



PATH Annual Report

**GHN-I-00-09-00006-01,
Task Order 01
(or TB IQC Task Order 2015)**

October 1, 2011 to September 30, 2012

Submitted to:

US Agency for International Development

Attn: Elizabeth Pleuss

GH/HIDN/ID

1300 Pennsylvania Avenue NW

Washington, DC 20523-7100, USA

Submitted by:

455 Massachusetts Avenue NW, Suite 1000

Washington, DC 20001, USA

Submitted October 30, 2012

This document was prepared for review by the US Agency for International Development (USAID) under USAID's TB Indefinite Quantity Contract Task Order 1, Contract No. GHN-I-00-09-00006. PATH gratefully acknowledges USAID's support for these efforts to assist high-burden countries to reach global tuberculosis control targets.

Summary

COUNTRY	Tanzania	REPORTING PERIOD	October 1, 2011 - September 30, 2012
----------------	----------	-------------------------	--------------------------------------

FUNDING SOURCE	TO2015 FY09/FY10 carryover funds and FY11 funds (GHCS and PEPFAR)
-----------------------	---

ACHIEVEMENTS

Major achievements are summarized below. Please see tabs 3a, 3b, and 4 for more details on outcomes and outputs during this time frame.

<p>Implemented TB/HIV collaborative activities in 1,047 facilities. Using PEPFAR funds, PATH has continued to implement TB/HIV collaborative activities in six regions: Kilimanjaro, Mwanza, Pwani, Dar es Salaam, Zanzibar, and Arusha.</p> <p>Within the 1,047 health facilities that PATH is supporting in these regions as of September 2012, 23,364 TB cases were notified in this reporting period. Of these, 19,635 (84%) had unknown HIV status. 17,169 people (87% of those with unknown status) were tested for HIV, and 4,591 people (27%) were found to be HIV positive. Of these, 3,130 people (68%) were registered for HIV care and 1,551 people (34%) started on ART. 4,293 people (94%) were started on CPT.</p> <p>Notably, the rates for starting on ART have increased compared to our last annual report. In the 2011 annual report, 18% of people who tested positive for HIV were started on ART; whereas in this reporting period, 34% of people who tested positive for HIV were started on ART. This rise in ART initiation can be attributed to clear communication about the national guidelines regarding timing of ART initiation and the emphasis that was placed on ART initiation at the different PATH forums, like trainings, workshops, and supervisions. More specific information is described below and also in tab 4 (Tables 1.1 and 1.2).</p>
<p>Strengthened and decentralized programmatic management of drug-resistant TB. A total of 54 MDR-TB patients have been transferred to their home districts for the continuation phase of treatment after being discharged from Kibong'oto Hospital. PATH has provided hands-on training and supervision to 99 regional and district TB coordinators, clinicians, nurses, and laboratory staff to facilitate the care of these patients in the districts. Findings from these supportive supervision visits showed most patients on their continuation phase of treatment are facing challenges in meeting transport costs to and from health facilities due to poor socioeconomic status and family support. These challenges directly affect patient adherence to treatment. To address this, PATH provided transport stipend to all patients in the continuation phase and, hence, strengthened treatment outcomes.</p> <p>At the central level, as reported in the quarterly report, PATH and the NTLF have partnered with Kibong'oto staff to conduct the first expert panel and cohort reviews without external technical assistance. This is a milestone toward developing a national center of excellence for drug-resistant TB.</p>
<p>Introduced new guidelines and training on the management of pediatric TB. PATH, in collaboration with the NTLF and Dartmouth College, finalized the development of pediatric TB guidelines which are now awaiting MOHSW approval. In addition, PATH, the NTLF, and Dartmouth College developed a full training curriculum and accompanying materials to train health care workers on how to diagnose and manage pediatric TB. PATH trained 25 trainers and 273 health care workers in PATH-supported regions; ICAP simultaneously used the guidelines and curriculum to train an additional 25 trainers and 375 health care workers in other regions. Post-training supervisions have noted that trainees are incorporating their new knowledge and skills to improve diagnosis of pediatric TB cases. PATH will continue to track pediatric TB case notifications as an outcome of this initiative.</p>
<p>Improved the infrastructure and coordination for TB diagnosis. PATH has provided ongoing support to the CTRL, diagnostic centers in PATH-supported regions, and the transport system of sputum specimens throughout the country. In the past year, due to the new transport system, there has been a four-fold increase in the number of specimens sent to the CTRL for culture and DST (see Table 4.2 in tab 4 for data and graphs). In addition, PATH supported the NTLF to develop a draft national strategic plan for laboratories, and we have played a key leadership role in improving coordination among partners on laboratory activities, both with international and in-country partners. Finally, PATH has introduced two GeneXpert® machines, at Amana (Dar es Salaam) and Sekoutoure (Mwanza) Hospitals.</p>

CHALLENGES

Challenge	How PATH is addressing this challenge?
<p>Though our work plan includes an expansion into the newly formed regions of Geita and Simiyu, the government of Tanzania has faced many delays in establishing the regional and district administrations; and hence, implementation of activities has been delayed.</p>	<p>PATH conducted an initial assessment visit in January 2012 and was able to meet with the key leaders, district medical officers, and staff at health facilities to get a better understanding of the situation. PATH is in conversation with the USAID Mission and the NTLP, and is monitoring the establishment of the regions closely. USAID, the CDC, the NTLP, and PATH are now in discussion regarding the possibility of switching to other regions (Simiyu and Mara), and we are awaiting for the final decision.</p>
<p>A shortage of HIV test kits due to a recall has resulted in a drop in P11.1D indicator performance.</p>	<p>The shortage of test kits has been reported, and we have set up a request mechanism to fill the void.</p>
<p>Forecasted shortage of beds at KNTH for MDR-TB patients in the initial phase of treatment.</p>	<p>PATH, in collaboration with the NTLP, conducted an assessment of facilities to decentralize initial MDR-TB patient care; suggested health facilities are Sinza Health Centre, Ukonga Prison Health Centre, and Temeke Hospital.</p>
<p>We continue to experience delays in approvals for key documents and protocols. Specifically, we submitted the protocol for the exit interview survey to NIMR in February; we submitted the draft ACSM strategy to the NTLP in April; and we submitted the workplace policy guidelines in May.</p>	<p>We continue to stay in close contact with our colleagues at NIMR and the NTLP to communicate the urgency of these activities. We will continue to move forward on some activities (e.g., developing operational guidelines based on the workplace policy guidelines) in the meantime.</p>

MAJOR CHANGES TO WORK PLAN THIS REPORTING PERIOD

In this reporting period, the revised FY11 work plan and revised FY09/FY10-funded carryover work plans were approved by USAID. These work plans are the basis for this report.

PATH submitted and USAID approved (in September 2012) a comprehensive narrative for FY11 carryover funds and new FY12 funds. This new work plan will be the basis for future reports.

ENVIRONMENTAL IMPACT STATEMENT

During the reporting period, the main activities undertaken by PATH were training and technical assistance to health care workers and other key stakeholders implementing TB and TB/HIV program activities in collaboration with the NTLP, which included disposal of medical waste. The disposal of all infectious waste produced as a result of these trainings was conducted in accordance with MOHSW guidelines. There was no adverse impact from these activities on the environment.

Global Indicators

Data was disaggregated by gender where possible

NATIONAL LEVEL

Tanzania

Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	24,298	NTLP annual report 2011	Jan-Dec 2011
Smear positive notification rate	55 per 100,000	NTLP annual report 2011	Jan-Dec 2011
Number of new SS+ TB cases successfully treated	22,030	NTLP annual report 2011	Jan-Dec 2011
Smear positive treatment success rate	88.9%	NTLP annual report 2011	Jan-Dec 2011
Number of MDR/XDR-TB cases diagnosed	28	PATH quarterly reports	Oct 2011-Sep 2012
Number of MDR/XDR-TB cases who initiated treatment	27	PATH quarterly reports	Oct 2011-Sep 2012
Number of TB patients tested for HIV	54,042	NTLP annual report 2011	Jan-Dec 2011
Percentage of TB patients tested for HIV	88%	NTLP annual report 2011	Jan-Dec 2011
Number of TB/HIV patients on ART	7,741 (38%)	NTLP annual report 2011	Jan-Dec 2011
Number of health care providers trained in TB elements	2,700	NTLP annual report 2010	Jan-Dec 2010

REGIONAL LEVEL

Arusha

Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	907	NTLP report 2011	Jan-Dec 2011
Smear positive notification rate	53 per 100,000	NTLP report 2011	Jan-Dec 2011
Number of new SS+ TB cases successfully treated	720	NTLP report 2010	Jan-Dec 2009
Smear positive treatment success rate	83%	NTLP report 2010	NTLP report 2009
Number of MDR/XDR-TB cases diagnosed	0	CTRL	Jan-Sep 2012
Number of MDR/XDR-TB cases who initiated treatment	0	CTRL	Jan-Sep 2012
Number of TB patients tested for HIV	2,392	PATH quarterly reports	Oct 2011-Sep 2012
Percentage of TB patients tested for HIV	90%	PATH quarterly reports	Oct 2011-Sep 2012
Number of TB/HIV patients on ART	205 (59%)	PATH quarterly reports	Oct 2011-Sep 2012
Number of health care providers trained in TB elements	142	PATH quarterly reports	Oct 2011-Sep 2012

Dar es Salaam

Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	5,848	NTLP report 2011	Jan-Dec 2011
Smear positive notification rate	196 per 100,000	NTLP report 2011	Jan-Dec 2011
Number of new SS+ TB cases successfully treated	3948	NTLP report 2010	Jan-Dec 2009
Smear positive treatment success rate	87%	NTLP report 2010	Jan-Dec 2010
Number of MDR/XDR-TB cases diagnosed	14	CTRL	Oct 2011-Sep 2012
Number of MDR/XDR-TB cases who initiated treatment	14	CTRL	Oct 2011-Sep 2012
Number of TB patients tested for HIV	6,801	PATH quarterly reports	Oct 2011-Sep 2012
Percentage of TB patients tested for HIV	83%	PATH quarterly reports	Oct 2011-Sep 2012
Number of TB/HIV patients on ART	502 (25%)	PATH quarterly reports	Oct 2011-Sep 2012
Number of health care providers trained in TB elements	121	PATH quarterly reports	Oct 2011-Sep 2012

Kilimanjaro

Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	975	NTLP report 2011	Jan-Dec 2011
Smear positive notification rate	57 per 100,000	NTLP report 2011	Jan-Dec 2011
Number of new SS+ TB cases successfully treated	616	NTLP report 2009	Jan-Dec 2009
Smear positive treatment success rate	88%	NTLP report 2010	Jan-Dec 2010
Number of MDR/XDR-TB cases diagnosed	2	CTRL	Oct 2011-Sep 2012
Number of MDR/XDR-TB cases who initiated treatment	2	CTRL	Oct 2011-Sep 2012
Number of TB patients tested for HIV	1,756	PATH quarterly reports	Oct 2011-Sep 2012
Percentage of TB patients tested for HIV	90%	PATH quarterly reports	Oct 2011-Sep 2012
Number of TB/HIV patients on ART	174 (39%)	PATH quarterly reports	Oct 2011-Sep 2012
Number of health care providers trained in TB elements	117	PATH quarterly reports	Oct 2011-Sep 2012

<i>Mwanza</i>			
Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	2,390	NLP report 2011	Jan-Dec 2011
Smear positive notification rate	95 per 100,000	NLP report 2011	Jan-Dec 2011
Number of new SS+ TB cases successfully treated	1809	NLP report 2010	Jan-Dec 2009
Smear positive treatment success rate	89%	NLP report 2010	Jan-Dec 2010
Number of MDR/XDR-TB cases diagnosed	1	CTRL	Oct 2011-Sep 2012
Number of MDR/XDR-TB cases who initiated treatment	1	CTRL	Oct 2011-Sep 2012
Number of TB patients tested for HIV	4,269	PATH quarterly reports	Oct 2011-Sep 2012
Percentage of TB patients tested for HIV	91%	PATH quarterly reports	Oct 2011-Sep 2012
Number of TB/HIV patients on ART	560 (40%)	PATH quarterly reports	Oct 2011-Sep 2012
Number of health care providers trained in TB elements	302	PATH quarterly reports	Oct 2011-Sep 2012

<i>Pwani</i>			
Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	1,172	NLP report 2011	Jan-Dec 2011
Smear positive notification rate	107 per 100,000	NLP report 2011	Jan-Dec 2011
Number of new SS+ TB cases successfully treated	1091	NLP report 2010	Jan-Dec 2009
Smear positive treatment success rate	97%	NLP report 2010	Jan-Dec 2010
Number of MDR/XDR-TB cases diagnosed	1	CTRL	Oct 2011-Sep 2012
Number of MDR/XDR-TB cases who initiated treatment	1	CTRL	Oct 2011-Sep 2012
Number of TB patients tested for HIV	1,532	PATH quarterly reports	Oct 2011-Sep 2012
Percentage of TB patients tested for HIV	96%	PATH quarterly reports	Oct 2011-Sep 2012
Number of TB/HIV patients on ART	90 (25%)	PATH quarterly reports	Oct 2011-Sep 2012
Number of health care providers trained in TB elements	50	PATH quarterly reports	Oct 2011-Sep 2012

<i>Zanzibar (Pemba and Unguja)</i>			
Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	266	NLP report 2011	Jan-Dec 2011
Smear positive notification rate	In Pemba, 8 per 100,000; in Unguja, 30 per 100,000	NLP report 2011	Jan-Dec 2011
Number of new SS+ TB cases successfully treated	209	NLP report 2009	Jan-Dec 2009
Smear positive treatment success rate	85%	NLP report 2010	Jan-Dec 2011
Number of MDR/XDR-TB cases diagnosed	0	CTRL	Oct 2011-Sep 2012
Number of MDR/XDR-TB cases who initiated treatment	0	CTRL	Oct 2011-Sep 2012
Number of TB patients tested for HIV	419	PATH quarterly reports	Oct 2011-Sep 2012
Percentage of TB patients tested for HIV	87%	PATH quarterly reports	Oct 2011-Sep 2012
Number of TB/HIV patients on ART	20 (36%)	PATH quarterly reports	Oct 2011-Sep 2012
Number of health care providers trained in TB elements	55	PATH quarterly reports	Oct 2011-Sep 2012

Outcomes (FY09/FY10 carryover work plan and FY11 work plan)

OBJECTIVE	OUTCOME	OUTCOME TARGET	OUTCOMES AS OF SEPTEMBER 30, 2012
Objective 1. Maintain high-quality TB/HIV collaborative services in more than 954 facilities in six priority regions and expand services to 60 health facilities in two new regions (Simiyu and Geita) by September 2012 (PEPFAR funds).	Improved quality of TB and TB/HIV services, and increase in TB case notification and treatment success rates; increased use of TB and TB/HIV services.	95% of registered TB patients receive counseling and testing services for HIV (<i>Numerator=Total number of TB patients tested for HIV; Denominator=All TB patients referred</i>).	87% of TB patients with unknown HIV status were offered counseling and testing services for HIV in PATH-supported regions between October 2011 and September 2012.
		85% treatment success rate among TB patients in PATH-supported regions.	Treatment success rates for 2011 will be reported by cohort in 2013 by following NTLP calendar.
	Improved TB case notification rate.	10% increase in TB case notification from baseline in the project-supported regions.	Compared to the baseline period in each region, case notification as of the NTLP calendar year 2011 has increased by 7%. See Tab 4, Table 1.3 for details.
	Improved treatment success rate in project-supported regions.	10% increase in treatment success rate in project-supported regions.	Treatment success rates for 2011 will be reported by cohort in 2013 by following NTLP calendar.
	Percentage of HIV-positive TB patients who initiate cotrimoxazole prophylaxis.	80% of HIV-positive TB patients initiate cotrimoxazole prophylaxis in project-supported regions (<i>Numerator=Number of HIV-positive clients receiving CPT; Denominator=Number of HIV-positive clients</i>).	CPT uptake in PATH-supported regions was 94% between October 2011 and September 2012. This uptake continues to be over the target, due in part to the fact that the CPT can be started at the TB clinics.
Increased coverage of TB and TB/HIV services.	60 additional health facilities provide collaborative TB/HIV services in project-supported regions.	Activity not yet started due to government delays in setting up regions.	
Objective 2. Strengthen PMDT based at KNTH and patient care during the continuation phase in the districts (GHCS funds).	Continuation rate at six months, by cohort.	85% of MDR-TB patients transferred for district continuation-phase care within each cohort are successfully maintained on treatment at time of the six-month interim outcome assessment.	12-month cohort review results show: Q4 2009: 11 of 12 (92%) patients transferred and on treatment at 12 months (one default). [Note: Total cohort is 15, but three deaths prior to transfer.] Q1 and Q2 2010: 11 of 12 (92%) patients transferred and on treatment at 12 months (one death after transfer). Q4 2010: 10 of 11 (91%) patients transferred at 12 months (one default). Two deaths prior to transfer. Q1 2011: Transfer data incomplete, pending verification.
	Treatment completion rate for MDR-TB patients.	>85% of the first cohort of MDR-TB patients complete treatment.	Data complete and confirmed for a treatment success rate of 73% for the first cohort of MDR-TB patients (Q4 2009). There were no final defaulters in this cohort, but one failure due to adverse effects. This first group to complete treatment was characterized by extensive disease at presentation, notable for a 20% death rate. This is not unexpected in a group that often had long periods between MDR-TB identification and start-up of the treatment program.
	Increased national capacity for initiation and maintenance of MDR-TB treatment and care.	Implementation of outpatient model of MDR-TB initiation-phase cases at two to three district facilities.	Three new clinical facilities were chosen to begin outpatient care of MDR-TB patients still on initiation-phase treatment, from the pool of 16 candidate sites evaluated through an assessment process, and subsequently vetted by key stakeholders at a strategic planning meeting held July 2012.

OBJECTIVE	OUTCOME	OUTCOME TARGET	OUTCOMES AS OF SEPTEMBER 30, 2012
	Improved adherence among MDR-TB patients.	Percentage of patients who default within the first six months of MDR-TB treatment will be less than 10%.	During this annual reporting period, there were three cohort review meetings. Within these cohorts, there were no defaulters in the first six months of MDR-TB treatment.
	Stockouts of second-line drugs.	PATH will report on this indicator but is not in a position to set a target, given this is a new activity.	Stockouts occurred and were addressed in November 2011, but have not been experienced since then. As a result of trainings and on-the-job supervision, drugs were adequately ordered and included buffer stock.
Objective 3. Expand pediatric TB diagnosis and treatment services in eight district hospitals in PATH-supported regions by September 2012 (GHCS funds).	Increased notification of pediatric TB cases.	10% pediatric case notification rate (as a proportion of all notified cases).	The pediatric case notification rate was 7% in this reporting period. This rate was lower than expected, but we anticipate it will increase following the recent roll-out of the new guidelines and training program. We will continue to monitor and report on the notification rate.
Objective 4. Strengthen the laboratory network to provide quality-assured laboratories for the diagnosis of all forms of TB and routine surveillance of MDR/XDR-TB (GHCS funds).	Reliability and reproducibility of EQA results.	85% EQA-participating laboratories in PATH-supported regions attain 90% concordant results (<i>D enominator=252 diagnostic centers</i>).	PATH-supported regions have been conducting EQA, and in this reporting period, we have an average of 86% of labs re-checked with the percent of true positives / all positive slides at 92.8%.
	EQA and LED FM performed according to NTLP guidelines.	95% of the 55 laboratories are able to properly use LED FM (<i>D enominator=55 laboratories</i>).	Thus far, 42 (76.3%) laboratories have been trained and are able to properly use LED FM.
	Improved AFB smear microscopy.	Smear positivity increased by 5% from baseline.	Information for July to Sept 2012 is still being entered into the database, and we will report on this outcome in January 2013.
	Improved routine drug resistance surveillance.	>80% of expected sputum specimens received at CTRL.	In this year, an average of 62% the expected sputum specimens were received at the CTRL. See Table 4.1 on Tab 4 for more details. It should be noted that there has been an almost four-fold increase in the absolute number of specimens received at the CTRL (red bars below) since the new transport system was started and achieved coverage in the middle of 2011.
	Improved routine drug resistance surveillance	>80% of expected retreatment specimens received at CTRL.	In terms of retreatment specimens, in the last two quarters, the CTRL has received on average 57% of the expected specimens.
Objective 5. Support implementation of the Three I's strategy in project-supported regions, with emphasis on strengthening infection control at all levels of the health	District coordinators and pilot site staff are able to read and interpret chest radiographs for diagnosis of TB.	100% of all smear-negative people living with HIV/AIDS undergo chest x-ray investigation in pilot sites.	St. Elizabeth Hospital in Arusha was trained to interpret chest radiography for diagnosis of TB. Hindu Mandal Hospital staff will be trained on chest radiographs in April. Thus far, they have two radiologists who are able to interpret chest x-rays.

OBJECTIVE	OUTCOME	OUTCOME TARGET	OUTCOMES AS OF SEPTEMBER 30, 2012
Review of the current system and introduction of intensified TB case-finding and IPT in priority facilities and congregate settings (PEPFAR funds).	Increased detection of TB in congregate settings.	10% improvement over baseline.	PATH is tracking case detection at the congregate settings in 2012, but it has been difficult to get baseline figures from the NTLF. We are now refining the data collection method for congregate setting as we think there has been duplication during reporting between health facility and community data. We will report these data in future reports.
	Reduced infection control in congregate settings (not measured).	Not measured.	Not measured.
	HIV-positive individuals in congregate settings initiate INH prophylaxis.	No target due to lack of data to estimate expected need for service.	At the two 3Is pilot sites, in a 3 month period, approximately 80% of the eligible HIV positive individuals initiated INH prophylaxis.
Objective 6. Expand use of innovative approaches to improve case detection and treatment in facilities and communities (GHCS funds).	ACSM strategy finalized and disseminated to stakeholders.	ACSM strategy launched by September 2012.	PATH submitted the ACSM strategy for NTLF review in April 2012; we are still awaiting inputs from the NTLF, which has engaged a consultant to review.
	Review of feasibility and models of contact investigation in Tanzania.	Alignment of strategic plan and implementation of contact investigation with WHO policy recommendations.	Contact investigation piloting continues through December 2012; data are being reviewed regularly, but formal review will take place in 2013.
	Number of personnel trained to conduct contact investigation and conduct further trainings.	30 personnel trained on contact investigation and trained in TOT.	This activity is planned for early 2013.
	Improved TB case notification in Arusha.	10% annual increase in TB case notification in targeted health facilities in Arusha.	Thus far, there has been a small increase (2%) in case detection in the quarter after SOPs were introduced throughout Arusha (see details in tab 4). We are still waiting for final data on Q4, and will continue to monitor data and report on outcomes.
	Percentage of all cases that are diagnosed using ACSM intervention support.	TBD percentage of all cases that are diagnosed with ACSM intervention support.	6% of the TB cases in these 11 districts can be attributed to USAID-funded ACSM activities. See Table 6.2 in tab 4 for more details.
	Percentage increase in TB case notification from baseline in ACSM intervention districts.	10% increase in TB case notification from baseline in ACSM intervention districts.	In the 12 districts where ACSM interventions have taken place, there was a 6% increase in case notification. See Table 6.3 in Tab 4 for more details.
	Increase in TB case detection in Meru and Arusha Districts.	Increase in case detection by greater than 10% in Meru and Arusha Districts.	Comparing the period before SOP introduction (April-September 2010) versus the period after SOP introduction (April-September 2011), there was a 92% increase in case detection in Meru and Arusha Districts. See tables under tab 4 for more details.
	10% increase in TB notification for all forms compared to the baseline in Zanzibar.	10% increase in TB notification for all forms compared to the baseline in Zanzibar.	Outcomes to be reported in the next reporting period, once intervention has been initiated.
	Screening rates for TB at diabetes clinics.	100% of diabetes patients are screened within 30 TB clinics.	Outcomes to be reported in the next reporting period, once intervention has been initiated
	Case notification at 30 diabetic clinics.	Case notification outcome target will be determined after initiation of screening.	Outcomes to be reported in the next reporting period, once intervention has been initiated.
Increase in TB case notification among women in targeted facilities.	TBD percentage increase in TB case notification among women in targeted facilities.	Activity cancelled.	
Improved treatment completion among men in targeted facilities.	TBD percentage increase in treatment completion among men in targeted facilities.	Activity cancelled.	

OBJECTIVE	OUTCOME	OUTCOME TARGET	OUTCOMES AS OF SEPTEMBER 30, 2012
Objective 7: Build leadership and management capacity at all levels of the NTLP and promote sustainability of all activities undertaken with support from TO2015 (GHCS funds).	Human and financial resources are allocated for TB within national-level plans, thereby contributing to sustainability of activities.	National program, regions, and districts improve current allocations of human and financial resources for TB control in their plans.	Thus far, 16 districts out of 35 had TB, TB/HIV activities in their CCHP in three regions. The total funds allocated was \$35,000 (Mwanza \$12,000, Kilimanjaro \$1,700, and Arusha \$21,060). We will continue to work with regions and districts to incorporate TB and TB/HIV activities into their budgets.
	TB control activities harmonized among implementing partners/stakeholders.	Harmonized work plans available by September 2012 (model available from Stop TB Partnership).	Activity reconfigured. The NTLP has not yet prioritized a national technical working group. Instead, PATH is supporting technical working groups on MDR-TB (see objective 2) and laboratories (see objective 4).
	Timely and complete submission of TB and TB/HIV data.	Targeted districts submit timely and complete TB and TB/HIV data.	TB and TB/HIV data are submitted in a timely manner to both PATH and USAID.
	Tanzania completes application in Global Fund Transitional Funding Mechanism.	Tanzania completes application in Global Fund Transitional Funding Mechanism.	Application to Transitional Funding Mechanism was submitted in March 2012. In October 2012, the TRP approved the TFM application for TB Program in Tanzania

Outputs (FY09/FY10 carryover work plan and FY11 work plan)

Please note: All activities that are delayed, ongoing, or pending have been shifted to the new work plan (FY11 carryover funds and FY12 funds) to run from October 2012 to September 2013.

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
Objective 1: Maintain high-quality TB/HIV collaborative services in more than 954 facilities in six priority regions and expand services to 60 health facilities in two new regions (Simiyu and Geita) by September 2012 (PEPFAR funds).						
FY11 Activity 1.1 Scale up new TB and TB/HIV services to 60 new facilities in two new regions and in existing regions.	Number of health facilities assessed for capacity to introduce collaborative TB/HIV services.	80 health facilities assessed for capacity to introduce collaborative TB/HIV services in Geita and Simiyu regions.		TBD: Depends on establishment of regions	Delayed	Government of Tanzania has not yet established these regions; PATH is therefore unable to initiate work in Geita and Simiyu yet. Trip report from initial visits in January was included in Q1 report.
	Number of HCPs trained on TB DOTS.	150 HCPs trained on TB DOTS.		TBD: Depends on establishment of regions	Delayed	
	Number of HCPs trained on collaborative TB/HIV services in the new regions of Geita and Simiyu.	180 HCPs trained on collaborative TB/HIV services in the new regions of Geita and Simiyu (three HCPs each in 60 new health facilities).		TBD: Depends on establishment of regions	Delayed	
FY11 Activity 1.2 Build human resource capacity in 955 existing and 60 new facilities to undertake TB and TB/HIV services.	Number of facilities that receive visits from the DTHC in each quarter.	940 health facilities receive quarterly visits by the DTHC.		Sep-12	Completed	1,047 facilities received supportive supervision.
	Number of districts receiving quarterly supportive supervision by the ZTHC/RTL/RLT.	45 districts receive quarterly supportive visits by the ZTHC/RTL/RLT.		Sep-12	Completed	35 districts received supportive supervision by the ZTHC/RTL/RLT in Q1 to Q4.
	Number of regions receiving supportive supervision from the central level.	Eight regions receive supportive supervision visits by the central level twice per year.		Sep-12	Completed	All six supported regions received a central supportive supervision visit per plan (Simiyu and Geita delayed).
	Number of joint supervision visits conducted with the NTL and other stakeholders.	Two supervision visits conducted jointly with the NTL and other stakeholders.		Sep-12	Completed	Supportive supervision completed jointly with the NTL in Mwanza, the CDC, and USAID.
	Number of people making presentations or participating in national meetings, international meetings, or international trainings.	Four people present at or participate in national meetings, international meetings, or international trainings.		Sep-12	Completed	One technical officer attended the IPCAN meeting in Namibia in November 2011; one project administrator traveled to Nairobi for training on USAID rules and regulations; ACSM officer attended M&E ACSM training in Italy.
FY11 Activity 1.3 Ensure smooth implementation of activities by conducting regular update and planning meetings with targeted stakeholders.	Number of district TB/HIV coordinating committee meetings.	92 district TB/HIV coordinating committee meetings held (biannual meetings for 45 districts and one town council).		Sep-12	Completed	2 TB/HIV coordinating committees meetings took place in each district (70 district TB/HIV coordinating committee meetings in total). Geita and Simiyu meetings did not take place (see explanation above).
	Number of regional TB/HIV coordinating committee meetings.	16 regional TB/HIV coordinating committee meetings held (biannual meetings for eight regions).		Sep-12	Completed	Six regional TB/HIV coordinating meetings took place in Q3, making a total of 12. Geita/Simiyu meetings are delayed (see above).
	Number of quarterly meetings for coordinators conducted at the regional level.	32 quarterly regional meetings for coordinators conducted (four meetings per year in eight regions).		Sep-12	Completed	24 quarterly regional meetings for coordinators were conducted, four for each region. Geita/Simiyu meetings are delayed (see above).

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
Carryover Activity 1.1 Ensure smooth implementation of activities by conducting regular update and planning meetings with targeted stakeholders.	Experiences among project staff shared to identify achievements and gaps in project implementation.	98 people: All PATH Tanzania TB staff, MOH representative, RACCs, and RTLCs from supported regions attend annual project meeting by December 2011.		Dec-11	Completed	85 people attended: All PATH Tanzania TB staff, MOH representative, RACCs, and RTLCs from the six PATH-supported regions attended the annual project meeting in December 2011.
		60 people: All PATH headquarters technical staff, ZTHC, RTLC, RACC, and DTHC representatives attend semiannual management meeting by June 2012.		Jun-12	Completed	Semiannual meeting completed in June 2012.
		Gaps in project implementation identified and plan to address them is drawn.		Jun-12	Completed	During semiannual meeting in June, several gaps in project implementation were discussed and action points were decided. Follow-up is ongoing and will be evaluated during annual meeting in December 2012.
Carryover Activity 1.2 Conduct an exit interview survey among people accessing TB/HIV collaborative services; use results to recommend improvements to service delivery model; and develop and implement service improvement plans in Ilala and Mkuranga Districts to improve the quality of services.	Service improvement plan developed and activities implemented in two districts.	Service improvement plan available and adopted (project files and CHMT records).		Sep-13	Delayed	The survey protocol was submitted to the NIMR IRB in February 2012. We are now waiting for approval of survey before moving forward to implement. We have been following up with NIMR on a weekly basis. They have assured us that the protocol has been reviewed by one person, and we are still waiting for two other people.
Carryover Activity 1.3 Provide TB DOTS training to HCPs.	Number of HCPs trained on TB DOTS.	87 HCPs trained on TB DOTS.		Nov-11	Completed	Four trainings took place in October 2011. Training report included in deliverables tab.

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
Objective 2: Strengthen PMDT based at KNTH and patient care during continuation phase in the districts (GHCS funds).						
FY11 Activity 2.1 Continue to strengthen and scale up capacity of Tanzania's national MDR-TB treatment facility, including focused clinical mentoring, cohort review and operations research, and rollout of electronic MDR-TB case reporting.	Number of MDR-TB cohort review meetings conducted.	Four quarterly MDR-TB cohort review meetings conducted.	UCSF	Dec-12	Completed	Four review meetings conducted. Technical assistance has resulted in final cohort review SOPs, forms, and completed data reports. The second cohort review for this year marked the first independent session delivered completely by the in-country MDR-TB team. This outcome is evidence for successful capacity-building with transfer of expertise to the Tanzanian MDR-TB team. UCSF will focus on helping the KNTH staff fine tune and remediate gaps in the process (based on observed assessment from the last review) to improve efficiency and accuracy.
FY11 Activity 2.2 Build district and community capacity to support the management of MDR-TB patients.	Number of health facilities assessed for scale-up of MDR-TB services.	Three health facilities in Dar es Salaam and one in Mbeya identified for scaling up MDR-TB care.	UCSF	Jul-12	Completed	16 clinical facilities were evaluated as candidate sites for decentralized scale-up of MDR-TB services. The increase in the number of targeted sites was determined by the NTLP MDR-TB program to serve as guidance for step-wise implementation beyond the initial phase.
	Number of health care providers trained.	16 HCPs trained on MDR-TB care and management for initiation-phase treatment.	UCSF	Sep-12	Completed	In Jan 2012, 12 HCPs participated in bedside mentoring/training for issues encountered during the initiation phase of care ; 9 HCPs trained with pilot MDR self-study material. In July 2012, 9 HCPs were mentored during bedside rounds.
	Number of district HCPs trained on care and management of MDR-TB during the continuation phase.	100 HCPs receive training on MDR-TB care and management during the continuation phase at KNTH, and ready to receive the discharged patients in their districts.		Sep-12	Completed	103 HCPs received training on MDR-TB care and management (January 13-17 and February 27-March 2, 2012). 28 more were trained on June 25, 2012. 30 health care workers were trained in September 2012.
FY11 Activity 2.3 Support follow-up of MDR-TB patients through the intensive and continuation phase.	Number of MDR-TB IEC materials printed and distributed.	100 flipcharts, 6,000 brochures, 4,000 posters, and 100 booklets printed and distributed.		Mar-13	Ongoing	IEC materials have been developed, and will be piloted in the next reporting period.
	Number of MDR-TB supervision visits.	Central staff conduct MDR-TB supportive supervision visits two times per year; regional staff conduct quarterly visits; district staff conduct monthly visits.		Sep-12	Completed	Three supervisions were conducted which included central, regional, and district staff.
	Number of MDR-TB peer educators oriented.	75 MDR-TB peer educators oriented/mentored in three sessions.		Mar-13	Pending	Activity planned for next reporting period. We expect one group of peer educators to be oriented by December 2012.

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
FY11 Activity 2.4 Support the NTLTP with development of MDR-TB drug-tracking tool for second-line drug management.	e-TB Manager assessment report.	Feasibility assessment report.	MSH		Cancelled	This activity has been cancelled.
Carryover Activity 2.2 Identify MDR-TB hotspots in Tanzania and risk factors for MDR/XDR-TB in selected regions.	Study reports.	One comprehensive report submitted on factors contributing to high prevalence of MDR-TB, including recommendations.	UCSF	Dec-12	Ongoing	UCSF is developing the platform and variables for an MDR/XDR-TB clinical and demographic database for analysis. This will be established by November 2012.

Objective 3: Expand pediatric TB diagnosis and treatment services in eight district hospitals in PATH-supported regions by September 2012 (GHCS funds).

FY11 Activity 3.1 Introduce active TB screening among children in RCH, medical, OPD, CTC, and pediatric wards in 16 district hospitals in PATH-supported regions.	Number of pediatric TB posters printed and distributed.	2,000 posters printed and distributed.		Mar-13	Delayed	We are waiting for inputs from other partners before finalizing the posters; will take place in next reporting period.
	Number of job aides printed and distributed.	192 pediatric TB job aides printed and distributed.		Mar-13	Delayed	We are waiting for inputs from other partners before finalizing the job aides; will take place in next reporting period.
	Number of HCPs trained on pediatric TB.	192 health care providers trained on pediatric TB.		Sep-12	Completed	213 health care workers in total have been trained on pediatric TB since June 2012.
	Number of pediatric TB screening tools and referral forms printed and distributed.	300,000 screening tools printed and 300,000 referral forms printed and distributed to 16 district hospitals implementing pediatric TB.		Sep-12	Completed	100,000 screening tools have been printed and distributed; the remained 200,000 will be printed in the next reporting period as per demand. Referral forms are waiting for approval at the NTLTP.
Carryover Activity 3.1 Strengthen management of TB in children through the rollout of training and continued mentoring of HCPs.	Materials developed, TOT curriculum, facilitator guidelines, primary health care provider curriculum, and participant manual.	Materials developed, TOT curriculum, facilitator guidelines, primary health care provider curriculum, and participant manual.	Dartmouth	Sep-12	Completed	PATH is planning to work with the NTLTP and other stakeholders to incorporate comments observed during training into pediatric TB training materials.
	Number of trainers trained on pediatric TB.	18 trainers trained on pediatric TB.	Dartmouth	Feb-12	Completed	Completed training of 25 trainers in Arusha, Mwanza, Pwani, and Dar es Salaam. In response to request by the NTLTP and USAID to continue expanding this effort, PATH is planning to train additional trainers from Zanzibar and Kilimanjaro in FY12.
	Number of HCPs trained on pediatric TB.	60 HCPs trained on pediatric TB.	Dartmouth	Apr-12	Completed	30 HCPs trained in Dar es Salaam March 26-30, 2012; in Arusha, training for HCPs was conducted June 25-29, 2012.

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
Objective 4: Strengthen the laboratory network to provide quality-assured laboratories for the diagnosis of all forms of TB and routine surveillance of MDR/XDR-TB (GHCS funds).						
FY11 Activity 4.1 Strengthen TB laboratory services for TB diagnosis at national, regional, zonal, and district levels, including EQA for smear microscopy, and ensure that activities are linked to other ongoing initiatives by the World Bank, CDC, etc. (GHCS).	TB diagnostic facilities assessed in eight regions.	291 TB diagnostic facilities assessed by March 2012.	MSH & PATH	Apr-12	Completed	291 facilities were assessed in six existing regions. Stakeholders meeting to take place on October 2 to share results.
	Regional TB laboratory strengthening plans developed.	Eight regional TB laboratory strengthening plans developed by May 2012.	MSH & PATH	Mar-13	Pending	Assessment done; strengthening plans will be completed in the next reporting period.
	Number of supervisors trained on management, supervision, and mentoring skills.	35 supervisors trained on management, supervision, and mentoring skills in EQA.	MSH & PATH	Mar-13	Pending	Planned to be done by December 2012.
	Number of laboratory staff and coordinators trained on EQA.	35 laboratory staff and TB, TB/HIV coordinators trained on EQA from new regions.		TBD: Depends on establishment of regions	Delayed	This training will only take place after the regional/district administrations are established in Geita and Simiyu.
	Number of laboratory staff trained on LED FM.	30 laboratory staff trained on LED FM.		TBD: Depends on establishment of regions	Delayed	This training will only take place after the regional/district administrations are established in Geita and Simiyu.
	Number of regional laboratory supervision visits supported.	16 regional laboratory supervision visits conducted.		Sep-12	Completed	12 supportive supervision visits conducted in six supported regions. The remaining four supervision visits were for Simiyu and Geita.
	Number of binocular microscopes procured and issued.	15 bright field binocular microscopes procured for Mwanza and Kilimanjaro.			Cancelled	This activity has been cancelled based on findings from needs assessment.
FY11 Activity 4.2 Strengthen current drug resistance surveillance system to ensure that all retreatment cases and an appropriate number of new TB cases are evaluated for drug resistance.	EMS for transport of sputum specimens in place.	All sputum samples from retreatment transported (2,500).		Sep-12	Completed	As shown in Table 4.1 in Tab 4, 4,957 sputum samples were transported to CTRL in this year. Because of incomplete data forms being sent to CTRL, it was difficult to assess what percentage of retreatment samples were transported. In the last two quarters, 456 retreatment samples were transported to CTRL (an average of 57% of the expected samples).
Carryover Activity 4.1 Strengthen current drug resistance surveillance system to ensure that all retreatment cases and an appropriate number of new TB cases are evaluated for drug resistance.	Web-based equipment.	Web-based system installed.		Sep-12	Completed	System has been installed.
	Number of laboratory staff trained on web-based system.	30 national and regional laboratory staff trained on web-based system.		Dec-12	Pending	Training will take place in the next reporting period.
	Functional toll-free telephone system.	Functional toll-free telephone system by March 2012.		Mar-12	Completed	System has been installed and is functioning. Receiving approximately 50 calls per month, and expect this to increase in future months.

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
Carryover Activity 4.2 Introduce and scale up new TB diagnostic technologies in PATH-supported regions.	Training manuals and guidelines for LED microscopy.	300 copies of training manuals for LED microscopy distributed.		Mar-13	Ongoing	Manual has been drafted, and we are awaiting NTLF approval before printing.
	Number of Job aides printed.	550 copies of job aides printed.		Sep-12	Completed	550 copies printed and will be distributed during NTLF annual meeting.
	Equipment status at Kibong'oto laboratory.	Kibong'oto laboratory has functioning biosafety cabinets and autoclave.		Dec-12	Pending	Equipment has been ordered, and we are waiting for shipment.
	Certification of the CTRL laboratory.	BSL-3 laboratory at the CTRL is recertified in 2012.		Dec-11	Completed	Recertification completed.
	Quarterly supportive supervision conducted by the DLT.	Quarterly supportive supervision conducted by the DLT.		Sep-12	Completed	All supportive supervisions have been completed.
	Reagents for LED procured.	Reagents for 82 LED microscopes in PATH-supported regions are procured and available at sites.			Cancelled	USAID procured these reagents directly, and this activity has thus been cancelled.
Carryover Activity 4.3 Provide leadership and coordination of diagnostic and laboratory activities across the country.	National TB laboratory strategic plan.	National TB laboratory strategic plan.		Dec-12	Ongoing	Strategic plan is currently in draft form; the plan will be finalized, and the next meeting is planned for November 8-9, 2012.
	Number of collaborative meetings.	Four collaborative meetings.		Sep-12	Completed	Three collaborative meetings completed; additional planned for next fiscal year.
Carryover Activity 4.4 Introduce GeneXpert® technology in targeted areas to improve TB diagnosis.	Number of guidelines, training materials.	Guidelines, training materials.		Sep-12	Completed	Guidelines and training materials developed by FIND/CDC. PATH is working to finish the SOPs now that the machines have been installed.
	Number of GeneXpert® machines and consumables.	Two GeneXpert® machines and consumables procured and placed in facilities.		Sep-12	Completed	The two machines have been procured and installed at Amana and Sekouture Hospitals.

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
Objective 5: Support implementation of the Three I's strategy in project-supported regions, with emphasis on strengthening infection control at all levels of the health system and introduction of intensified TB case-finding and IPT in priority facilities and congregate settings (PEPFAR funds).						
Carryover Activity 5.1 Provide technical support to ensure accelerated implementation of TB infection control measures in public and private TB clinics/DOTS facilities in the project area.	Number of health facilities implementing short- and mid-term plans.	125 health facilities implement TB IPC short- and mid-term plans.	PATH	Sep-12	Completed	PATH has plans for all of the facilities; monitoring of the implementation is ongoing.
Carryover Activity 5.2 Provide technical support to ensure accelerated implementation of the Three I's in selected health facilities.	Number of district coordinators and staff in two pilot sites trained on chest radiography.	45 district coordinators, four pilot site staff receive training on chest radiography.	PATH	Sep-12	Completed	45 people trained on chest radiography.
	600 copies of Three I's guidelines and 200 copies of training manual printed and distributed.	600 copies of Three I's guidelines and 200 copies of training manuals distributed.	PATH	Sep-12	Completed	600 copies of draft guidelines are being printed.
Carryover Activity 5.3 Provide technical support to ensure accelerated implementation of the Three I's in 12 selected congregate settings.	Number of congregate settings selected for IPC implementation.	18 congregate settings selected to implement infection control plan.	PATH	Apr-12	Completed	All 18 congregate settings were identified (see listing of the 18 settings under tab 4, Table 5.1 and under deliverables tab), sensitized, and trained. Implementation began in April 2012.
	Number of staff trained in congregate settings.	54 staff trained in 18 congregate settings.	PATH	Sep-12	Completed	36 staff have been trained (two staff from each of 18 congregate settings); The trainings were done on 27th- Feb-1st March 2012 and 5th-6th March 2012.

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
Objective 6: Expand use of innovative approaches to improve case detection and treatment in facilities and communities (GHCS funds).						
FY11 Activity 6.1 Finalize and disseminate ACSM strategy to stakeholders.	ACSM strategy finalized and disseminated to stakeholders.	ACSM strategy finalized and disseminated to stakeholders.	PATH	TBD, Depends on NTLF review	Ongoing	PATH submitted a draft strategy to the NTLF in April; we are awaiting feedback. We anticipate that the strategy will be completed in Oct-Dec 2012 if feedback is offered in October.
FY11 Activity 6.2 Support rollout of intensified case-finding among contacts of all smear-positive patients, including children at the household level.	Number of patients for whom contacts are traced.	450 index patients for whom contacts are traced.	UCSF	Dec-12	Ongoing	This was not an originally planned output, but we wanted to share the progress with USAID: As of September 1, 2012, we had 478 index patients enrolled, 258 intervention patients and 220 controls. For those intervention patients, we have screened 549 household contacts over 272 separate household visits. Among the 549 screened household contacts, 343 were recommended for TB evaluation at the local health clinic by their TB contact investigator and seven new TB cases have been identified. In January 2012, we conducted a workshop and refresher training based on this new system, and built a new database so that we can see the data in real time to monitor how many contacts are screened and how many secondary cases are found. 33 persons working on the project (volunteer contact investigators, DTLC, other project personnel) were trained during the refresher, and implementation for the next phase starting March 2012 was launched.
	Number of workshops on contact investigation.	One coordination workshop on contact investigation conducted.	UCSF	Mar-13	Pending	This workshop will take place after the implementation phase of contact investigation in Kinondoni is complete (February 2013). After the data are analyzed and outcomes are evaluated, we will review the feasibility of contact investigation in line with WHO guidelines (see below) and conduct a workshop in Dar es Salaam, reviewing models of contact investigation and developing a strategic plan for scale-up.
	Number of trainings and TOTs on contact investigation.	One central-level training on contact investigation and one TOT on contact investigation conducted.	UCSF	Mar-13	Pending	Once the coordination workshop has been held and a plan developed, we will lead central-level training and a TOT on contact investigation. See below as well.
FY11 Activity 6.3 Evaluate and scale up SOPs for improving case detection.	36 health facilities implementing SOPs in six districts in Arusha region.	Six health facilities (hospitals and health centers) per district to implement SOPs.	MSH	Sep-12	Completed	150 health care workers in Arusha region have been oriented in SOPs. Two supportive supervision and mentorship visits have been conducted, with strong achievements.

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
Carryover Activity 6.1 Implement community-based activities in ten districts to support TB control.	Number of new CBOs identified, oriented, and trained in new districts.	Two new CBOs identified, oriented, and trained in Pemba and Misungwi.	PATH	Nov-11	Completed	Two CBOs identified, oriented, and trained.
	Number of CBO members and PATH staff trained as trainers on Magnet Theatre.	20 CBO members and five PATH staff trained as trainers on Magnet Theatre, two members from each of ten CBOs.	PATH	Mar-12	Completed	20 CBO members and five PATH staff trained as trainers on Magnet Theatre, two members from each of ten CBOs.
	Number of CORPs trained and supported on community TB DOTS.	155 CORPs trained on and supporting community-based TB DOTS (MOHSW package).	PATH	Sep-12	Completed	160 CORPs trained from Kisarawe, Nyamagana, Misungwi.
	Number of private drug sellers, traditional healers, and sputum fixers who received training.	25 private drug sellers and traditional healers trained.	PATH	Feb-12	Completed	25 private drug sellers and traditional healers trained.
	Number of ACSM supervision visits.	Two supervision visits by central staff; four supervision visits by regional staff.	PATH	Sep-12	Completed	Two central supportive supervision visits conducted in Karatu and Arumeru. Four central supportive visits conducted.
Carryover Activity 6.2 Promote TB control by providing health education by developing IEC materials for staff and patients.	Number of brochures and posters developed, printed, and disseminated.	128,900 brochures and 10,100 posters printed and distributed.	PATH	Dec-11	Completed	Distribution of the brochures and posters completed by December 2011.
	Number of calendars developed, printed, and disseminated.	4,000 calendars printed and distributed.	PATH	Dec-11	Completed	4,000 calendars printed and distributed.
	Number of national and regional public events attended.	PATH presents or exhibits at five national or regional public events.	PATH	Sep-12	Completed	Large World TB Day event held in March 2012; additional events planned for next reporting period.
Carryover Activity 6.3 Monitor and evaluate ACSM/PPM approaches to determine contribution to case detection.	Number of revised M&E tools to track referrals of TB suspects.	Revised M&E tools to track referrals of TB suspects available by February 2012.	PATH	Sep-12	Completed	M&E tools have been revised; printing to take place in next reporting period.
	Number of community health providers oriented on M&E tools.	325 community health providers oriented on the use of M&E tools.	PATH	Mar-13	Delayed	Orientation will be held in next reporting period.
	Number of project staff who received intensive coaching on ACSM M&E.	Four staff, including ACSM technical officer and ACSM regional coordinators, receive intensive coaching support.	PATH	Jun-12	Completed	ACSM officer attended intensive ACSM M&E course in Sondalo in June 2012; PATH DC program officer visited Dar es Salaam for continued coaching in August 2012. See trip reports for more details.

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
Carryover Activity 6.4 Evaluate and scale up SOPs for improving case detection.	Number of health facilities that are evaluated for SOP implementation.	Evaluation of SOPs in 12 health facilities in Meru and Arusha District Councils.	MSH	Nov-11	Completed	Evaluation of the piloted SOPs in 12 health facilities in Meru and Arusha was conducted in November 2012 by independent consultant. Final evaluation report submitted under deliverables tab.
	Dissemination of the findings.	Dissemination of findings from the evaluation to RHMT and CHMT members and national level.	MSH	Nov-11	Completed	Findings were disseminated in November 2012.
	Baseline assessment in Zanzibar.	Baseline assessment in Zanzibar.	MSH	Mar-13	Ongoing	Baseline assessment took place in September 2012.
	Training of staff on SOPs.	Training of staff on SOPs.	MSH	Mar-13	Pending	34 RHMT and DHMT members have been oriented on SOPs; 21 district TB supervisors have been trained in supportive supervision and mentorship; 90 health workers from different health facilities have been oriented on SOPs for TB case detection.
	Implementation of SOPs in 16 health facilities in Zanzibar.	Implementation of SOPs in 16 health facilities in Zanzibar.	MSH	Mar-13	Pending	Implementation started in September 2012.
Carryover Activity 6.5 Provide technical assistance to conduct TB screening in diabetes clinics.	Number of diabetes clinics that are identified and then begin screening for TB among diabetics.	30 newly identified diabetes clinics that begin screening for TB.	PATH	Sep-13	Pending	MOHSW has requested that we do not initiate this activity until they develop a strategic plan and approved curriculum; PATH is providing technical support to develop this plan and curriculum.
Carryover Activity 6.6 Roll out TB, TB/HIV workplace policy.	Workplace TB policy finalized.	Final TB workplace policy approved by September 2012.	PATH & NTLP	March 2013 depending on NTLP approval	Ongoing	<p>TB workplace policy guideline for Tanzania mainland has been finalized and submitted to the NTLP for approval.</p> <p>PATH, in collaboration with the ZTLP and Zanzibar labor office, is now conducting an assessment at workplaces in Zanzibar for policy development process. This assessment will be completed on November 2, 2012; and thereafter, a series of stakeholders meetings will be conducted for finalization of the policy.</p>
Carryover Activity 6.7 Identify and address gender-related barriers and inequalities in TB care services.	Gender-sensitive interventions identified and operational plan developed.	20 stakeholders participate in the intervention development workshops.			Cancelled	Based on the outcomes of the assessment, PATH proposes to cancel this activity.
Carryover Activity 6.8 Introduce ISTC into medical and allied health sciences school curricula.	Number of medical and allied health sciences schools that introduce ISTC curriculum.	ISTC curriculum introduced in two medical schools.	PATH		Cancelled	PATH proposes to cancel this activity. The NTLP and UCSF will work directly with the universities on the ISTC curriculum introduction.
Carryover Activity 6.9 Improve case detection in hard-to-reach areas in Ukerewe District.	Number of community leaders sensitized.	25 community leaders sensitized on TB, TB/HIV.	PATH	Sep-12	Completed	Outreach TB screenings completed at Rufiji in 2011; community sensitization meetings were completed in four hard-to-reach Ukerewe islands. Screenings will take place in November 2012.
	Number of health education sessions conducted.	Three health education sessions conducted.		Dec-12	Ongoing	
	Number of outreach screening visits conducted.	Eight outreach TB, HIV screening visits conducted.	PATH	Dec-12	Ongoing	

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
Objective 7: Build leadership and management capacity at all levels of the NTLP and promote sustainability of all activities undertaken with support from TO2015 (GHCS funds).						
FY11 Activity 7.1 Participate in planning meetings at the district, regional, and national levels to ensure inclusion of TB and TB/HIV collaborative activities in partner frameworks, work plans, and budgets.	Number of regional and district health plans incorporating TB and TB/HIV activities.	45 district and eight regional plans incorporate TB and TB/HIV activities.		Sep-12	Completed	Technical assistance has been provided to a number of activities at the national level, including laboratory strategic plan development, ACSM strategic plan, and Global Fund Transitional Funding Mechanism application.
	Number of national TB working group meetings held.	Four national TB working group meetings held.		Sep-12	Completed	Thus far, 16 districts out of 35 had TB, TB/HIV activities in their CCHP in three regions. The total funds allocated was \$35,000 (Mwanza \$12,000, Kilimanjaro \$1,700, and Arusha \$21,060). We will continue to work with regions and districts to incorporate TB and TB/HIV activities into their budgets.
FY11 Activity 7.2 Coordinate the activities of key stakeholders through the national TB working group.	Number of national TB working group meetings held.	Four national TB working group meetings held.		Sep-12	Completed	A national TB working group has not been convened due to competing priorities; however, PATH has supported MDR expert panel meetings and laboratory coordinating meetings as topic-specific working groups.
FY11 Activity 7.3 Improve data management systems, including recording and reporting, to aid in the analysis of data needed to inform decision-making at all levels.	Number of TB and TB/HIV coordinators trained on recording and reporting, including data use.	60 TB and TB/HIV coordinators trained as trainers on recording and reporting.	MSH	Mar-12	Completed	A pilot training was conducted between September and December 2011 by MSH in collaboration with PATH Tanzania and the NTLP. 200 RTLCs, DTLCs, and TB/HIV officers, including 25 from PATH-supported regions, were trained to record, report, and supervise other HCPs on the updated tools.
FY11 Activity 7.4 Support regional and district councils to capture data on Electronic TB Register.net to facilitate timely submission of reports and strengthen electronic data system linkages between districts and the NTLP central level (GHCS).	Number of coordinators trained on e-TB Register.	15 coordinators trained.		Sep-12	Completed	Ten coordinators trained out of 15
FY11 Activity 7.5 Provide general support to all of the above activities.	Number of project administrators trained.	Two PADMs trained on US and PATH rules and regulations.		Mar-12	Completed	Two PADMs trained on US and PATH rules and regulations.
	Number of technical support trips from PATH Washington, DC.	Two technical support trips for PATH staff from Washington, DC.		Dec-11	Completed	Global portfolio manager visited in November 2011 to provide support on work planning; PATH TB Team managing director visited in December to accompany USAID headquarters team and participate in annual program meeting. Trip reports included under deliverables tab.
	Project planning workshop.	Five-day project planning workshop conducted.		Sep-12	Completed	Planning was submitted to USAID.

ACTIVITY	OUTPUTS	TARGETS	TO2015 PARTNER	TARGET DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	NOTES
Carryover Activity 7.1 Provide general support to the project activities.	Number of staff attending international conference.	Three staff attend Union conference in Lille, France.		Nov-11	Completed	Three staff attended Union conference in Lille, France.
	Vehicles and motorbikes maintained and insured.	Vehicles and motorbikes maintained and insured.		Mar-12	Completed	30 motorbikes and four cars insured.
Carryover Activity 7.2 Support the NTLP's application to the Global Fund Transitional Funding Mechanism.	Number of staff and consultants providing technical assistance on Global Fund Transitional Funding Mechanism application.	Three staff/consultants provide technical assistance for Global Fund Transitional Funding Mechanism application.	MSH & PATH	Mar-12	Completed	Three consultants/staff provided technical assistance for Global Fund Transitional Funding Mechanism (Alka Dev, Anna Spector, Marijke Beex); trip reports submitted under deliverables tab.
Carryover Activity 7.3 Review and update key NTLP policies and guidelines.	NTLP manual available.	2,000 copies of the revised NTLP manual printed and distributed to the NTLP, RTLCs, DTLCs, TB/HIV officers, and other HCPs.	MSH	Mar-13	Ongoing	The manual is under review and refinement with the NTLP, and we anticipate this will be finalized in the next reporting period.

Table 1.2. TB/HIV data for Quarters 1 to 4 in PATH-supported regions (Oct 2011-Sept 2012)

	All TB patients	Unknown Status	Offered DTC	Tested for HIV	HIV Positive	Ref to CTC	Reg for HIV Care	Start ART	Start CPT
Arusha	3,132	2,665	2,635	2,392	347	341	289	205	343
Dar es Salaam	9,490	8,236	8,236	6,801	1,978	1,872	1,044	502	1,881
Kilimanjaro	2,394	1,952	1,943	1,756	449	446	379	174	442
Mwanza	5,889	4,708	4,708	4,269	1,405	1,388	1,097	560	1,234
Pwani	1,949	1,594	1,594	1,532	356	344	265	90	338
Zanzibar	510	480	479	419	56	56	56	20	55
Total	23,364	19,635	19,595	17,169	4,591	4,447	3,130	1,551	4,293

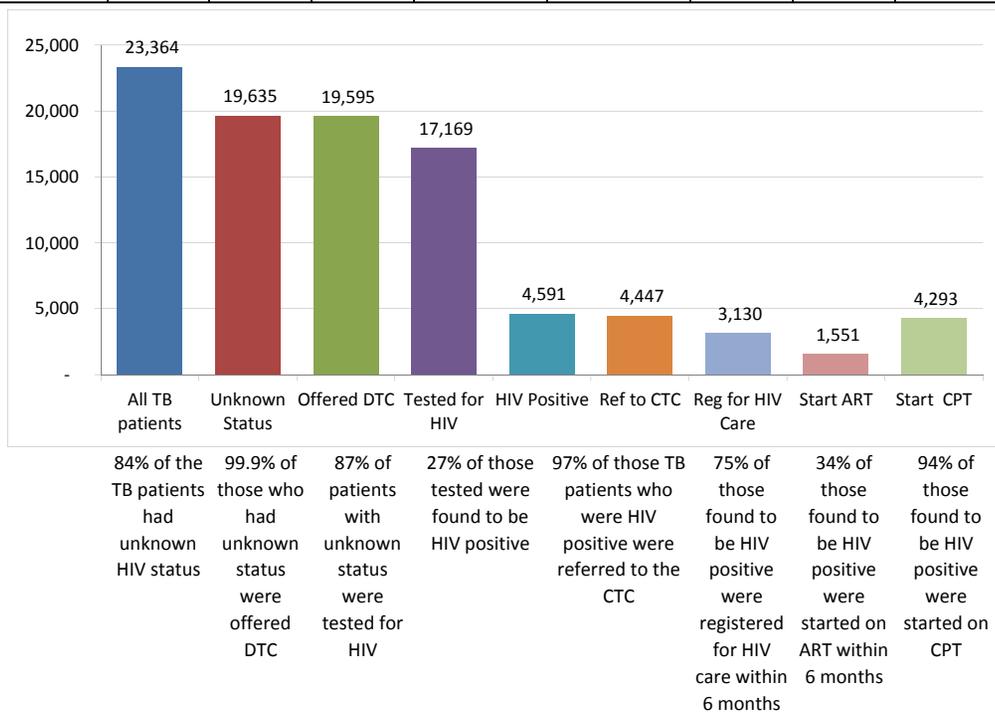


Table 1.3. Key outcomes in PATH-supported regions

PATH-supported region	Year PATH started working in the region	Case notification in the baseline year (baseline is the year BEFORE PATH started working in that region; data source: NTL reports)				Case notification in 2011 (Covers Jan to Dec 2011)				% change in case notification since baseline year	Treatment success rate for the baseline year	Treatment success rate as reported in 2011	% change in treatment success rate since baseline
		NEW sputum smear positive	NEW Sputum smear negative	NEW extrapulmonary	TOTAL NEW CASES	NEW sputum smear positive	NEW Sputum smear negative	NEW extrapulmonary	TOTAL NEW CASES				
Arusha	2006	576	601	426	1,603	870	977	635	2,482	55%	86	85	-1
Dar es Salaam	2006	5,586	5,682	2,490	13,758	6,222	4,313	2,508	13,043	-5%	80.7	86	5.3
Mwanza	2006	2,027	1,445	709	4,181	2,442	2,472	579	5,493	31%	84.6	89	4.4
Pwani	2006	1,177	439	340	1,956	1,158	333	477	1,968	1%	79.5	93	13.5
Zanzibar	2008	233	69	48	350	279	150	73	502	43%	81.9	89	7.1
Kilimanjaro	2010	803	936	458	2,197	945	861	489	2,295	4%	78	77.7	-0.3
Total		10,402	9,172	4,471	24,045	11,916	9,106	4,761	25,783	7%	82	87	5

Table 2.1 MDR Program Status as of June 2012

19 Already completed treatment.
36 Currently on continuation phase in their home-districts
18 At KNTH for the intensive phase treatment.
10 Died since initiating treatment
4 Stopped treatment
2 Back on treatment
89 Total number of people who have initiated treatment for MDR- TB in Tanzania, as of June 2012

Table 4.1. Drug resistance surveillance									
Data source: Annual report NTLP 2010 (most recent data) and CTRL data 2012	Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011 (new transport system)	Oct-Dec 2011	Jan-Mar 2012	Apr-June 2012	June - Sept 2012	Reporting period: Oct 2011 - Sept 2012	
Number of all smear-positive specimens expected	1,993	1,993	1,993	1,993	1,993	1,993	1,993	7,972	<p>In this year, an average of 62% the expected sputum specimens were received at the CTRL.</p> <p>It should be noted that there has been an almost four-fold increase in the absolute number of specimens received at the CTRL (red bars below) since the new transport system was started and achieved coverage in the middle of 2011.</p> <p>In terms of retreatment specimens, in the last two quarters, the CTRL has received on average 57% of the expected specimens.</p> <p>Note on policy changes in 2011-2012: In early 2011, the national policy was to have 25% of new smear positive cases be tested for culture. In late 2011, this policy was changed to ALL smear positive cases. In October 2012, this policy has reverted back, to the original (25%) policy. We have used the 25% assumption to set the target of expected number of specimens.</p>
Number of all smear-positive specimens received	278	420	342	1,201	1,158	1,415	1,183	4,957	
Percentage of those expected that were received	14%	21%	17%	60%	58%	71%	59%	62%	
Number of retreatment specimens expected	398	398	398	398	400	400	400	800	
Number of retreatment specimens received	Could not be categorized (new and retreatment) due to incompleteness of the forms completed by coordinators. Staff are being sensitized re: the need for accuracy on the laboratory DST request form.					241	215	456	
Percentage of those expected that were received						60%	54%	57%	

Number of specimens received for drug resistance surveillance at CTRL

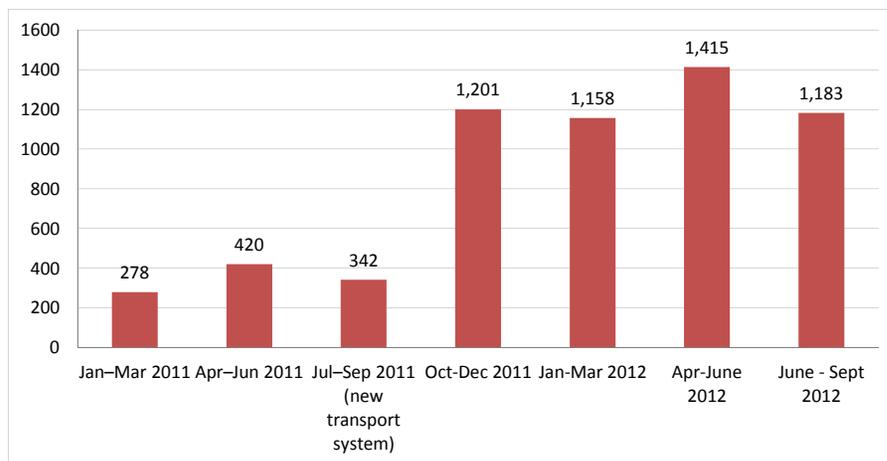


Table 5.1. Outcomes at 3 Is Pilot Sites

	Shree Hindu Mandal Hospital					St. Elizabeth Hospital				
	June	July	August	September	Total	June	July	August	September	Total
Number of clients screened for IPT	16	9	66		91					68
Number of clients eligible for IPT	14	9	34		57		14	14	16	44
Number of clients started on IPT	12	9	16		37 (65%)		14	14	16	44 (100%)
Number of clients developed active TB									2	2

101

81 (80%)

80% of clients started on IPT

Table 5.2. TB Detection at Congregate Settings.

Congregate setting - district	Region	Total number of NEW TB cases diagnosed (all forms) between January 1 and March 31, 2012			
		NEW sputum smear positive	NEW sputum smear negative	NEW extrapulmonary	TOTAL NEW CASES
Mianzini Primary School - Kinondoni District	Dar	2	0	0	2
Kawawa Primary School - Kinondoni District	Dar	0	0	0	0
Kariakoo Markets Corporation - Ilala District	Dar	25	5	0	30
Vingunguti Abattour - Ilala District	Dar	0	0	0	0
Butimba Prison - Nyamagana District	Mwanza	18	6	0	24
Ngudu Prison - Kwimba District	Mwanza	5	0	0	5
Magu Prison - Magu District	Mwanza	1	0	0	1
St. Augustine University of Tanzania	Mwanza	6	0	0	6
Kisongo Prison - Arusha DC	Arusha	2	3	0	5
A TO Z Textile - Arusha DC	Arusha	3	0	0	3
Arusha Police Barracks - Arusha municipality	Arusha	0	0	0	0
Arusha Technical College - Arusha municipality	Arusha	0	0	0	0
Anna Mkapa Secondary School - Moshi rural	Kili	0	0	0	0
Moshi University College of Cooperative and Business Studies -	Kili	3	0	0	3
Orphanage Centre - Hai District	Kili	8	0	0	8
Decker Jos Mulnerg (Flour plant) - Moshi rural	Kili	2	0	0	2
TPC Sugar Company - Moshi rural	Kili	13	0	0	13
Marangu Teachers Teaching college - Rombo District	Kili	0	0	0	0

PATH is tracking case detection at the congregate settings in 2012, but it has been difficult to get baseline figures from the NTLF.

We are now refining the data collection method for congregate setting as we think there has been duplication during reporting between health facility and community data. We will report these data in future reports.

Table 6.1. Results from ACSM interventions in selected districts for Oct 2011-Sept 2012, organized by intervention and district.

District	Drug seller		Traditional healers		CBO members		Sputum fixers		CORPs		TOTAL	
	People tested for TB	Confirmed TB cases	People tested for TB	Confirmed TB cases	People tested for TB	Confirmed TB cases	People tested for TB	Confirmed TB cases	People tested for TB	Confirmed TB cases	People tested for TB	Confirmed TB cases
Totals	161	31	89	19	458	70	888	206	93	21	0	0
Hai	0	0	3	0	5	1	0	0	31	4	39	5
Arumeru	0	0	0	0	13	3	0	0	0	0	13	3
Karatu	1	0	0	0	0	0	0	0	9	2	10	2
Geita	0	0	0	0	0	0	235	49	0	0	235	49
Nyamagana	54	17	17	4	139	37	60	13	21	9	291	80
Misungwi	30	5	45	3	71	9	91	7	19	2	256	26
Magu	0	0	0	0	0	0	192	18	0	0	192	18
Urban west	45	0	0	0	54	0	45	11	0	0	144	11
Pemba	0	0	0	0	96	2	0	0	13	4	109	6
Kisarawe	28	7	22	10	30	5	151	15	0	0	231	37
Ilala	3	2	2	2	50	13	93	93	0	0	148	110
Bagamoyo	0	0	0	0	0	0	21	0	0	0	21	0
Totals	161	31	89	19	458	70	888	206	93	21	1689	347

Results from ACSM interventions, Oct 2011-Sept 2012

Over the past year, sputum fixers referred the largest number of people for testing and the largest number of people confirmed to have TB. It is difficult to compare across the interventions because they have been introduced at different scales in different districts. We will continue to look at the relative contributions of these interventions as they are scaled up in the next year.

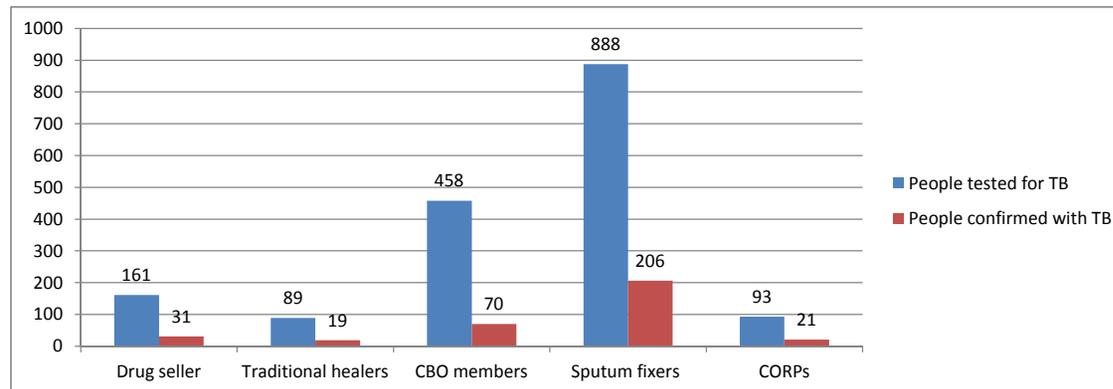


Table 6.2. Contribution of ACSM Interventions to detection of all new TB cases in selected districts. (Oct 2011 to Sept 2012)

District	Total number of NEW TB cases diagnosed (all forms)				Contribution of ACSM to detection of NEW TB cases (all forms)	
	NEW Sputum smear positive	NEW Sputum smear negative	NEW Extrapulmonary	TOTAL NEW cases	ACSM NEW cases (from Table 6.1)	Percent contribution
Kisarawe, Pwani	62	31	16	109	37	33.9%
Ilala, Dar	976	676	440	2092	110	5.3%
Bagamoyo	147	51	40	238	0	0.0%
Kibaha	80	14	15	109		0.0%
Urban West, Zanzibar	184	70	50	304	39	12.8%
Pemba	60	73	20	153	6	3.9%
Nyamagana, Mwanza	387	937	571	1895	80	4.2%
Misungwi	102	111	26	239	26	10.9%
Magu	146	50	64	260	18	6.9%
Geita	189	202	52	443	49	11.1%
Hai, Kilimanjaro	14	39	9	62	5	8.1%
Karatu, Arusha	93	38	71	202	2	1.0%
Arumeru, Arusha	69	45	32	146	3	2.1%
Summary data:				6252	375	6.0%

Over the full year, 6% of the new TB cases in the ACSM intervention districts can be attributed to the ACSM activities.

6.3 Contribution of ACSM to detection of NEW cases, by district

District	Year PATH started conducting ACSM interventions in the districts	Case notification in the baseline year (baseline is the year before PATH started working in that region)				Case notification in 2011
		NEW sputum smear positive	NEW sputum smear negative	NEW extrapulmonary	TOTAL NEW CASES	TOTAL NEW CASES
Kisarawe, Pwani	2009	136	70	80	286	246
Ilala, Dar	2011	2,210	1,524	1,078	4,812	4,735
Bagamoyo	2009	323	37	85	445	572
Kibaha	2009	101	18	15	134	423
Urban West, Zanzibar	2009	155	17	39	211	328
Pemba	2012	42	22	17	81	120
Nyamagana, Mwanza	2011	584	765	352	1,701	1,687
Misungwi	2008	217	155	28	400	500
Geita	2009	526	428	110	1,064	822
Hai, Kilimanjaro	2011	34	49	27	110	182
Karatu, Arusha	2008	98	154	83	335	416
Arumeru, Arusha	2012	98	48	68	214	344
Totals:					9,793	10,375

6% increase in case notification compared to the baseline

Table 6.4. Treatment outcomes in Meru and Arusha districts (pilot districts), before and after the introduction of SOPs to increase facility-based case detection

	April to June 2010 (before SOPs)				April to June 2011 (after SOPs)			
	Number of total cases	Mortality rate	Case holding	Treatment Success	Number of total cases	Mortality rate	Case holding	Treatment Success
Meru	46	7%	92%	80%	66	0	97%	100%
Arusha district	47	13%	86.90%	76.40%	67	1.40%	98.50%	96%

Comparing the period before SOP introduction (April-September 2010) versus the period after SOP introduction (April-September 2011), there was a 92% increase in case detection in Meru and Arusha Districts.

There were significant gains in number of cases, case holding, and treatment success; and reduction in mortality rate after the introduction of SOPs.

Table 6.5. Number of TB cases (all forms) and smear positivity in Meru and Arusha districts (pilot districts), before and after the introduction of SOPs to increase facility-based case detection

	# TB cases (all forms), April - Sept 2010	number of smear positive cases, April - Sept 2010	Smear positivity, April - Sept 2010	# TB cases (all forms), April - Sept 2011	number of smear positive cases, April - Sept 2011	Smear positivity, April - Sept 2011
Meru	97	69	71%	166	80	48%
Arusha	81	24	30%	176	63	36%
Total	178	93		342	143	

92% increase in case detection

Table 6.6. Case detection in Arusha region, before and after the introduction of SOPs to increase facility-based case detector

District	Notified TB Cases Before SOPs (Jan - March 2012)				Notified TB Cases After SOPs (April - June 2012)			
	SM P+ cases	SM P- cases	EPTB	Total new cases	SM P+ cases	SM P- cases	EPTB	Total new cases
Arusha city	95	96	79	270	127	73	70	270
Arusha DC	19	62	40	121	19	24	24	67
Longido DC	5	7	8	20	10	17	5	32
Karatu DC	37	22	16	75	47	20	40	107
Meru DC	45	27	20	92	48	19	19	86
Monduli DC	14	78	18	110	31	73	12	116
Ngorongoro	10	23	7	40	17	34	15	66
TOTAL	225	315	188	728	299	256	185	744

2% increase in one quarter

Thus far, there has been a small increase (2%) in case detection in the quarter after SOPs were introduced throughout Arusha (see details in tab 4). We are still waiting for final data on Q4, and will continue to monitor data and report on outcomes.

Course participant in a field practical training providing mentorship to health care providers at Selian Lutheran Hospital in Arusha District on how to record patient information in the cough register.



A CHMT member presents a plan of action for implementing SOPs in Arusha.



Four photos from World TB Day outreach in Ilala, Dar es Salaam, 2012.



Two photos of community engagement interventions in PATH-supported regions.



Evaluation and Operations Research

Title	Purpose of study	Evaluation type and method(s)	PATH field contact	PATH DC contact	Partner	IRB status	Status/Results
Gender TB assessment	To identify gender issues related to TB control in two districts.	Formative assessment, focus groups.	Rose Olotu	Bindiya Patel	None	Determined not research by RDC.	Completed. Final report submitted with semiannual report, April 2012.
Exit interview survey	To assess the quality of integrated TB and HIV services through patient satisfaction.	Quantitative and qualitative interviews.	Cecilia Makafu	Bindiya Patel	None	Waiting for NIMR clearance.	The survey protocol was submitted to the NIMR IRB in February 2012. We are now waiting for approval of survey before moving forward to implement. We have been following up with NIMR on a weekly basis. They have assured us that the protocol has been reviewed by one person, and we are still waiting for two other people.
Evaluation of case detection SOPs	To evaluate an innovative approach to improve case detection using SOPs in Arusha.	Desk review of reference documents, development of data collection tool, field visits, interviews with key informants.	Yussufu Bunu	Bindiya Patel	MSH	n/a.	Completed. Final report submitted with this semiannual report. Recommendations will be incorporated into further rollout.
Evaluation of Kisarawe ACSM activities	To evaluate community-based interventions to improve TB case detection in Kisarawe District.	Data triangulation, qualitative and quantitative interviews.	Atuswege Mwangomale	Bindiya Patel	None	The study received ethical clearance from the PATH Research Ethics Committee based in Seattle, Washington and the National Institute for Medical Research in Dar es Salaam.	Completed. Final reported with this annual report; dissemination to take place in Tanzania in this quarter.

Deliverables					
Activity in work plan	Deliverable	Target date of completion	Status as of September 30, 2012	Notes	File name
Objective 1. TB/HIV activities.					
Carryover Activity 1.1 Annual and semi-annual meetings.	Annual and semi-annual meetings reports.	Sep-12	Completed	Submitted annual program meeting report (Dec-11).	Annual Program Meeting Report.
		Sep-12	Completed		Semi-annual Program Meeting Report.
Carryover Activity 1.2 Exit interview survey.	Survey report. Service improvement plans.	Sep-13	Delayed	Waiting for NIMR IRB approval. Submitted the protocol as a deliverable.	Patient Satisfaction Protocols.
Carryover Activity 1.3 DOTS training.	Training report.	Nov-11	Completed	Summary training report submitted.	Summary DOTS Training Report.
FY11 Activity 1.1 Scale up new TB and TB/HIV services to 60 new facilities in two new regions and in existing regions.	Health facility assessment report for Geita and Simiyu.	TBD	Delayed	Activity is delayed as government of Tanzania is still finalizing the administration for these two regions. Trip report from initial assessment visits submitted.	Trip report - Geita, Simiyu January 2012.
FY11 Activity 1.2 Build human resource capacity in 955 existing and 60 new facilities to undertake TB and TB/HIV services.	Central supervision reports; others available on request. Trip reports from international meetings and conferences.	Sep-12	Completed	Supervision and trip reports submitted.	Supervision Report - Kilimanjaro Oct 2011 Supervision Report - Pemba, Nov 2011 Supervision Report - Rufiji Nov 2011 Supervision Report - Mwanza Feb 2012. Supervision Report - Arusha Aug 2012. Supervision Report - Dar Sept 2012 Supervision Report - Pemba June 2012 Supervision Report - Urban West May 2012 Supervision Report - Ilala, Community, May 2012 Trip report - Sondalo June 2012

Activity in work plan	Deliverable	Target date of completion	Status as of September 30, 2012	Notes	File name
Objective 2. MDR activities.					
FY11 Activity 2.1 Continue to strengthen and scale up capacity of Tanzania's national MDR-TB treatment facility, including focused clinical mentoring, cohort review and operations research, and rollout of electronic MDR-TB case reporting (UCSF).	Cohort review reports.	Sep-13	Completed	Cohort review reports and trip reports submitted.	MDR-TB Cohort Review Report. Trip report - Tanzania, Chen/True, Oct 2011. Trip report - Tanzania, Chen/Raftery, Jan 2012. Trip report - Tanzania, Hopewell, Jan 2012. Trip report - Tanzania, Grantz, March 2012. MDR-TB cohort review report (June 2012).
FY11 Activity 2.2 Build district and community capacity to support the management of MDR-TB patients (UCSF)	Health facility assessment report Six month interim outcome assessment report	Jul-12	Completed	Assessment and geographic mapping of key districts for MDR cases has been completed (see Hopewell Feb 2012 report and decentralisation of MDR TB management report).	HF Assessment for MDR TB Care
Carryover Activity 2.2 Identify MDR TB hotspots in Tanzania and risk factors for MDR /XDR in selected regions. (UCSF)	A study report on factors contributing to high prevalence of MDR-TB in selected areas	Sep-12	Completed	Assessment and geographic mapping of key districts for MDR cases has been completed (see Hopewell Feb 2012 report and decentralisation of MDR TB management report),	Addressing MDR-TB in Tanzania, Hopewell, Jan 2012.
Carryover Activity 2.3 Assess and build organizational capacity at Kibong'oto National TB Hospital	Organizational capacity assessment for Kibong'oto National Tuberculosis Hospital.	Sep-12	Completed		Trip report - Initiatives, Tanzania, August 2012. KNTH OCA Report.

Activity in work plan	Deliverable	Target date of completion	Status as of September 30, 2012	Notes	File name
Objective 3. Pediatric activities					
Carryover Activity 3.1 Strengthen management of TB in children through the rolling out of training and continued mentoring of HCPs (Dartmouth).	Trip reports.	Sep-12	Completed		Trip report - Tanzania, Adams Nov 2011 Trip report - Tanzania, Adams March 2012
Carryover Activity 3.1. Strengthen management of TB in children through the rolling out of training and continued mentoring health care providers. (Dartmouth)	TOT curriculum, facilitators' guidelines, primary health care providers' curriculum and participant manual Pediatric TOT and HCPs training reports	Mar-13	Ongoing	These materials have been reviewed 5 times by an expert review group, but are still in the review process. We are submitting these files with this report, as it is such an important deliverable, but will re-submit the final approved version once MOH has approved.	Pediatric TB Materials in DRAFT Form: Training report - TOT, Peds 2012. Meeting report - Peds validation 2012. Meeting report - Peds materials review. Ped TB Participant Manual Tanzanian Pedi TB Guidelines TZ Ped TB Course Work Book Unit 1 PediTB CourseIntro Unit 2 Intro TB in children Unit 3 Diagnosis of TB in children Unit 4 Mgmt of TB in Children Unit 5 Prevention of TB in Children Unit 6 TB-HIV in Children Unit 7 Drug Resistant TB in Children Unit 8 Recording Reporting Child TB Unit 9 Field Visit TB in Children Unit 10 PediTB Course Closing
FY11 Activity 3.1 Introduce active TB screening among children in RCH, medical ward, OPD, CTC, and Pediatric ward in 8 district hospitals in PATH-supported regions	Pediatric IEC posters Pediatric job aids Pediatric HCP training report Pediatric screening tool	Mar-13	Ongoing	These materials are still being finalized and will be submitted in the next reporting period.	Pediatric TB suspect registry

Activity in work plan	Deliverable	Target date of completion	Status as of September 30, 2012	Notes	File name
Objective 4. Laboratory and new diagnostics activities.					
Carryover Activity 4.3 Provide leadership and coordination of diagnostic and laboratory activities across the country.	Finalized TB laboratory strategic plan. Lab coordination meeting reports/minutes	Mar-13	Ongoing	Submitted trip report from strategic plan consultant and laboratory coordination meeting minutes.	Trip Report - Dr. Moses Joloba. Lab Coordination Meeting Minutes: January 2012. Lab Coordination Meeting Minutes: November 2011. Trip report - Tanzania, de Haas, Sept 2012.
Carryover Activity 4.2 Introduce and scale-up new TB diagnostic technologies in PATH supported regions	Manuals for LED microscopy	Mar-13	Delayed	Manual is drafted, but pending MOH Approval	
FY11 Activity 4.1 Strengthen TB laboratory services for TB diagnosis at national, regional, zonal, and district level, including EQA for smear microscopy, and ensure that activities are linked to other ongoing initiatives by the World Bank, CDC, etc	Lab assessment report for 8 regions Lab strengthening planning workshop report 8 TB lab strengthening regional plans Training report and package from management, supervision and mentoring skills training	Mar-13	Ongoing	Assesment tool was developed and assesment completed; remaining activities are in progress.	Lab assessment tool. Lab needs assessment presentation. Microscopy center assessments: Arusha, Zanzibar, Kilimajaro, Mwanza.

Activity in work plan	Deliverable	Target date of completion	Status as of September 30, 2012	Notes	File name
Objective 5. Three I's.					
Carryover Activity 5.2 Provide technical support to ensure accelerated implementation of the 3 I's in two selected health facilities.	Supervision report	Sep-12	Completed	Supervision report for Shree Hindu Mandal submitted, June 2012	Supervision report - 3Is, July 2012.
Carryover Activity 5.3 Provide technical support to ensure accelerated implementation of the Three I's in 12 selected congregate settings.	List of new congregate settings.	Jan-12	Completed	List of congregate settings submitted.	List of congregate settings
Objective 6. Innovative case detection and ACSM.					
FY11 Activity 6.2 Support rollout of intensified case-finding among contacts of all smear-positive patients, including children at the household level (UCSF).	Report from coordination workshop on contact investigation in Tanzania including strategic plan for scale up of contact investigation.	Mar-13	Pending; will be submitted in next reporting period.		Trip report - Tanzania, Fair/Miller, March 2012 Trip report - Tanzania, Fair/Miller, July 2012.
	A report describing, in both quantitative and qualitative terms, the results of the initial phase of implementation of household contact investigation.	Mar-13	Pending; will be submitted in next reporting period.		Results from Validation Phase of Household Contact Investigation
	SOPs for contact investigation of smear positive TB cases at household level.	Mar-12	Completed		CI SOPs, Protocols, and Tools CI Master Documents from Contact Investigation Workshop

Activity in work plan	Deliverable	Target date of completion	Status as of September 30, 2012	Notes	File name
FY11 Activity 6.3 Evaluate and scale up Standard Operating procedures (SOPs) for improving case detection (MSH)	Final report on the expansion of SOPs in Arusha region	Mar-12	Completed	Translation of SOPs in Swahili as recommended by health care providers during the evaluation of SOPs. planning scaling of SOPs in 6 new districts and orientation of Regional and Council health management teams from new districts is planned to start on 26/3/2012	Review meeting for SOPs and Swahili translation.

Activity in work plan	Deliverable	Target date of completion	Status as of September 30, 2012	Notes	File name
Carryover Activity 6.1	Evaluation report for Kisarawe activities.	Sep-12	Completed	Final Report on Evaluation of ACSM activities	Kisarawe evaluation report, draft.
	Report on World TB Day ACSM activities in Ilala.	Sep-12	Completed		Report - World TB Day, Ilala.
Carryover Activity 6.4 Evaluate and scale up SOPs for improving case detection (MSH).	Evaluation report.	Mar-12	Completed	Final evaluation report submitted.	TB SOPs Evaluation Report Trip Report - Tanzania, Habtamu Ayalneh
	Dissemination Report (on evaluation in Arusha)	Sep-12	Completed		SOPS Dissemination Report
	Workshop reports.	Mar-13	Completed		Workshop report - SOPs: CHMTs, Zanzibar, Karatu and Monduli, Arusha City.
	Supportive supervision reports.	Mar-13	Completed		Supportive supervision - Arusha April, Arusha July, Zanzibar.
	Progress report and feedback on SOPs.	Mar-13	Completed		Progress review - Arusha SOPs.
	Zanzibar baseline assessment report	Mar-13	Pending	Activities still in progress	
	Zanzibar Sensitization report				
	Zanzibar Training report				
Zanzibar Supervision reports					
Carryover Activity 6.3 Monitor and evaluate ACSM/PPM approaches to determine contribution to case detection	Revised M&E tools	Mar-13	Pending	Pending finalization	
	Supervision checklist				

Activity in work plan	Deliverable	Target date of completion	Status as of September 30, 2012	Notes	File name
Carryover Activity 6.5 Roll out TB, TB/HIV work place policy	Workplace TB policy	Mar-12	Completed	Work place policy is being submitted to NTLT in April; will submit final policy in the next reporting period.	Baseline assessment - Workplace policy,
		TBD	Pending approval	Final policy has been submitted to MOH for approval.	
Carryover Activity 6.7 Identify and address gender-related barriers and inequalities in TB care services	Gender analysis focus group report	Mar-12	Completed	Final report submitted.	Gender analysis focus group report.
Objective 7. Management and sustainability; M&E.					
Carryover 7.2 Support the NTLT's application to the Global Fund Transitional Funding Mechanism.	International trip reports (MSH, consultants).	Mar-12	Completed	International trip reports and final application submitted.	Trip reports and final application filed under Core deliverables.
Carryover 7.3 Review and update key NTLT policies and guidelines.	Revised NTLT manual (MSH).	Dec-12	Ongoing	NTLT stakeholder review meeting report submitted; final version of manual will be submitted in next reporting period.	Meeting report - NTLT Manual Review
FY11 Activity 7.1 Participate in planning meetings at district, regional and national level to ensure inclusion of TB and TB/HIV collaborative activities in partner frameworks, work plans, and budgets	A report summarizing the national, regional and district health plans incorporating TB and TB/HIV activities	Sep-12	Completed	Instead of a separate report, we have included a summary of the outcomes under Tab 3a, Outcomes section.	
FY11 Activity 7.5 Provide general support to all of the above activities.	Trip reports for international travelers.	Sep-12	Completed		Trip report - Tanzania, Slabyj, Dec 2011. Trip report - Tanzania, Patel, Dec 2011. Trip report - Tanzania, Mueller, August 2012. Trip report - Tanzania, Patel, July 2012.

Financial Reporting

	Tanzania PEPFAR (FY10, FY11)	Tanzania GHCS (FY09, FY10, FY11)
Approved budgets	\$ 3,950,000	\$ 9,515,000
Expenses through 9/30/11	\$ 497,509	\$ 2,059,203
Expenses in reporting period 10/1/11 through 9/30/12	\$ 1,694,912	\$ 3,799,838
Fixed fee (6%)	\$ 101,695	\$ 227,990
Pipeline as of 10/1/12	\$ 1,655,884	\$ 3,427,968

GeneXpert® Procurement

Instrument	Location (facility name, city, region)	Number of modules (1, 2, 4, or 16)	USG funding source	Partner	Comment
1	Amana hospital, Dar es Salaam	2	Yes	PATH	We will upgrade to 4 modules by January 2013
2	Sekoutoue hospital, Mwanza	2	Yes	PATH	We will upgrade to 4 modules by January 2013

Cumulative Xpert/RIF cartridges procured

Order #	Location (facility name, city, region)	Number of cartridges	USG funding source	Partner	Comment
1	Amana hospital, Dar es Salaam	1,400	Yes	PATH	6 months stock
2	Sekoutoue hospital, Mwanza	1,400	Yes	PATH	6 months stock

Inventory

Date of purchase	Commodity	Work plan	Quantity	Location	Were PEPFAR funds used?
15-Feb-12	Laptop computer, X201	TO2015 FY11 Tanzania	1	PATH Tanzania office	No
15-Feb-12	Laptop computer, X201	TO2015 FY11 Tanzania	1	PATH Tanzania office	No
11-Nov-11	HP Proliant server	FY11	1	NTLP	No
Mar-12	HP standard desktop tower	FY11	5	PATH Tanzania office	No
Mar-12	HP standard desktop tower	FY11	2	Kibong'oto	No
Mar-12	HP Color Laserjet CP2025DN	FY11	1	PATH Tanzania office	No
7-Aug-12	Desktop computer	FY11	1	PATH Tanzania office	No
7-Aug-12	Desktop computer	FY11	1	PATH Tanzania office	No
7-Aug-12	Desktop computer	FY11	1	PATH Tanzania office	No
17-Feb-12	Camera - SONY DSC W570	FY11	1	PATH Tanzania office	No
17-Feb-12	Camera - SONY DSC W570	FY11	1	PATH Tanzania office	No
17-Feb-12	Camera - SONY DSC W570	FY11	1	PATH Tanzania office	No
13-Sep-12	Smart UPS, 2200VA	FY11	1	PATH Tanzania office	No
13-Sep-12	Smart UPS, 2200VA	FY11	1	PATH Tanzania office	No

Success Story

Giving back: Community support for TB/HIV treatment in Tanzania

Once he would have been considered a target beneficiary of the Detroit Recovery Project, but Mohamed Sultan, a former cocaine addict, is now a member of Tupambane na Kifua Kikuu na UKIMWI (TUKIKIZA), a CBO working with PATH to create community awareness on TB and TB/HIV and contribute to TB detection at the community level in Zanzibar. Mohammed has worked at Detroit Sober House, a recovery center for drug addicts, for three years. He used drugs for many years before he joined Sober House, and since his recovery, supports newcomers to the house and other projects.

Since 2009, with support from USAID, PATH has been encouraging community members to take part in TB case detection in several districts in Tanzania. Specifically, PATH has identified, sensitized, and trained former TB patients, traditional healers, drug sellers, and sputum fixers on TB and TB/HIV activities.

In 2011, Mohammed and 19 others from TUKIKIZA participated in training on TB and TB/HIV organized by PATH with USAID support. At the training, Mohammed learned how to screen and refer people who may have TB for proper diagnosis and treatment, and also how to support patients on TB treatment and provide referral for drug addiction recovery. To date, Mohammed has referred more than 100 people for TB diagnosis, of which 25 people were diagnosed with the disease. In addition, because many of the people with whom Mohammed is working are at risk for contracting other diseases, Mohammed's work is especially critical to the larger community. For example, in just a few months in 2012, he identified six people with TB, among whom two also had HIV and one had hepatitis C. All of these patients have now been able to access treatment for their illnesses.

In addition to a focus on increasing TB case detection, Mohammed also received training on community TB DOTS and can now help others receive treatment in line with national guidelines. As a treatment supporter, Mohammed is responsible for storing TB medications and overseeing TB patients staying at Sober House to receive their daily treatment.

Mohammed takes this job very seriously: "I am very happy to volunteer because I wasted my time taking drugs; I feel honored to help other people and being useful to the community. I am giving back to the ones who have helped me, and I think it's only by raising awareness and helping each other that we can solve our problems, and change behavior."

Mohammed does not just do this work at Sober House, but also talks with drug addicts living on the streets and helps get them admitted to the hospital. In addition, he participates in creating community awareness through different approaches, including Magnet Theatre performances at local health facilities to teach people about the signs and symptoms of .

Through Mohammed's efforts, patients who may otherwise have been overlooked are now able to receive care at Mnazi Mmoja Referral Hospital in Zanzibar. In addition to DOT services, with support from the MOHSW and USAID, the Mnazi Moja Hospital's TB/HIV program has been able to provide counseling, health education outreach, and psychological support for patients.

"Every day I come to the Sober House with a positive energy to share with my fellows, giving them hope and telling them they can change their lives. I am glad I am taking part of that change through my mission along with PATH." – Mohammed Sultan



Acronyms List

ACSM	advocacy, communication, and social mobilization	ISTC	International Standards for TB Care
AFB	acid-fast bacilli	KNTH	Kibong'oto National Tuberculosis Hospital
AIDS	Acquired Immune Deficiency Syndrome	LED FM	light-emitting diode fluorescence microscopy
ART	antiretroviral therapy	M&E	monitoring and evaluation
BSL-3	Biosafety Level 3	MDR-TB	multidrug-resistant tuberculosis
CBO	community-based organization	MOHSW	Ministry of Health and Social Welfare
CCHP	Comprehensive Council Health Plan	MSH	Management Sciences for Health
CDC	US Centers for Disease Control and Prevention	NIMR	National Institute of Medical Research
CHMT	Council Health Management Team	NTLP	National Tuberculosis & Leprosy Programme
CORP	Community's Own Resource Person	OPD	outpatient department
CPT	cotrimoxazole preventive therapy	PADM	Project Administrator
CTC	care and treatment clinic	PEPFAR	US President's Emergency Plan for AIDS Relief
CTRL	Central TB Reference Laboratory	PMDT	programmatic management of drug-resistant tuberculosis
DLT	District Laboratory Technician	PPM	public-private mix
DOTS	directly observed therapy, short course	RACC	Regional AIDS Control Coordinator
DST	drug susceptibility testing	RCH	reproductive and child health
DTHC	District TB/HIV Coordinator	RDC	Research Determination Committee
DTLC	District TB/Leprosy Coordinator	RHMT	Regional Health Management Team
EMS	Expedited Mail Services	RLT	Regional Laboratory Technician
EQA	external quality assurance	RTLC	Regional TB/Leprosy Coordinator
FIND	Foundation for Innovative New Diagnostics	SOP	standard operating procedure
FY	Fiscal Year	SS+	sputum smear positive
GHCS	Global Health and Child Survival	TB	tuberculosis
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria	TB/HIV	tuberculosis and HIV co-infection
HCP	health care provider	Three I's	intensified case-finding, isoniazid preventive therapy, and TB infection control
HIV	human immunodeficiency virus	TOT	training of trainers
ICAP	International Center for AIDS Care and Treatment Programs	UCSF	University of California, San Francisco
IEC	information, education, and communication	Union	International Union Against Tuberculosis and Lung Disease
INH	isoniazid	USAID	US Agency for International Development
IPC	infection prevention and control	WHO	World Health Organization
IPCAN	Infection Prevention & Control Africa Network	XDR-TB	extensively drug-resistant tuberculosis
IPT	isoniazid preventive therapy	ZTHC	Zonal TB/HIV Coordinator
IRB	Institutional Review Board	ZTLP	Zanzibar TB/Leprosy Coordinator