviewed cited lack of reliable and sustainable funding for CHWs as a barrier to TB-HIV integration. One care provider in South Africa explained, “If the funding stops, for whatever reason...you’ll find the samples were just not sent.”

Stakeholder interviews pointed to a lack of prioritization and investment by both high burden countries’ governments and donors in healthcare workers as a means to scale up the TB-HIV response. “Why is it so problematic?” asked a physician in Haiti. “You can buy millions of dollars of ART, not a big deal, but pay 400 health workers and it’s a major issue.”

In addition to CHWs, nurses stand on the front lines in the battle against TB and HIV. While nurses carry out the bulk of TB and HIV care, they historically have been restricted from initiating treatment. In some countries, this has changed as efforts were made to scale up ART. “Task shifting [allowing nurses to take on some roles previously assigned to doctors]...has been a great advancement in TB and HIV integration, so that nurses and midwives could also prescribe ART, as there are [few] doctors in our country,” said a member of Côte d’Ivoire’s national HIV program. The same is true in South Africa, which implemented a countrywide training program that allowed nurses to initiate ART. However, this has yet to happen with initiation of TB treatment.

Just as TB and HIV programs themselves have historically been separated, so too were the nurses. Many nurses have been trained specifically on either TB or HIV, posing a barrier to integration. “Historically, nurses have been running tuberculosis programs at the facility level. And they have not been trained on ART...[even though] one of the best opportunities to initiate people [on ART] is at TB clinics,” pointed out a care provider in South Africa. Some countries, such as Indonesia, made efforts to rotate staff among TB and HIV services in efforts to improve integration. Interviews with care providers indicated the rotation was welcome, but that the process could be better refined as the rotation led to constantly changing staff with little experience and expertise in the services they were providing.

In addition to ensuring further training on both TB-HIV, most stakeholders interviewed said it was important to compensate nurses and CHWs to carry out any additional work that integration would entail. A technical advisor in Haiti explained, “You still find some people that are reluctant...It’s

like ‘I was trained as a TB person and then you want me to do more work.’ A donor interviewed in Ukraine suggested increased salaries for nurses and CHWs, saying it would help motivate them to carry out integrated care.



### Haiti: Maximizing impact on TB-HIV integration

Prior to the 2010 earthquake that devastated Haiti’s capital, Port-au-Prince, the country already had the highest TB incidence in the Americas. Following the earthquake, the number of new TB cases more than doubled.<sup>47</sup> Although the number of Haitians living with HIV has been declining,<sup>48, 49</sup> the TB epidemic is still exacerbated by HIV: 19 percent of new TB cases occur among people living with HIV.<sup>50</sup> Donor funding for both TB and HIV increased following the earthquake, but this funding peaked in 2011-2012 and has been declining since, leaving the gap to be filled by the government and community organizations.

Haitian organizations have a long history of fighting TB-HIV jointly and were among the first to document the efficacy of TB-HIV integration as early as 2001.<sup>51</sup> GHESKIO Centers (an HIV/AIDS NGO) in the capital and surrounding region and in Zanmi La Sante in the central highlands provide fully integrated TB and HIV services. At a national level, the government has committed to a policy on managing TB-HIV co-infections that mirrors WHO guidelines and adapts to Haiti’s context. Whenever possible, local health clinics are implementing that policy, but they do so with the very limited government resources dedicated to TB-HIV. Still, Haiti has made impressive progress on turning TB-HIV integration policy into practice, with 88 percent of people with TB being tested for HIV and 54 percent of co-infected patients treated with ART in 2014.<sup>52</sup>

Experts interviewed cited low public financing for health, poor salaries and low morale of health workers, and separate management of TB and HIV programs as major challenges to fully achieving integrated care. However, a new grant from the Global Fund has been approved that will finance expansion of coordinated TB and HIV services, provide nutrition and transportation support for patients, and increase the number of trained community health workers. While Global Fund investment and NGO pioneering of TB-HIV collaborative activities are critical to the response, more financing from the government is needed to ensure TB-HIV policies are taken to scale and sustained.



## South Africa: Political will driving scale up of TB-HIV activities

Of all the countries with high burdens of HIV-associated TB, the government of South Africa has most fully embraced TB-HIV integration and actively taken steps to implement collaborative activities. “There is a lot of support, even from high up politically, to push for TB-HIV collaboration,” said a member of South African civil society. Support for TB-HIV collaboration flourishes within the Ministry of Health, including at the highest level. For example, the commitment to intensified case-finding is illustrated by the use of diagnostic tools particularly well-suited to diagnosing TB in people living with HIV. In fact, South Africa alone is responsible for one in five of the GeneXpert machines and 75 percent of the individual cartridges that have been procured worldwide.<sup>53</sup>

South Africa’s government has been incredibly innovative in its fight against TB and HIV, and has recently begun to implement the recommendations in *South African HIV and TB Investment Case* published in March 2016.<sup>54</sup> This investment case, which began as a requirement for a Global Fund HIV proposal and was taken further by the government, compared all known HIV and TB interventions and estimated their impact on both HIV and TB across all segments of the population.

Five of the 12 TB-HIV collaborative activities were identified in the investment case as having the highest impact at a population level: CPT, IPT, HIV counseling and testing for TB patients, TB screening for HIV patients, and providing ART to people with TB-HIV. By investing more money to scale up key interventions in the medium term, the investment case found the country would save money in the next 5-15 years, as prevention efforts begin paying off and fewer people require expensive treatment.<sup>55</sup> Civil society organizations interviewed have called the investment case “very innovative on the part of the government.”

Despite the country’s strong efforts to fight TB and HIV, its health system is fractured by overburdened public clinics and a number of well-resourced private providers. This means that many people who need services are still not being reached. In an attempt to address these inequities, South Africa is rolling out a national health insurance financing system over the next 14 years.<sup>56</sup> The government is also trying to address quality of care by pursuing an “Ideal Clinic” initiative, where all government-funded health clinics follow a common set of standards on infrastructure, staff, medicine, and protocols.<sup>57</sup> The concept of “Ideal Clinics” is intended to advance South Africa’s fight for health equity. However, one health service director worried that, “at the moment, facility managers are not equipped with the skills and resources needed to achieve ‘Ideal Clinic’ status.” It will likely require greater investment of both human and financial resources to ensure facilities are able to fully achieve their potential and meet new guidelines.

### Finding 5: Donor assistance does not fill all gaps in TB-HIV activities

ACTION's analysis shows that some of the 12 TB-HIV collaborative activities are largely ignored in donor grant, program, or operational documents. In particular, donors largely fail to mention strengthening coordinating bodies for TB and HIV; carrying out TB-HIV prevalence surveys; or providing prevention, treatment, and care interventions specific to people with HIV-associated TB. It is important to note that decisions on what to include in grants, projects, and operational plans are country-led. One would expect national plans to be more comprehensive, with donors emphasizing only the subset of planned activities where they can add the most value. However, it is important for donors to prioritize filling gaps in evidence-based TB-HIV collaborative activities that governments have included in national strategic plans, but are unable to carry out. ACTION's analysis shows several gaps that remain unfilled.

#### The Global Fund

The decision to require single concept notes for TB and HIV in high TB-HIV burden countries was cited as a major policy win by the majority of people interviewed. The development of single (joint TB-HIV) concept notes started conversations between national TB programs and national HIV programs that, in many cases, had previously rarely interacted with one another. In Kenya, the national TB program and the national HIV program are located on different floors of the same building. Even though they were in close proximity, interviewees reported that the two programs seldom worked together, often holding separate meetings and developing separate guidelines. However, as a result of the Global Fund's new policy, these programs were

brought together for the first time to develop the single concept note. "When we have a joint goal, we tend to interact more," said one government official in Kenya. Similarly, a donor agency official in Haiti remarked, "As a result of this decision, both programs are now having joint meetings and trainings."

While the single concept notes have been a major policy improvement, the majority of active Global Fund financing is still delivered through HIV-only grants that were approved before the policy change. Among the 41 countries that were included in the research, HIV grants totaled \$5.6 billion in funding, whereas TB grants totaled only \$1.3 billion in funding—less than one-quarter of their HIV counterparts. The new TB-HIV grants, based on single concept notes, received just \$369 million.

A few critical TB-HIV collaborative activities are routinely ignored in Global Fund grants. This includes IPT, which is only mentioned in 23 percent of TB grants, 13 percent of HIV grants, and 23 percent of joint TB-HIV grants. Based on what they heard from colleagues, a few interviewees suggested that this gap was due to fear that the overuse of IPT would lead to drug resistance. However, the same care providers then noted that this misconception would become more irrelevant as more studies indicate that IPT does not lead to resistance. Despite global acceptance of IPT guidelines and their importance in preventing TB among people living with HIV, the failure of recent concept notes to include providing IPT to people living with HIV was not addressed by the Global Fund's Technical Review Panel in its last report.<sup>58</sup>





## Kenya: Community-based monitoring to improve data collection

Despite its disease burden, Kenya has been recognized as a leader in implementing the WHO TB-HIV collaborative activities.<sup>59</sup> In 2014, 95 percent of people with newly diagnosed TB had a documented HIV test, 87 percent of those with HIV were put on ART, and 99 percent of people with co-infection received CPT.<sup>60</sup> Interviews in Kenya indicated that reporting was a major challenge in assessing the country's efforts to combat TB-HIV. "The care is happening, but the recording is still a challenge," as a technical partner described the situation.

To combat challenges in reporting, the Global Fund is financing pilot interventions in three districts to establish community-based monitoring systems. In these projects—which will encompass monitoring and evaluation of TB, HIV, and malaria—community health volunteers and health extension workers will be trained to collect data and refer people to health facilities. The pilot will also utilize an integrated reporting tool that links to the Ministry of Health's Demographic Health Information System, aimed to improve national reporting. While the success of the pilot remains to be seen, community-based monitoring may offer a method to develop a national reporting system across the country, and hopefully lead to increases in screening, testing, and treatment.

Interviews in Côte d'Ivoire indicated that integration may not be happening as quickly as it could because it is seen as an external push from donors, rather than part of a country vision. Furthermore, while single concept notes are seen as one tool to promote integration, stakeholders in affected countries need to decide which strategies will result in the best TB-HIV outcomes in their own context. "Despite not having a single joint concept note, we [have been] developing joint activities in TB and HIV programs since interim guidelines were published in 2008," explained an official from Côte d'Ivoire's TB program.

To ensure the Global Fund adequately addresses and finances the TB-HIV response, its Technical Review Panel must encourage its partners to

work with country leadership to ensure that the single TB-HIV concept notes specifically include a robust plan to carry out the full set of priority TB-HIV activities. There are opportunities for Global Fund grants to systematically finance additional critical pieces of the TB-HIV response beyond ART: continuing investment in innovative programs (such as utilizing CHWs to carry out services), improving data collection through important TB prevalence surveys, and developing new monitoring and evaluating tools and platforms.

### UK DfID

The number of TB-HIV collaborative activities identified in DfID's bilateral projects has increased by 73 percent since 2014, driven by a 72 percent increase in intensified case-finding in its projects over the period. However, more generally, DfID only mentions an average of two collaborative activities in its projects, similar to Global Fund HIV grants. Although there has been progress, the low number of collaborative activities does not correlate with the Minister of State for International Development's assurances to the House of Commons that integration is a major priority for DfID and that all WHO guidelines are being incorporated over time into DfID programming.

DfID plays a major role through its contributions to multilaterals and channels the majority of its funding for TB and HIV through the Global Fund. Nevertheless, of the 12 DfID projects active as of May 2016, only one-third included at least three collaborative activities. This is the lowest incidence among the organizations analyzed in this report. Interestingly, none of the current DfID projects includes ART for co-infected patients, which is considered one of the highest impact interventions.





# Findings



Photo credit: Marcus Rose.

To its credit, DfID has made world-leading gains in the transparency and availability of project documentation. Its much-improved development tracker and the best publicly available set of documents, of all donors reviewed, made ACTION's analysis possible.

In response to ACTION's preliminary analysis of DfID's contribution to TB-HIV integration for this report, however, DfID was unable to articulate its role. This gap presents an opportunity: with DfID's growing focus on health systems, it can increase its impact on TB-HIV by ensuring that TB-HIV collaborative activities that are health system-focused are included in its programming, for example, infection control and intensified case-finding.

### U.S. PEPFAR

In the past few years, PEPFAR has made major policy commitments to fighting TB-HIV. Reducing HIV-associated TB infections and deaths was a top priority in PEPFAR's 2012 *Blueprint: Creating an AIDS-Free Generation*, which came out a few months after WHO's guidelines and featured seven of the 12 recommended TB-HIV collaborative activities.<sup>61</sup> A review of Country Operational Plans (COPs) shows that PEPFAR has made efforts to include TB-HIV collaborative activities in its country-strategy documents, listing an average of seven TB-HIV collaborative activities per COP—more than any other donor included in this research.

As ACTION's 2014 report had also encouraged, PEPFAR has been able to expand rollout of GeneXpert to increase countries' impact on TB-HIV. In its 12th annual report to the U.S. Congress, PEPFAR outlined its priorities in the fight against TB-HIV, which include increased diagnosis and

treatment of TB among people living with HIV and early initiation of ART.<sup>62</sup> This commitment was translated into reality at the country level: all but two COPs reviewed included intensified case-finding of TB among people living with HIV, largely through uptake of GeneXpert.

In addition to scaling up GeneXpert, PEPFAR continued to emphasize early initiation of ART and immediate access to ART among people co-infected with TB: 93 percent of COPs included ART for people with TB-HIV. Furthermore, 75 percent of COPs reviewed mentioned IPT as an activity—more than any other donor reviewed.

Unfortunately, while IPT is mentioned in a majority of COPs, there is little evidence that it is being carried out at the country level. In the data reported in PEPFAR's 12th annual report to Congress, more than half (53 percent) of PEPFAR countries failed to report the percentage of people with HIV being put on IPT.<sup>63</sup> This is particularly concerning, considering that IPT is one of two mandatory TB-HIV reporting requirements in the PEPFAR Stewardship and Oversight Act of 2013.<sup>64</sup> To ensure people living with HIV access to IPT in PEPFAR-funded programs, the discrepancy between what is mentioned in the COPs and what is being reported to PEPFAR should be remedied.

One concern about PEPFAR that came across in interviews was the recent decision to shift focus to a smaller number districts with the highest burdens of disease, often called "hot spots." As a result, PEPFAR has pulled out of areas with lesser, yet still problematic, burdens of disease, leaving national governments and other donors to fill the gap. Given that PEPFAR is the donor with the greatest emphasis on TB-HIV collaborative activities, some people interviewed were apprehensive that



PEPFAR's withdrawal from certain districts to focus on hot spots would impact the TB-HIV response in those districts, including expanded access to ART.

Given the additional burden this will place on the implementing country governments, all interviewees agreed that it would be important for PEPFAR to work closely with national governments and other donors to ensure smooth transitions. In South Africa, for example, the government has committed to fill these gaps at a provincial level, using additional financing through the national treasury.

## World Bank

The World Bank sees its primary role in the TB response as improving health systems, including modernizing public health laboratory networks, training healthcare personnel, improving monitoring and evaluation systems, and investing in infrastructure that supports infection control.<sup>65</sup> The same is true for the Bank's investments in HIV: on request from national governments, the Bank provides financing for HIV programs that is often integrated with broader health sector financing, health systems strengthening, and other infrastructure projects.<sup>66</sup> In both cases, countries often look to World Bank financing for complementary investments alongside the targeted programmatic support of donors, such as the Global Fund, DfID, or PEPFAR, and rely on the World Bank for technical assistance and analytical support in program design. This puts the World Bank in a strong position to promote certain elements of TB-HIV collaboration in health systems.

In 2014, ACTION recommended that the World Bank provide countries with specific guidance on TB-HIV interventions to ensure activities were systematically implemented, monitored, and evaluated. In the last two years, however, little has changed. TB-HIV activities, including those emphasizing investment in infrastructure and stronger health systems, were largely absent from publicly available World Bank project documents, which mentioned an average of only two collaborative activities. Only 29 percent of World Bank TB and HIV projects mentioned infection control, although this collaborative activity could be systematically incorporated as a priority in all health infrastructure funding.

The World Bank is currently carrying out a few large-scale TB projects, such as the East Africa Laboratory Networking Project, which aims to improve TB diagnosis and surveillance efforts in the region.<sup>67</sup> The East Africa project demonstrates how World Bank financing and technical support can support governments' goals and complement the work of other development partners, including WHO and the Global Fund.<sup>68</sup> Newly approved investments in the "Southern Africa TB and Health Systems Support" and "West African Regional Disease Surveillance Systems Enhancement" projects could provide additional capacity for intensified case-finding for TB. The latter's project information document, however, does not clarify how the investment would impact TB-HIV specifically.<sup>69, 70</sup> More World Bank support—financial and analytical—is needed to increase countries' diagnostic capacity, improve drug-resistance surveillance, and scale up TB diagnosis and treatment for people living with HIV. The need is particularly pronounced in the Central and Francophone African regions, which suffer from weak laboratory infrastructure.<sup>71</sup>





Photo credit: Tom Maguire.

In addition to improving infection control and diagnostic capacity through well-designed infrastructure investments, another area the World Bank could invest in and advise on is prevalence studies to determine TB rates among people living with HIV and HIV rates among people living with TB. While USAID and the Global Fund have supported TB prevalence studies, a specific focus on TB-HIV prevalence studies is a critical gap in the TB-HIV

response that could be filled by the Bank. Currently, only 16 percent of the Bank projects reviewed included TB-HIV prevalence studies. By scaling up this activity, the World Bank has the opportunity to fill a critical need in the global TB-HIV response.

# Recommendations

## *For high TB-HIV burden countries*

High TB-HIV burden countries have made some important progress on the policy front. Now, investment in good policies must be matched by investment in good practice.

- Countries indicated as high TB-HIV burden by WHO should emulate South Africa's lead in developing joint national TB and HIV strategic plans, and require collaboration at the highest levels to ensure all the TB-HIV collaborative activities recommended by WHO are included.
- National HIV programs should carry out and finance TB-HIV collaborative activities beyond ART and HIV counseling and testing, such as investment in TB testing (with GeneXpert, chest X-rays, and LAM), IPT, and CPT, and include clear performance metrics on TB-HIV collaborative activities.
- Governments, with donor assistance as necessary, should increase budgets for TB programs to adequately fund the many TB-HIV collaborative activities already included in national TB strategic plans.
- Governments should further engage civil society organizations and private sector providers in the fight against TB-HIV, making them aware of national guidelines, including them in policy and program planning and implementation, and requiring all providers to report on TB and HIV indicators.

- Ministries of Health should prioritize investment in health workers that includes training existing and new staff on TB-HIV interventions, and compensating all health workers (particularly CHWs), which will have an impact on the health system beyond TB and HIV.
- Governments should work with donors on efforts to improve data collection and reporting systems of TB-HIV collaborative activities.

## *For donors*

### Global Fund

- Through its Secretariat, Technical Review Panel, and partners, the Global Fund should continue to work with countries in order to ensure that all single TB-HIV concept notes specifically include a robust plan for the full set of priority TB-HIV collaborative activities. It should also ensure that this translates into joint programming of the collaborative activities specifically mentioned in the TB-HIV grants.
- The Global Fund should help countries identify where the budget impacts of joint TB-HIV interventions will fall during implementation. For example, it can encourage national HIV programs to systematically finance additional critical pieces of the TB-HIV response beyond ART. Thus, the burden of carrying out joint activities will not simply fall on TB programs as an unfunded mandate.
- Continue investment in innovative programs, such as utilizing community extension workers to carry out services, improving data collection such as the recent important TB prevalence surveys, and developing new monitoring and evaluation tools and platforms.

## UK DfID

- DfID should publicly articulate its position and mandate on TB-HIV integration, and work with country teams and departments to highlight the importance of this integration.
- In line with government priorities, DfID should ensure that its growing focus on health systems also increases its impact on TB-HIV. It can do this by including the TB-HIV collaborative activities that are most focused on health systems strengthening, such as infection control and active case-finding, in health investments.

## U.S. PEPFAR

- PEPFAR should continue its investment in high impact TB-HIV interventions, such as ART and IPT, and the scale-up of GeneXpert. In addition, it should ensure that data, especially for IPT, is collected at the country level and reported to the U.S. Congress in accordance with the PEPFAR Stewardship and Oversight Act of 2013.
- PEPFAR needs to work closely with implementing countries and donors, as it shifts the focus of its funding to “hot spots,” to ensure a smooth transition of TB-HIV activities from PEPFAR funding to sustainable national programs in lower HIV burden areas.

## World Bank

- The World Bank should continue efforts to improve laboratory infrastructure by replicating the East Africa Networking Project in other regions with high TB-HIV burdens and weak laboratory structure, such as Central and Francophone Africa.

- Collect, analyze, and advise governments on best practices for health systems strengthening program design, so that increased investments in health infrastructure and healthcare workers specifically address infection control for TB-HIV and other diseases.
- The World Bank should fund and advise on best practices to encourage more frequent and comprehensive prevalence studies for TB among people living with HIV and for HIV among people with active TB.

## *For advocates*

- Advocates should make the case to public- and private-sector decision makers for increasing investments in research and developing new tools to better prevent, diagnose, and treat TB, including HIV-associated TB.

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c/o RESULTS Educational Fund  
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