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TB CARE I

TB CARE I
PROGRAM YEAR 2
Third Quarter Performance Monitoring Report
April 1st, 2012 – June 30th, 2012

August 15, 2012

TB CARE I Partners

American Thoracic Society (ATS)
FHI 360
Japan Anti-Tuberculosis Association (JATA)
KNCV Tuberculosis Foundation (KNCV)
Management Sciences for Health (MSH)
International Union Against Tuberculosis and Lung Disease (The Union)
World Health Organization (WHO)

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List of Abbreviations

ACSM	Advocacy Communication Social Mobilization
AFB	Acid Fast Bacilli
ART	Anti-retroviral Therapy
Binfar	Directorate General of Pharmaceutical and Medical Devices (Indonesia)
BPPM	Directorate of Medical Services (Indonesia)
CAR	Central Asian Republics
CB-DOTS	Community-Based DOTS
CBTBC	Community-Based TB Care
CDC	Center for Disease Control and Prevention
CoE	Center of Excellence
CDR	Case Detection Rate
CSO	Civil Society Organization
DEWG	DOTS Expansion Working Group
DOT	Directly Observed Treatment
DOTS	Directly Observed Treatment Short Course
DR	Drug Resistance
DRS	Drug Resistance Survey
DST	Drug Susceptibility Testing
ECSA	East, Central and Southern Africa
EQA	External Quality Assurance
ERR	Electronic Recording & Reporting
FIND	Foundation for Innovative New Diagnostics
GDF	Global Drug Facility
GFATM	Global Fund for Aids, Tuberculosis and Malaria
GLC	Green Light Committee
GLI	Global Laboratory Initiative
HRD	Human Resource Development
HSS	Health System Strengthening
IC	Infection Control
IEC	Information, Education and Communication
IQC	Internal Quality Control
ILEP	International Federation of Anti-Leprosy Associations
JATA	Japan Anti Tuberculosis Association
JSM	Joint Strategic Meeting
KANCO	Kenya AIDS NGOs Consortium
KAPTLD	Kenya Association for Prevention of TB and Lung Diseases
KIT	Royal Tropical Institute
KNCV	KNCV Tuberculosis Foundation
LED	Light Emitting Diode (microscopy)
LPA	Line Probe Assay
MDR	Multi Drug Resistance
MDR-TBMulti	Drug Resistant Tuberculosis
M&E	Monitoring and Evaluation
MOA	Memorandum of Agreement
MOH	Ministry of Health
MOST	Management & Organizational Sustainability Tool
MSF	Médecins sans Frontières (Doctors without Borders)
MSH	Management Sciences for Health
NAP	National Aids Program
NCE	No-Cost Extension
NGO	Non-Governmental Organization
NIHE	National Institute of Health and Epidemics (Vietnam)
NTP	National TB Program
NRL	National Reference Laboratory
NTRL	National Tuberculosis Reference Laboratory
OPD	Out-patient Department
OR	Operations Research
PCA	Patient Centered Approach
PITC	Provider-Initiated Treatment and Counseling
PHCC	Primary Health Care Center
PLHIV	People Living with HIV
PMDT	Programmatic Management of Drug-resistant Tuberculosis
PMU	Program Management Unit
PPM	Private Public Mix
PPP	Public Private Partnership
RIF	Rifampicin
QMR	Quarterly Monitoring Report
SANAS	South Africa National Accreditation System
SLD	Second Line Drug

SNRL	Supra National Reference Laboratory
SOP	Standard Operating Procedures
SS+	Sputum Smear positive
SS-	Sputum Smear negative
TA	Technical Assistance
TB	Tuberculosis
TB IC	TB Infection Control
TB CAP	Tuberculosis Control Assistance Program
TBCTA	Tuberculosis Coalition for Technical Assistance
TOT	Training of Trainers
TFM	Transitional Funding Mechanism
TWG	Technical Working Group
USAID	United States Agency for International Development
UVGI	Ultraviolet Germicidal Irradiation
WHO	World Health Organization

1. Introduction

TB CARE I is happy to present USAID with a quarterly monitoring report for the April - June 2012, quarter three of the TB CARE I program. This timeframe covers the third quarter of Year 2, during which some projects with Year 2 approved extensions carried out their activities as well. Twenty-one countries continued implementing Year 2 workplans. No new countries have been added to TB CARE I in this reporting period.

Eight core projects were completed this quarter; three from Year 1 and five from Year 2. In addition, 30 Year 2 core projects continued and six Year 2 core projects were launched. Of the five regional projects, one APA1 project was completed this quarter and three continued APA2 activities under the African Region. This report provides a technical and financial update on progress made during the quarter for TB CARE I core, regional and country projects. Below is a brief summary of TB CARE I's main achievements to date and challenges for the next quarter.

Main Achievements:

- So far in 2012, a total of 5,382 cases of MDR TB have been diagnosed and 83% of those cases have been put on treatment (4,443). Although this quarter shows lower numbers of MDR patients diagnosed and put on treatment compared to the previous quarter, this is mainly due to missing data (Botswana, Kazakhstan, Nigeria, and Zambia). In other focus countries the number of MDR cases put on treatment shows an increase, including Indonesia.
- GeneXpert testing continues to expand to more TB CARE I countries. Testing has been introduced in five TB CARE I supported countries: Cambodia, Indonesia, Kenya, Nigeria, and Vietnam; with five more countries expected to implement testing shortly. A total of 53 GeneXpert machines have been procured (12 in this quarter) with 16 more GeneXpert machines are expected to be procured this year. As of June 30 2012, a total of 3,491 GeneXpert tests have been conducted. Of those 3,491 tests, 1,676 have been MDR TB positive and 338 Rif resistant.
- TB CARE I continues to facilitate the coordination of GeneXpert implementation in the African region and the Central Asian Region (CAR). In the African region a regional workshop on GeneXpert was held for seven African countries to support implementation strategies. In CAR a workshop and training was held for Kyrgyzstan and Kazakhstan. In addition to this, a regional PMDT workshop for CAR countries was held in Almaty in April, 2012.
- GeneXpert testing continues to expand to more TB CARE I countries. Testing has begun in Cambodia, Indonesia, Kenya and Nigeria and Vietnam, with Djibouti, and Kazakhstan shortly. Zambia is also in the early stages of planning and expects to implement testing during APA3. TB CARE I also supports the procurement of GeneXpert machines in countries where machines are being purchased with other funding sources. This includes Kyrgyzstan, Uzbekistan (planned for July), and Tajikistan (planned for August).
- In Afghanistan TB CARE I approaches such as CB-DOTS, Urban DOTS, TB IC and system strengthening approach like M&E and OR, guideline/policy development are embedded into NTP's strategic plan for 2013-2017. TB CARE I assisted NTP to conduct visits to provinces and health facilities so as to ensure appropriate implementation of DOTS strategy and provide on-the-job training for health facility staff.
- In Ethiopia TB CARE I supported the final revision of national comprehensive TB/Leprosy and TB/HIV guidelines, training materials preparation and validation workshop of the guideline. Regional Health Bureau representatives, TB/HIV focal persons and partners participated in this important event. As a follow up, TB CARE I is committed to supporting this activity through proof reading, editing, printing and the dissemination of the guidelines.
- In response to addressing the general low TB case detection in Ghana and specifically in the Eastern Region TB CARE I has trained 123 health care workers (84 females and 49 males) in the implementation of hospital based intensified TB case finding. During the first month (May 2012) of implementing hospital intensified TB case finding a total of 33,325 clients/patients were registered at the OPD in these six hospitals, 243 (7%) had their sputum examined and 30 (12%) were smear positive. During the first four months of 2012 (January to April) before staff were trained on average 175 TB suspects were examined for AFB and 21 were notified as having smear positive TB, a clear indication that these training activities have improved case finding.
- Mozambique completed rehabilitation of the Cuamba Rural district hospital laboratory. The laboratory structure has been upgraded to fit the requirements of a standard clinical laboratory. Biosafety measures for AFB smear microscopy have been improved, and conditions created for the installation of GeneXpert machine. A quick assessment was conducted in two other sites where GeneXpert machines will be installed, and the conditions at those sites were considered to be adequate for the installation. The total number of GeneXpert machines planned for Mozambique is 3.
- In South Sudan, with a focus on improving quality, TB CARE I has continued to support comprehensive visits comprising of clinicians and laboratory personnel to existing and new diagnostic and treatment centers. In total 2238 of all forms of TB and 773 new smear positive cases of TB cases were notified in period 1st January – 31st March 2012, which is 23% and 15% increase respectively compared to previous quarter. Currently the number of TB diagnostic centers has increased from 65 to 70.
- This quarter TB CARE I spent $17 million including accruals, a total level of spending of 54%. After deducting the accruals from the previous quarter there was a $15.6 million increase in expenditures. After receipt of MOA #6 the obligation increased to $119,111,255, the pipeline decreased from almost $60 million by the end of March to $46.2 million by the end of June.

Main Challenges and Next Steps:

- The timely and complete reporting on PMDT remains a problem. Data on MDR-TB patients diagnosed and put on treatment are either not available or are incomplete for many countries. The PMU is in dialogue with the country offices and will put this again on the agenda of the September meeting for Country Directors.
- The availability of technical experts is too low to adequately support the expansion of the implementation of GeneXpert. The PMU will conduct special trainings to increase the number of experts and will start discussion

with partners to have extra (semi) long-term technical assistance (TA) in some target countries.
- Partners continue to have concern over the complexity of the core project development process. The PMU will continue to maintain transparency while reevaluating how best to streamline and simplify the proposal development steps (while still abiding by USAID requests/requirements).
- The cancellation of Global Fund Round 11 and the replacement with a transitional funding mechanism is affecting almost every TB CARE I country. TB CARE I will need to work closely with NTPs and USAID to find short and long-term alternatives to this funding source.
- A key bottleneck for GeneXpert implementation is strategic planning and coordination of activities, both of which require extensive support and mentoring. In order to meet the increasing demand for technical assistance from TB CARE I countries, training for lab officers and international consultants is planned for September, which will substantially increase the capacity of TB CARE I to provide extensive support to countries.
- Access to Second Line Drugs (SLDs) remain a challenge in many TB CARE I countries, and TB CARE I continues to support efforts to improve this access.
- Another challenge for the next quarter is to financially close out all APA1 projects and to assure a smooth carry over from all remaining funds in the countries to the APA3 workplans. Furthermore, there is $7.8 million of unprogrammed country funds which needs to be budgeted for, either in the APA3 workplan or in additional workplans.

2. Project Management Unit (PMU)

The TB CARE I Operational Manual has been significantly revamped and updated this quarter. This was done to better describe and update program policies, procedures and guidelines. The updated manual and accompanying annexes can be found on the eRoom:

http://eroom.msh.org/eRoom/O/TBCAP-2/0_cd5a

A new system for tracking and reprograming country project savings has been implemented. The Modification Tracker (MoT) has been developed to speed up the process of identifying savings, reallocating these funds and obtaining approval for the changes.

In April 2012, Year 3 work planning began. USAID sent the PMU a list of possible core activities for Year 3. The activities were listed by technical area and in priority order based on USAID priorities and the AG discussions. Improvements to the Year 3 country planning templates and process have been made. Most importantly the planning process was re-organized into four distinct phases to streamline work plans through linking outcomes to activities and budgets. The four phases are:

1. Scope of Work (SOW) with agreement from each respective country Mission;
2. Work plan development focusing on M&E, activity plan and narrative with strategic approach;
3. Preparing a detailed budget
4. Final USAID approval.

It is believed that these revisions will result in greater involvement and transparency of USAID country Missions and collaborating partners. Moreover, we expect the planning process to run more smoothly so all projects will be ready to start implementation on time on October 1st, 2012.

By May 9, the PMU submitted on behalf of the TB CARE I coalition partner's 45 draft Core project proposals for Year 3 to USAID. These concerned activity narratives including a prioritization list by the TB CARE I partners. USAID subsequently distributed the activity narratives to the Advisory Groups for their review.

On June 28, 2012 comments and feedback from the Advisory Groups and USAID on Year 3 Core project proposal narratives were returned to the coalition. A total of 27 projects will be further developed including a budget.

The PMU staff made monitoring visits to counties, attended meetings and conferences and provided technical assistance, which for this quarter included:

Technical Assistance (TA) visits by PMU staff this quarter included:

Country:	Purpose:
Geneva	Meet with Global Fund to introduce TB CARE I's workplanning and budgeting tools and templates. Also met with WHO to review progress of WHO led core projects (9-10 June).
Geneva	STAG, pre-STAG meetings, TB TEAM meetings June 14-22
Ghana	Protocol development and planning for field-testing the draft Guide on measuring TB among HCWs (9-13 April)
Indonesia	Transfer and introduction to new unit head KNCV, project monitoring
Indonesia	Supervision of GeneXpert operation in 5 sites and TA for M&E data collection (31 May-13 June)
Kazakhstan	Review of the NTP and monitoring of the TB CARE I project, May 13-18
Kazakhstan	Facilitation of Regional (CAR) PMDT workshop. April 17-19

Kazakhstan	Facilitation of Training of Trainers (ToT) on GeneXpert implementation. June 18-23
Kazakhstan	Regional country directors meeting (11-14 June)
Kenya	Facilitation of Regional (7 African countries) workshop on GeneXpert implementation. May 21-25
Kyrgyzstan	Xpert strategic planning workshop (14-18 May)
Pakistan	Closing TB CARE I project, presentation of preliminary report TB Prevalence Survey (APA2 Q2, but included for record)
United States	New York: Board meeting TB Alliance (6 June) Washington: Meetings at USAID (7 June)
Vietnam	Transfer and introduction to new unit head KNCV, project monitoring (APA2 Q2, but including for record)
Zambia	Monitoring implementation of Ndola IC demonstration project and introduction of the FAST strategy 16-27 April)

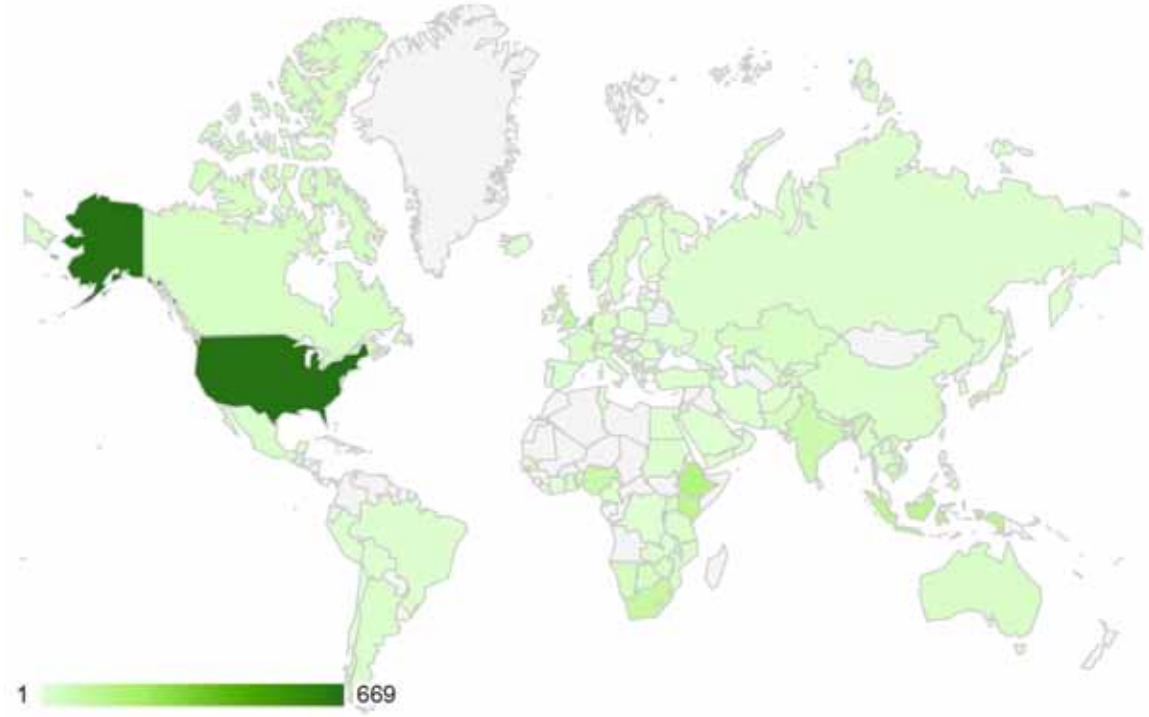
2.1 Knowledge Exchange

The news of visitors levelled off in the quarter but the number of countries from which visitors came from rose to 112. (Table 1).

Table 1: Summary of visitors to the TB CARE I website:

Number of visitors	October-December 2011	January-March 2012	April–June 2012
Percent that were new visits	2,700	3,604	2,972
Number of countries visitors came from	100	110	112
Number of Pages Viewed	7,940	10,612	8,632
Percentage of new visitors	67%	70%	61%
10 Most Popular Downloads, April-June 2012 (Number of downloads)	1. Electronic Recording and Reporting for TB Care and Control Handbook (58) 2. TB IC at Community Level Training Handbook (37) 3. TB CARE I Year 2 QMR 1 Oct 2011-Dec 2011 (32) 4. PPM Guide (29) 5. TB-IC Facilitators Guide (27) 6. TB CARE I Annual Report Year 1 Oct 2010-Sept 2011 (27) 7. TB CARE I Newsletter February 2012 (27) 8. Rapid Implementation of Xpert MTB-RIF Diagnostic Test 25 9. Integration HIV into MDR Routine Surveillance (23) 10. TB CARE I Year 2 QMR 2 Jan 2012-Mar 2012. (23)		

Figure 1: Countries which visited the website and the number of visitors per country.



New TB CARE I Publications this quarter:

A number of new TB CARE I tools and publications have been released this quarter:

World TB Day 2012
A publication documenting the events and activities TB CARE I took part in for World TB Day 2012 was published online and distributed to the mailing list:

http://www.tbcare1.org/publications/toolbox/recent/TB_CARE_I_Focus_WTBD_2012.pdf

TB CARE I – Year 2 Quarter 2 Summary Report
A summary version of the Year 2 Quarter 2 report was released which focuses on the highlights of TB CARE I work during this time period:

http://www.tbcare1.org/reports/reports/TB_CARE_I_Year_2_Quarter_2_Summary.pdf

New TB CARE I Tool

Guidelines to Measure the Prevalence of Active TB Disease Among Health Care Workers
It has been proven that in many settings the burden of TB is higher among healthcare workers (HCWs) than among the general population. It is very important to prevent the transmission of TB in facilities, thereby preventing TB among HCWs. This guide has been developed to help and guide the monitoring of active TB disease incidence among HCWs through routine surveillance.

http://www.tbcare1.org/publications/toolbox/tools/hss/HCW_TB_Prevalence_Measuring_Guidelines.pdf

3. Core projects

As of June 30 2012, 23 of the 28 Year 1 core projects (82%) have been completed and tangible deliverables published on the TB CARE I website. Of the five remaining projects in APA1, three will be completed by September (These projects only require the finalization and printing of the deliverables) and the remaining two are currently being followed up by the PMU and involved partners.

In this past quarter, a total of eight core projects have been completed; three from APA1 and five from APA2. Table 2 lists all core projects completed in this quarter, and their respective deliverables as of June 2012.

Table 2: Completed Year 1 Core Projects and Deliverables, through March 2012
(All tangible deliverables are available on the TB CARE I website unless otherwise indicated; projects highlighted in beige are APA1 projects that were completed this quarter.)

Technical Areas	Code	Lead	Project Title	Type of Deliverable	Outcome/Deliverables
Universal and Early Access	C1.3	PMU	RHAP TB in Mining Project	Assessment	Two assessment visits were made in Southern Africa (Lesotho, Mozambique, and Swaziland) to discuss the development of a Regional Project on TB in the mines with NTPs, TB CARE I and II partners as well as USG Implementing Partners.
Laboratories	C6.4.3	WHO	Meeting of the Supranational Reference Laboratory Network (SRLN)	Meeting	A consultation of the SRLN was held in conjunction with the 4th Global Laboratory Initiative Partners meeting. The consultation evaluated the status of the network and its activities, reviewed linkages between countries and SRLs and the expanding requirements for SRLs to fulfill beyond quality assurance for DST, and discussed possible mechanisms for the network to provide strengthened and sustainable technical support to countries. 130 participants from SRLs, other international institutions and initiatives, academic institutions and associations, high-burden TB country health programs, non-governmental organizations, research institutes from developed and developing countries, industry representatives and funding agencies attended the consultation. The agenda of the SRLN consultation and presentations are available at: http://www.stoptb.org/wg/gli/meetings.asp
	C2.3	KNCV	Lab management training of NRL staff	Training	Successfully completed in May/June 2012. CD made of course materials. 12 participants as planned. Course was well evaluated by the participants and significant improvements were observed with pre-post testing.
PMDT	C4.9	KNCV	MDR TB-course in Latvia for Mongolian Physicians	Training	On request of USAID, four Mongolian physicians participated in the MDR-TB course in Latvia in July. In June 2012, KNCV facilitated their visa requests, travel arrangements and DSA.
Health Systems Strengthening	C7.4.1	MSH	Training national leaders on HRD Tools	Action plans	Action plans on HRD are in place for six NTPs that participated in a virtual HRD training program (Afghanistan (2), Ghana, Indonesia, Pakistan, and Uganda).
	C6.11	PMU	Support to CSHGP and CORE Group	Report	Two evaluations were planned and completed. This project is complete.
Overarching Elements	C0.0.1	WHO	Support to the Sub Working Groups of the Stop TB Partnership	Workshops	The 4th Global Laboratory Initiative (GLI) meeting took place in April 2012. It was a three-day meeting on the SRL network, laboratory strengthening activities of the GLI partners, and progress with the implementation of the Xpert MTB/RIF.
	C0.3	PMU	Pakistan UPS	Procurement	Air cons have been installed. UPS have been shifted to respective sites and were installed by the end of June.

Table 3 provides detailed information on the progress of the Year 1 core projects that are not yet complete. Table 4 summarizes progress on the all Year 2 core projects, including the 7 completed projects, and 34 remaining projects (41 in total). Six additional Year 2 core projects were added throughout the quarter.

Table 3: Overview of Extended Year 1 Core Projects, January 2012 to March 2012

Technical Area	Code	Lead	Title	Expected Year 1 Deliverables	Progress to date	% complete	Level of spending
TB/HIV	C4.2.2	**ATS,** WHO	Guidelines for evaluations of contacts to infectious cases of tuberculosis	• WHO-approved set of guidelines developed	The draft document is being finalized and will be submitted to the WHO Guideline Review Committee in February. Editing & printing will take place in March. A workshop with selected countries to outline and prepare national guidelines based on the WHO/ATS guidelines is then planned. A no-cost extension through June 2012 is being requested (March no-cost extension (NCE) already approved).	75%	84%
M&E, OR and Surveillance	C5.1.2	**WHO,**	• WHO-approved set of guidelines developed	The final guidelines have been sent to the WHO Guideline Development Group for final review. When approved, a copy will be shared.	90%	84%	45%
Health System Strengthening	C7.1.1	**WHO,** ATS, FHI360	Increased and sustained political and financial commitment to TB prevention, care and control	• Improved TB plans, indicators and budget embedded within national health plans and/or strategies.	The assessment of plans is ongoing. Spending will happen between May - September 2012. NCE requested through September 2012.	25%	61%
	C7.1.2	**ATS,** MSH, WHO	Create political commitment and financing database	• Political commitment (measured by domestic financing for TB) increased	The assessment of plans is ongoing. Spending will happen between May - September 2012. NCE requested through September 2012.	25%	19%
	C7.1.3	**WHO**	Enhancement of the planning and budgeting tool	• Planning and budgeting tool enhanced	The meeting of the SRLN is planned and taking place April 17-19, 2012 in France as part of a three-day meeting on the SRL network, laboratory strengthening activities of the GLI partners and Xpert MTB/RIF.	75%	89%

Table 4: Overview of Approved Year 2 Core Projects, January 2012 to March 2012

Technical Areas	Code	Lead	Title	Expected Year 2 Deliverables	Progress to date	% complete	Level of spending
Universal and Early Access	C1.1	**PMU,** ATS, MSH	World TB Day Patient Panel	World TB Day Patient Panel	Completed.	100%	80%
	C1.2	**WHO,** KNCV, The Union	Engaging pharmacists in TB care and control	- baseline assessment	A site visit to Ghana was undertaken in May 2012. The consultant has submitted draft reports on the Cambodia and Ghana experiences of engaging pharmacists. Visit to Dominican Republic to collect the latest data to be included in the country case study on pharmacy involvement for early case finding has been completed. A consultant was recruited to undertake review of published and grey literature including WHO reports on rational use of TB medicines prepared for selected countries in Asia (Cambodia, India), Africa (Tanzania, Zambia, Ghana) and Latin America (Brazil) and prepare a paper on comparative analysis of country policies on TB drug regulation.	75%	55%
	C1.3	**PMU,** KNCV	RHAP TB in mining project	Assessment	Two assessment visits were done to South Africa (Lesotho, Mozambique, and Swaziland) to discuss with NTPs, TB CARE I and II partners as well as USG Implementing Partners the development of a Regional Project on TB in the mines.	100%	6%
	C1.4	**WHO,** ATS, KNCV, The Union	PPM Toolkit workshop	A multi-country global workshop of selected countries on the PPM toolkit	The venue and dates of the workshop have been revised to 10-11 November in Kuala Lumpur. The content of the workshop is currently being designed and key speakers and facilitators are being identified.	40%	8%
	C1.5	**WHO,** The Union	Update of WHO guidelines on Childhood TB management	Updated WHO Guidelines on Childhood TB Management	Draft of guidelines completed and being circulated. Meeting for panel to review and discuss recommendations in Geneva 16-18 July 2012.	25%	58%
	C1.9	**The Union**	Childhood TB training	- ToT for 10 people – NTP (1), national child TB expert (1) and selected district staff (2 from each of 4 districts) in two countries countries (Indonesia & Namibia) - Training in 4 Districts in both countries	Several systematic reviews of active TB screening questions are in progress with results due in May. A meeting will take place in May to review these results and draft recommendations.	50%	25%

Universal Access	C1.12	**WHO,** ATS, JATA, KNCV, MSH, The Union	Guidelines on screening for active TB	Guidelines on TB screening	Meeting was organized assessing 3 finalized reviews and the protocol for 1 review that will be done by September, followed by final guideline meeting.	75%	0%
	C1.13	**ATS,** KNCV, MSH, WHO	ISTC ed. 2 review	Review of ISTC ed. 2. Decision made on the topics that need to be updated and/ or renewed	Meetings were held with the ATS and WHO co-chairs to discuss the organization of work for edition 3 under the new WHO Guideline process, areas of revision and structure of the writing and steering committees. A meeting of the writing committee will be organized for the fall quarter.	25%	76%
	C1.15	**KNCV**	Adapt and pilot PCA package	- End of implementation regional workshops - Final report of pilot implementation with results, recommendations for next steps, scale up and adaptation.	All five countries received ethical approval for research component. Cambodia and Mozambique completed baseline data collection and are implementing selected tools. The remaining countries (Indonesia, Nigeria, and Zambia) will begin activities in the coming quarter.	40%	4%
	C1.16	**ATS,** FHI 360, WHO	Develop contact investigation guidelines*	Development of WHO approved set of guidelines for evaluations of contacts to infectious cases of TB and enhanced existing intensified active TB case finding strategies in PLHIV and children.	The Guidelines are final and at the WHO Guideline Review Committee for final action. Kenya has been selected as the high HIV setting and Vietnam has been selected as the low HIV setting to validate the recommendations in the Guidelines to demonstrate whether they produce the intended results.	50%	81%
	C1.17	**KNCV,** FHI 360, WHO	Scaling up engagement of prisons	Regional workshop for 7 countries Action plans to scale up engagement of prisons in TB control	Implementation of this project is delayed. UGM has requested to postpone the workshop to December 2012.	15%	3%

Laboratories	C2.1	**KNCV,** The Union	Lab strategic plan handbook	Practical laboratory strategic handbook, piloted and finalized	2nd pilot of handbook was conducted successfully in Botswana in June 2012. Need to compile handbook further based on 2nd pilot and consensus meeting planned in The Hague in early September with stakeholders.	80%	44%
	C2.2	**The Union,** KNCV, WHO	Tool for lab network assessment	A consensus tool for assessment and accreditation of microscopy laboratory networks is available, pilot tested by trained assessors and endorsed by GLI	Pilot testing of the tool in Pakistan was completed. The tool is being revised based on this experience. A set of 10 standards and minimum requirements was made up and presented to the GLI in Annecy.	33%	43%
	C2.3	**KNCV,** MSH, The Union	Lab management training of NRL staff	A 2-week laboratory training of 12 NRL lab staff from sub-Saharan Africa in Nairobi, Kenya	Successfully completed in May/June 2012. CD made of course materials. 12 participants as planned. Course was well evaluated by the participants and significant improvements were observed with pre- post testing.	100%	73%
	C2.4	**KNCV,** MSH, WHO	Lab accreditation tools and roadmap	Improved, functional implementation guide (version 2.0) available for use by NTRLs worldwide for the implementation of a total quality management system leading to ISO 15189 accreditation	In April, KIT representatives attended the GLI meeting to present and promote the GLI tool. Performance indicators were finalized to determine impact of the introduction of a quality management system on the improvement of laboratory services and piloted in Benin. A ''letter to the editor'' was published in the IJTLD journal regarding the GLI tool.	90%	31%
	C2.6	**PMU-PEPFAR,** KNCV, WHO	GeneXpert phase 2	Workshop, document and tool	The workshop in Africa was held from 21-25 May in Mombasa, Kenya. It was attended by NTP, NRL and TB CARE I staff from Botswana, Ethiopia, Djibouti, Mozambique, Zambia, Zimbabwe and Kenya. Local representatives from USAID, CDC and SRLN were there. In total there were 34 participants, plus 12 facilitators from PMU, KNCV, WHO Geneva, USAID Washington, and Nigeria (advanced Xpert implementer). Each country drafted its specific Xpert implementation plan.	40%	36%
	C2.7	**The Union**, KNCV	Develop Benin NRL to SNRL	- A functional supra-national TB reference laboratory (SRL) in Benin - The Benin NRL accreditation process is advanced	One Benin technician was trained in Antwerp. Total 5 TA visits were made by partners (for accreditation, GIS, bench work and proficiency testing, NRL and network management in general). One international lab course was organized. SRL links and activities were further developed.	50%	33%

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Laboratories	C2.8	**The Union**	Uganda TB Supra National Reference Lab	The Uganda NRL has started functioning as a SRL, integrated in the network (SRLN) as designated SRL, and actively linked with 2 countries in its area	One Uganda technician was trained in Antwerp. Two TA visits were made by partners (for accreditation, NRL and network management & SRL status and activities). Further work was done for strategic and business plan.	25%	35%
Infection Control	C3.1	**PMU,** *JATA, FHI 360, KNCV, MSH, The Union, WHO*	Testing of guide for TB among HCWs	Field-tested guideline	The HCW TB prevalence guide was finalized and made available on the TB CARE I website. TA missions took place to Cambodia, Ghana and Kyrgyzstan to support HCW TB incidence guide. HCW TB screening protocols including diagnostic algorithms and symptom screens were developed for Ghana and Cambodia to field test the incidence guideline. In Kyrgyzstan an in-depth review of the current recording and reporting system in a sample of TB facilities was recommended.	50%	56%
	C3.2	**PMU,** FHI 360, KNCV, MSH	TB IC Core package	TB IC 'core package' strategy has been adapted and adopted in 15 health facilities of Ndola district (Zambia)	A team of consultants introduced the Core Package at the Ministry of Health, PMO, DMO and health facilities. Two sites for piloting the FAST strategy were proposed. A draft detailed protocol will be developed in the next quarter.	50%	52%
	C3.3	**KNCV** MSH, WHO	TB-IC training	- Organize and conduct training and workshop in TB-IC for 12-20 participants from EMRO & Asia, in Indonesia participants from EMRO & Asia, in Indonesia Provide mentored field visits to 8 consultants from the workshop Provide distance support to consultants	A refresher course on infection control was conducted in late January in Jakarta, Indonesia. The training was attended by 16 participants from 14 different countries. Based on selection criteria and observation of the facilitators, the eight most promising participants were selected for mentored field visits. Since the training, two mentored field visits have taken place and another three are in preparation. KNCV has created an e-portal to connect all trained IC consultants for further distant support.	80%	64%
	C3.5	**PMU-PEPFAR** FHI 360, KNCV	TB-IC demonstration Ndola district	End-evaluation study reports to describe approaches and demonstrate results	With the project launched in January, baseline assessments of the 15 health facilities (HFs) were completed. Key HF staff were trained in TB IC. Affiliated community volunteers were trained in community-based TB IC & administering the Simplified Checklist. 13 out of 15 facilities developed their implementation plans using the CDC assessment and analysis tools.	25%	29%

Infection Control	C3.3	KNCV, MSH, WHO	TB IC training	- Organize and conduct training and workshop in TB IC for at least 12 (maximum 20) practitioners/ consultants from EMRO & Asia, in Jakarta, Indonesia - Provide mentored field visits to 8 consultants from the workshop - Provide distance support to consultants trained	Two (out of eight selected) mentees from Canada (working in Uzbekistan) and Kyrgyzstan took place in Q3. All TB-IC mentors were asked (before finalization of ToRS for planned mentored TB-IC visit) to revise mentorees developed "Personal development plans". KNCV has opened "KNCV E-portal" and developed e- platform "IC Infection Control for trained consultants TB CARE I & TB CAP" to connect all trained IC consultants for further interactions among each other and with their mentors for distant support. This e-group is facilitated by KNCV. All selected mentees and mentors are invited to become members. So far there are 10 active members.	80%	77%
	C3.5	PMU-PEPFAR, FHI 360, KNCV	TB IC demonstration Ndola district	End-evaluation study reports to describe approaches and demonstrate results	Costed facility plans were finalized and endorsed by the DMO. Budget lines will be merged in the 2012-2013 District implementation plans. IEC materials were disseminated. The renovation plans were revised and prioritized to remain within the available budget. A mission took place which provided recommendations for PMDT implementation. Introduction of Xpert is delayed awaiting guidance from the national level. Compliance with IC work practices went up to 43% from 27% as a result of the training. The remaining APA2 project period will focus on continuing supervision of the health facilities, renovations and screening of HCWs on TB.	50%	40%

PMDT	C4.3	**MSH, ATS, WHO**	Cost effectiveness modeling for MDR TB treatment	- Tool completed - Advocacy materials	Costing data has been collected in Indonesia. Outcome data will be collected in September. A development tool is in progress.	35%	8%
	C4.4	**KNCV, JATA, MSH, WHO**	Assessing the costs faced by MDR-TB patients	- Development and validation of tool - Validation of tool - Consensus workshop to define policy recommendations (2013)	Overall protocol and questionnaires finalized. Planned next steps: Start pre-test and pilot in one country as soon as possible, so lessons learnt can be taken into account before implementation in other two countries.	25%	23%
	C4.6	**TB CARE II-4.3, KNCV**	DR TB Learning site	On-line PMDT training program for clinicians and program managers	The site for online case series is developed and functioning at http://tbta.co/cases. The online functionality and the format of the "discussion" is being updated. TB CARE I and II experts will provide comprehensive responses to case discussions.	50%	13%
	C4.7	**TB CARE II-4.1, KNCV**	PMDT management training course	A training of three days around the WHO Guide, Management of MDR-TB: A field guide	The 3-day training course on the management of MDR-TB/HIV co-infection will focus on district-level practitioners, will include basic clinical protocols dealing with MDR-TB and ART and will include cases from the TB CARE clinical case discussion series.	0%	3%
	C4.8	**TB CARE II-4.6, The Union**	Tools for tracking DR-TB suspects	Review of existing tools	A first draft for review is expected in May. TB CARE II will then pilot it in Bangladesh.	0%	0%
	C4.9	KNCV	MDR TB-course in Latvia for Mongolian Physicians	Training	On request of USAID, four Mongolian physicians participated in the MDR TB course in Latvia in July.	100%	0%
Health Systems Strengthening	C6.1.1	**The Union**	Support to TB poverty working group		Coordinated 2nd quarter conference call during the period April-June; Disseminated the minutes of the conference call to core team members for further actions		3%
	C6.1.2	**WHO**	Support to Stop TB Partnership Working Groups		The PPM Subgroup meeting will be held in Kuala Lumpur from 10-11 November 2012. The Childhood TB subgroup meeting is planned to take place on 11 November 2012 in Kuala Lumpur, Malaysia. The TB-IC subgroup will also take place in Kuala Lumpur, Malaysia.	30%	0%
	C6.8	**ATS, MSH**	Improved domestic financing	Technical assistance and mentoring will be provided to selected workshop participants.	THIS PROJECT HAS BEEN CANCELLED	0%	19%

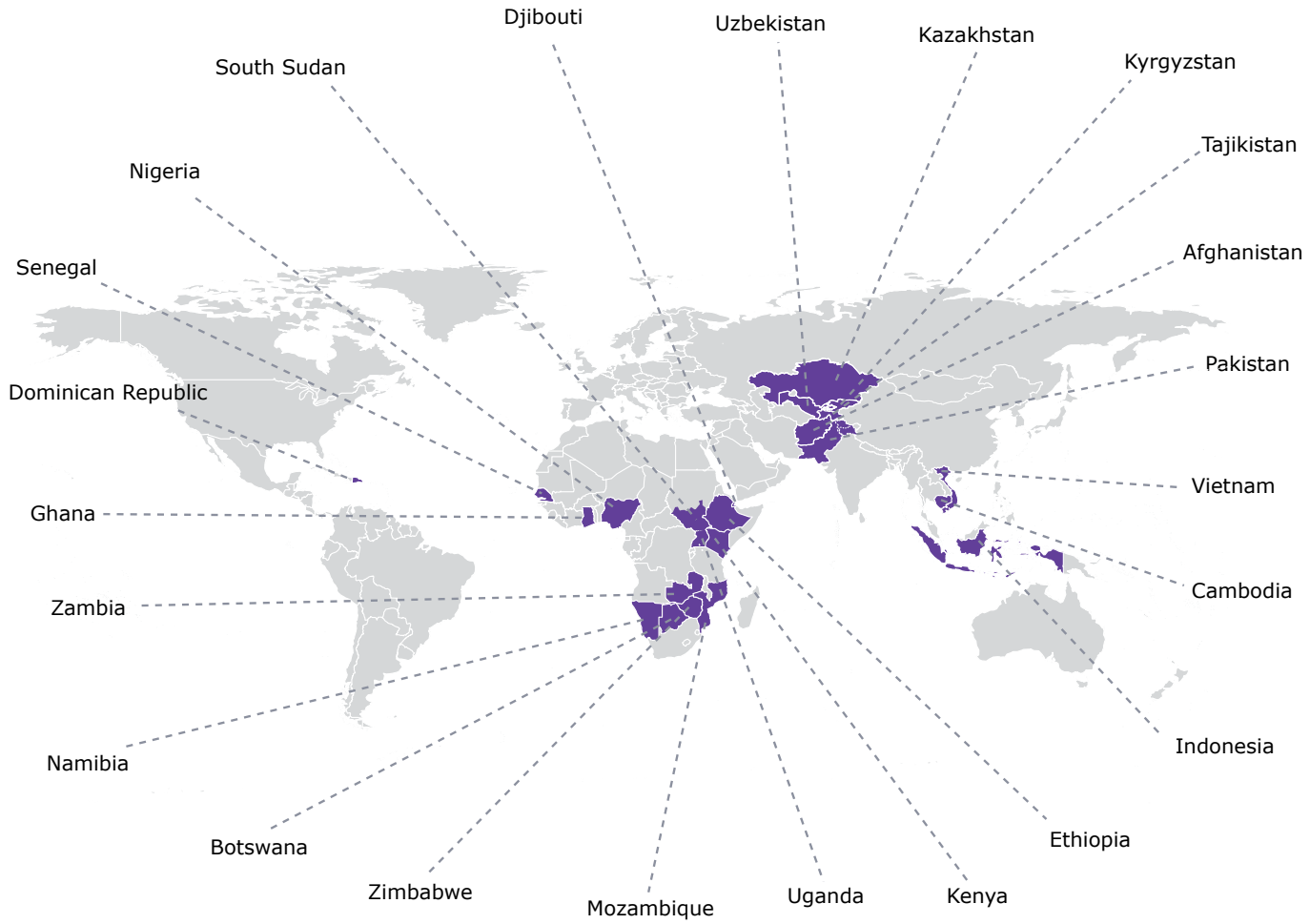
Health Systems Strengthening	C6.9	KNCV, ATS, FHI360	Build capacity of civil society in TB control	Revised training curricula, Post graduate curriculum Union conference, M&E framework including project results	At distance support to KNCV country office staff in Nigeria to M&E project implementation. In Nigeria mentoring organizations coach mentee organizations. Mentee organizations have referred TB suspects, trained own staff and CBO's, mobilized resources, introduced CBO's into the TB network. Training of Trainers in Ethiopia and implementation of four days CSO training. CSO's started implementing their workplan: training of staff and 5 defaulters were retrieved	75%	92%
	C6.11	PMU	Support to CSHGP and CORE group	Evaluation report for mid-term or final evaluations of selected CORE Group field projects	Two evaluations were planned and completed. This project is complete.	100%	23%
M&E, OR and Surveillance	C7.2	**KNCV**	Finalization of Prevalence Survey report Pakistan	Prevalence survey finalized	All the activities had been completed in the previous quarter. Data cleaning process continued as advised by KNCV experts. It is expected that the final survey report will be ready by mid-August 2012.	90%	44%
	C7.5	**MSH, KNCV, WHO**	Support M&E efforts of NTPs	- A community of practice will be established	The eRoom CoP has been set up and access granted to participants. The first trainings are planned for February and March. Following the workshop in The Hague (Year 1), 13 country teams finalized mini-M&E workplans, which are being implemented. The data management training materials outline has been developed.	20%	5%
	C7.6	**MSH**	GIS for managing human resources	A GIS tool which can be used for managing HR requirements, identify and visually display HR gaps and training needs, and develop training plans based on disease burden, and facilities for managing TB in a defined area. People trained in the use of the GIS tool	1. All steps have been put in place for the implementation of the pilot phase of this project in Ethiopia. 2. Representatives of the three participating organizations will be making an initial scoping visit to Ethiopia in the end of July to early August (July 26 - August 10	10%	2%
	C7.7	**WHO, The Union**	Improving the estimates of childhood TB	A featured in-depth analysis of childhood TB case notifications in the 2012 WHO Global TB Control Report. An approach for countries to identify gaps in the childhood TB activities of their surveillance systems that needs to be addressed.	The in-depth analysis of notification data from the WHO Global TB Database is on-going and so is the work on the childhood TB component of the APA I TB CARE project on the standards and benchmarks for TB surveillance. A questionnaire has been developed and circulated to 18 targeted countries for the collection of data characterizing childhood TB activities as well as surveillance data not reported to WHO.	48%	36%

Overarching	C0.1	**PMU**	Printing of report to Congress	Reports printed and distributed.	Completed. On request of USAID, PMU paid for the printing of a USAID TB report to Congress.	100%	100%
	C0.2	**PMU**	Advisory Group member LOE		Advisory groups met during the Joint Strategic Meeting in Washington DC in February to discuss priorities for core projects in Year 3. Follow-up calls are also being held as needed.	50%	42%
	C0.3	**PMU**	Pakistan UPS	Procurement, transport and installment for AC's in Pakistan	Air cons have been installed. UPS have been shifted to respective sites and were installed by the end of June.	100%	0%
	C0.4	**PMU**	Country Directors Meeting	Planned for APA2 Q4.	The TB CARE I Country Director’s Meeting is planned for September 24-26, 2012 in The Hague. Preparations are well advanced.	0%	0%

4. Country projects

The total number of countries in APA2 has held steady at 21. Senegal's workplan is still in development. Based on approved extensions, five countries are reporting on Year 1 workplans while the remaining 15 are reporting on Year 2 activities. Figure 2 displays the geographic distribution of TB CARE I countries.

Figure 2: Map of TB CARE I countries, as of June 2012



PMDT

PMDT scale-up at country level continues to be a priority for TB CARE I. Therefore, national data on MDR-TB cases that were diagnosed and put on treatment are collected each quarter. Table 5 summarizes the available information for 2010, 2011 and Jan-June 2012 by country. In total, 10,441 MDR-TB cases were diagnosed in TB CARE I-supported countries and 8,017 were put on treatment in 2010. In 2011, 11,078 cases were diagnosed and 8,902 were started on treatment. A 6% increase in MDR-TB diagnosis and an 11% increase in treatment initiation between 2010 and 2011 for TB CARE I countries is seen. This indicates a positive trend in PMDT scale-up, but significant work still needs to be done to diagnose more MDR-TB cases and close the gap between diagnosis and treatment.

So far in 2012, a total of 5,382 cases of MDR-TB have been diagnosed and 83% of those cases have been put on treatment (4,443). Reporting for the number of patients put on treatment includes suspected cases in some countries (Cambodia) as well as only registering patients on treatment, not otherwise tested (Kyrgyzstan, Namibia).

Table 5: MDR-TB cases diagnosed by drug sensitivity testing (DST) and put on SLD treatment during 2010, 2011 and 2012 by country, as of June 2012.

Countries	Jan - Dec 2010		Jan - Dec 2011		Jan - March 2012		Apr-Jun 2012		Comments
	Number Diagnosed	Number put on Treatment	Number Diagnosed	Number put on Treatment	Number Diagnosed	Number put on Treatment	Number diagnosed	Number put on treatment	
Afghanistan	19	0	22	22	5	5	3	3	
Botswana	106	92	46	44	N/A	N/A	N/A	N/A	
Cambodia	31	41	56	83	N/A	N/A	18	29	# put on treatment includes confirmed and suspected cases
Djibouti	8	8	73	12	N/A	N/A	41	19	
Dominican Republic	108	108	85	85	N/A	N/A	54	56	
Ethiopia	140	85	136	214	16	91	24	60	
Ghana	14	2	10	1	0	0	0	0	
Indonesia	182	142	326	248	131	72	250	126	Jan-Mar 2012 cases include those diagnosed with Xpert
Kazakhstan	7,336	5,740	7,386	5,311	1,902	1,342	N/A	N/A	
Kenya	112	59	130	130	21	21	28	28	All diagnosed MDT-TB cases on treatment according to NTP
Kyrgystan	441	441	423	423	N/A	160	238	380	Only MDT-TB cases on treatment are registered. About 700 MDR-TB cases ar not on treatment and are not registered.
Mozambique	165	86	184	146	N/A	58	135	94	
Namibia	222	222	198	198	N/A	N/A	32	32	Diagnosed MDR-TB case unavailable due to electronic system which captures the number of samples tested rather than cases. TB CARE I is working with NTP and CDC to modify the R&R system.
Nigeria - OP	U	23	92	61	54	12	N/A	56	
Pakistan	203	203	344	344	N/A	N/A	256	256	
South Sudan	3	0	3	0	0	0	0	0	The NTP will only provide data once registration is complete
Uganda	86	9	71	71	7	0	8	3	
Uzbekistan	1,023	628	1,385	858	N/A	N/A	1,886	987	Cumulative data from Jan 1, 2012
Vietnam	202	101	N/A	578	N/A	1	N/A	176	Only reporting patients registered for treatment.
Zambia	N/A	N/A	N/A	N/A	N/A	176	N/A	N/A	M&E tools for PMDT are not yet available. The NTP has finalized the tools and TB CARE I plans to make them available in the next quarter.
Zimbabwe	40	27	108	73	37	38	33	12	
Total	**10,441**	**8,017**	**11,078**	**8,902**	**2,376**	**2,126**	**3,006**	**2,317**	

GeneXpert

GeneXpert is used in the routine diagnosis of HIV positive TB suspects and MDR-TB suspects. TB CARE I is helping to introduce and scale-up GeneXpert use in several countries. Routine testing has begun in Cambodia, Indonesia, Kenya and Nigeria and Vietnam. Table 6 shows the number of tests performed in the countries currently testing, as of June 30, 2012.

Table 6: Number of GeneXpert tests performed through June 30, 2012

Country	# Xpert tests performed	# Xpert tests TB positive	# Xpert tests Rif resistant
Cambodia	1006	245	25
Indonesia	751	472	184
Kenya	792	347	17
Nigeria	517	296	36
Vietnam	425	316	76
Total	3491	1676	338

***Cambodia TB and Rif positive tests are only based on the 846 samples tested in APA2 Q3.**

Routine GeneXpert testing is expected in Djibouti, Kazakhstan, Mozambique, Zambia and Zimbabwe in the coming months. Djibouti and Kazakhstan have completed the installation of their GeneXpert machines, and will begin testing following trainings planned for July 2012. Mozambique and Zambia are continuing the installation process. Zimbabwe is expecting their procured GeneXpert machines to arrive in the very near future. More details can be found in each respective country section. Table 7 below is a summary of GeneXpert instruments and cartridges procured through March 2012 and planned for Year 2 with TB CARE I funds. Since several countries experience delays in putting GeneXpert machines into operation after they have been imported, and some are faced with the risk of cartridges expiring. More information is available in the country section.

TB CARE I is also providing technical assistance for GeneXpert implementation in selected countries where machines are not procured through TB CARE I, including Kyrgyzstan, Uzbekistan and in August in Tajikistan.

Table 7: TB CARE I-funded procurements of GeneXpert instruments and cartridges (completed and planned in Year 2) as of June 2012

Countries	# Instruments Procured	# Cartridges Procured	# Instruments Planned	# Cartridges Planned
Afghanistan	0	0	0	
Botswana	0	0	0	
Cambodia	2	2,000	1	3,000
Kazakhstan	4	3,120	0	2,880
Kyrgyzstan	0	0	0	0
Uzbekistan	0	0	0	0
Djibouti	1	800	0	1,260
Dominican Republic	0	0	0	0
Ethiopia	0	0	0	0
Ghana	0	0	0	0
Indonesia	17	1,700	0	0
Kenya	3	1,000	0	1,450
Mozambique	3	1,500	0	0
Namibia	0	0	0	0
Nigeria	9	7,600	6	7,500
Pakistan	0	0	0	0
South Sudan	0	0	0	0
Uganda	0	0	0	0
Vietnam	11	2,700	6	10,000
Zambia	3	960	0	0
Zimbabwe	0	0	3	1,500
TOTAL	**53**	**21,380**	**16**	**27,590**

Tuberculosis in Children

As a part of the technical area of Universal Access, TB CARE I has been working to improve TB services in children. Activities include outreach through youth-focused messaging, establishing Technical Work Groups (TWGs) within countries who will be responsible for improving TB services among children, facilitation of workshops and meetings focused on TB in children, assessments of current practices, provider training, tool development and improvement of national policies.

With support from TB CARE I, Cambodia, Ethiopia, Vietnam and Kazakhstan are all updating national policies, programs, protocols and strategic plans to ensure that they appropriately address TB in children. Uganda and Ethiopia have held workshops and established TWG's with the objective of increasing momentum for the implementation and monitoring and evaluation of activities. Ghana, Tajikistan and Vietnam are reviewing training materials and conducting trainings to ensure that providers are better equipped to identify and care for children with TB.

Two TB CARE I core projects focus on TB in children. The WHO is working in collaboration with The Union to update WHO guidelines on Childhood TB management. A draft of the new guidelines has been circulated, and will be reviewed at a meeting in July, 2012. The Union is also conducting a Childhood TB Training of Trainers for staff from Namibia and Indonesia.

Each TB CARE I country will now be briefly discussed in turn below.

4.1 Afghanistan

MSH is the lead partner in Afghanistan with collaboration from WHO and KNCV; community-based DOTS activities are subcontracted to BRAC. The project works in universal and early access (UA), infection control (IC), health system strengthening (HSS) and M&E. Implementation of the Year 2 workplan began in January 2012.

During the period Jan-Mar 2012, 20,914 TB suspected cases were identified and examined in the 13 USAID supported provinces; a sustained trend since the third quarter of 2011. Of these suspected cases, 1,559 cases were determined to be sputum smear positive and 3,301 cases were of all types. Urban DOTS contributed significantly to this achievement, with 2,816 TB suspects identified; of them 316 were sputum smear positive and 713 were TB cases of all types diagnosed in Kabul province.

The follow up workshop of MOST for TB was conducted for provincial staff including provincial health offices' staff, PTCs, PLSs, NGO staff and CDC officers. In total, 54 (7 female, 47 male) staff from ten provinces attended these workshops. They identified their new challenges and priorities and prepared action plans to address them over the coming six months.

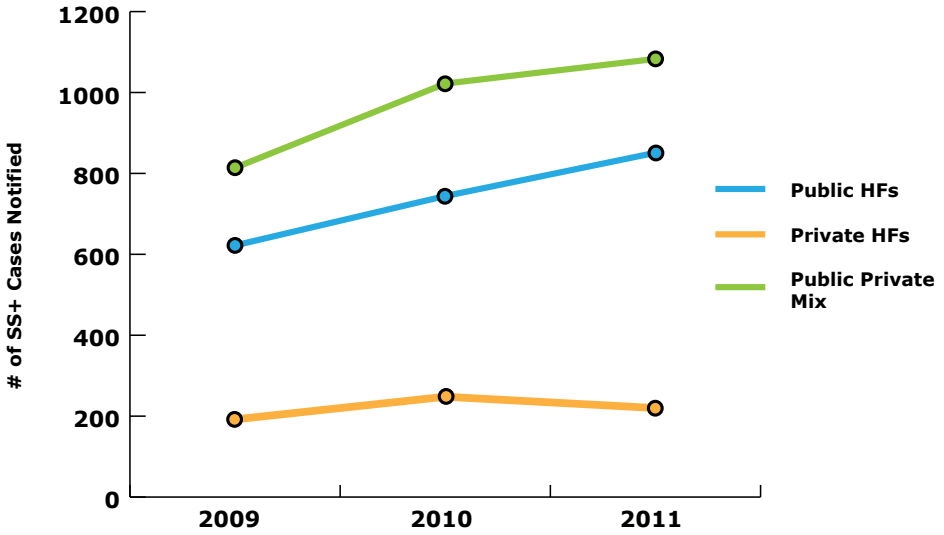
TB CARE I provided technical and financial assistance to the NTP to conduct SOPs (case detection and treatment) training for newly hired staff in 13 USAID supported provinces (TB CARE I intervention area) during the quarter. From April-June, 66 health facility (8 females and 58 male) staff from various facilities were trained.

TB CARE I initiated the on-the-job training manual, which was approved by the NTP. In the quarter, a total of 156 (6 female, 150 male) individuals from various health facilities in 8 provinces were taken on study tours to model DOTS facilities that were developed under TB CAP. The aim was to demonstrate to the health facility staff how the SOP works and how to increase early case detection and diagnosis, provide uninterrupted treatment to TB patients and follow up for those patients. This resulted in increased TB suspect identification and case notification; the TB suspect identification rose from 1,572 to 2,782 (a 76% increase) in Ghazni province this quarter compared to first quarter of 2012.

CB-DOTS implementation was contracted with local organization (BRAC) so as to ensure proper implementation in the field. The CB-DOTS implementation resulted in increased TB suspect identification and case notification in these provinces. During this quarter, 1,026 TB suspects were identified by CHWs in all 13 USAID supported provinces that makes 5% of all TB suspects in these provinces. Of them, 53 (6%) turned to be sputum smear positive TB cases. Urban DOTS was expanded to three additional public health facilities, thus, the total number of facilities covered by DOTS reached 62. Facility staff were oriented on DOTS with 21 individuals (5 female, 16 male) attending a 5 day training course. The NTP recording and reporting system was introduced and DOTS packages were delivered to them. 45 visits were conducted to ensure appropriate DOTS implementation and during these supervisory/monitoring visits on-the-job training was provided.

The Global Fund Round 8 Phase I was completed at the end of Sep 2011 and so far Phase II has not been approved. This presented a challenge to the NTP and partners specifically with delays in implementation and reduced motivation of the NTP staff. Phase II approval is anticipated for late April 2012, however further delay will impact the essential activities of the NTP including shortages of drugs, commodities, reagents and staff. Global Fund Round 10 for Afghanistan (PR: JICA) was approved and activities began late March 2012. Global Fund Round 10 was designed to complement Round 8, and cannot close the gap that was identified in the Round 10 proposal.

Figure 3: Contribution of Urban DOTS in new SS+ TB Cases in Kabul, 2009-2011



4.2 Botswana

KNCV is the lead partner and sole implementer in Botswana. In Year 2 the project focuses on universal and early access and laboratories. The in-country technical advisor facilitated harmonization of TB/HIV training tools, conducted supervisory visits to 2 districts (14 facilities) to strengthen CTBC implementation and supported PPM policy framework finalization. The Senior Technical Advisor has also been involved in the development of strategies and tools to scale up the implementation of community TB care: integration of community based HIV and TB care programs, harmonization of related tools, scale up of patient-centered-treatment (PCT) approach in selected districts, supervision visits to districts to strengthen DOTS implementation.

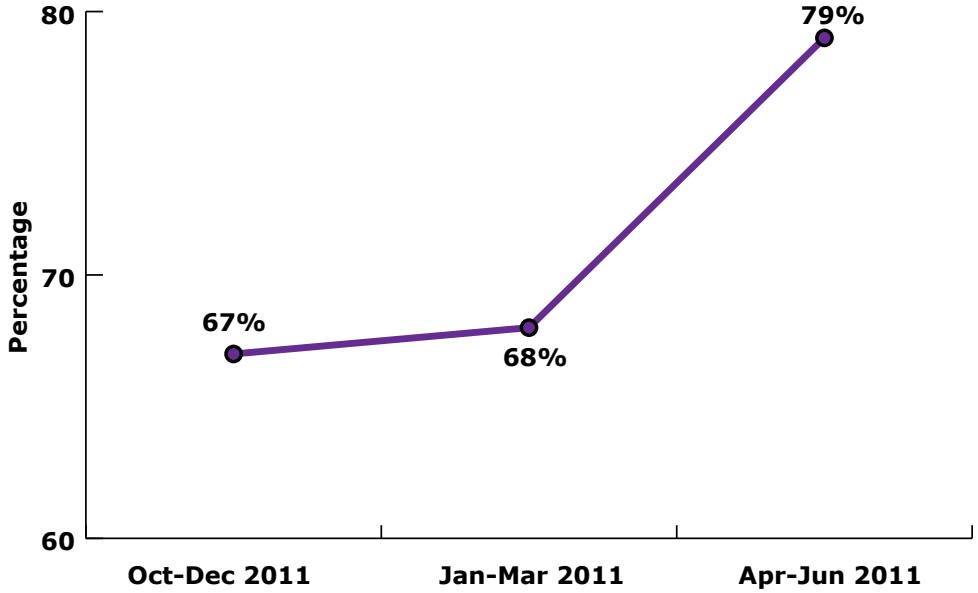
TB CARE I provided technical input in collaboration with partners in the conducting of an LED Fluorescent Microscopy pilot workshop in May 2012 which trained 10 technicians (6 female, 4 male) and has supported the roll out and installation of LED microscopes to 10 high workload smear microscopy sites. Through a core project mechanism with support from two KNCV consultants, CDC Atlanta and a budget expert, a second workshop supported the development of a draft TB specific laboratory strategic plan for Botswana and the development of a strategic planning handbook for TB labs. The National Reference Laboratory (NRL) will work towards finalizing the strategic plan and its endorsement by the MOH.

4.3 Cambodia

JATA is the lead partner in Cambodia, with collaboration from FHI 360, KNCV, MSH and WHO. The project in Year 2 has activities in seven TB CARE I technical areas (UA, Laboratories, IC, PMDT, TB/HIV, HSS and M&E).

The Public Private Mix (PPM) project showed marked improvement during this quarter. The proportion of referred TB suspects reporting to public health facilities increased from 67% in Q1 to 79% during the reporting period. Similarly, the number of TB cases diagnosed among referred suspects increased from 43 to 78 cases - an increase of 45% (see figure 4).

Figure 4: Proportion of referred TB suspects reporting to public health facilities (%)



The joint TB CARE I and CENAT peer-review team visited three randomly selected districts (ODPs) to assess the overall performance of the TB program, including data verification and patient interviews. The overall scores for consistency between the register and the quarterly report was 100% for case-finding and 64% for treatment outcomes. The overall score for completeness of the OPD register for case-finding was 96%, while the score for timeliness of starting TB treatment (within one week of diagnosis) was 68%.

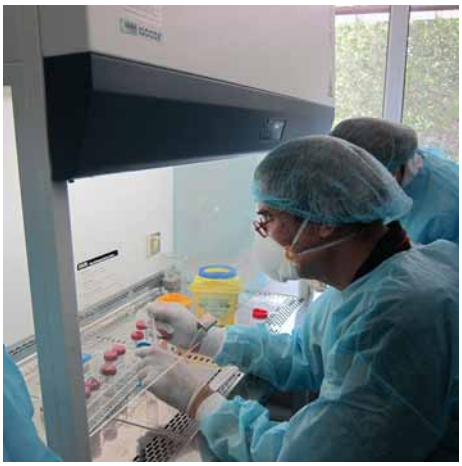
Website development for the NTP was completed and the site was launched on 29 June 2012- www.cenat.gov.kh. CENAT organized a small function to mark the occasion which was attended by most NTP partners. TB CARE I has handed over management of the website to CENAT but will continue to contribute to articles and entries, to keep the contents up to date.

During this quarter, Xpert/MTB RIF assay was used for testing 849 samples, bringing the total number of samples in Cambodia tested to 1,006. 29% (245/849) tested MTB positive including 25 samples which were both MTB and RIF positive. The error rate was 5.1%, down from 7.4% error rate when the test was first used for active case finding in prisons.

Global Fund Round 7 Phase II grants were finally disbursed in May 2012 after a delay of around 1 year due to prolonged negotiations for phase II.

4.4 CAR-Kazakhstan

KNCV is the lead and sole implementer of TB CARE I activities in all four Central Asian Republic (CAR) countries: Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan. There is also a small CAR regionally-funded project which is discussed on page 36. All three CAR country projects have activities in the eight technical areas (UA, laboratories, IC, PMDT, TB/HIV, HSS, M&E and drug supply and management). All four of the CAR countries received approval for the Year 2 workplans in May, 2012.



Laboratory professional shows preparation of sputum samples for XpertMTB/RIF to training participants

In June, a mission in the Akmola oblast to assess the needs and opportunities for piloting an outpatient care model in the oblast was conducted. The mission emphasized strong political commitment for the expansion of outpatient care and sufficient existing framework to build on. During the mission, preliminary agreements were secured jointly with TB services, regional government and other stakeholders to set up a taskforce and develop the protocol for the outpatient care model introduction by September 2012. The mission also focused on the establishment of a customized patient support system. Agreement was reached with Akmola partners to develop a protocol, utilizing a patient centered approach, as part of the outpatient care model.

Four GeneXpert machines and 3,120 cartridges were procured and shipped to Kazakhstan in April 2012. Additional supportive equipment for safe GeneXpert functioning was procured in May-June, 2012 (4 printers, 4 UPS, 8 additional batteries for UPS). The machines will be distributed among four facilities in Almaty, Akmola and East Kazakhstan oblasts. To prepare managers, clinicians and lab specialists for the utilization of the new technology, a four-day TOT workshop and training on the practical use of Xpert MTB/RIF was conducted in Almaty on June 19-22 for 23 representatives (18 female, 5 male) from general and prison TB services at the project sites. The trainings were delivered by the PMU Laboratory Consultant and PMDT Consultants, a lab consultant, joined by CAR Regional Lab Officer Bela Kim. As a result, the trained specialists are ready to operate the machines when they are shipped to sites in late July 2012.

One-day workshop was conducted in Almaty on June 20, 2012 for 14 specialists (12 female, 2 male) from the national and oblast (Akmola oblast, East-Kazakhstan) TB control programs. During the workshop, TB CARE I facilitated the finalization of new MDR protocols that provide a more structured, comprehensive and detailed guidance on MDR TB management, including TB/HIV, TB in Children and other components. These protocols will now be reviewed by the NTP and will be the basis for new amendments to MDR-TB Order #218 expected to be released later in 2012.

TB CARE I's Regional M&E Officer and Technical Officer conducted a workshop on operational research on the effectiveness of patients support in EKO for 17 participants from National TB program, regional TB dispensary and interviewers in Oskemen. A plan of OR implementation was agreed upon, responsibilities were assigned among research implementers and the data collection process was initiated.

4.5 CAR-Kyrgyzstan

Consensus on the development of a midterm plan for implementation of integrated framework for TB control in prisons was achieved during a workshop conducted between key stakeholders, including the Prison Service, NTP and partners in May of 2012.

A TWG on GeneXpert MTB/Rif implementation was established in April of 2012. The TWG consisted of partners implementing GeneXpert: TB REACH, MSF and QHCP. The TWG Supervisor is the Director of National Reference Laboratory. The regional lab specialist and an M&E specialist facilitated the workshop with 23 participants (12 female, 11 male).

A workshop for the GeneXpert Technical working group was conducted in May, 2012. 16 participants (11 female, 5 male) took part in the meeting to develop a National Strategy for Xpert implementation. A PMU lab specialist and two regional specialists on GeneXpert facilitated this workshop. The GeneXpert strategy and revisions to clinical protocols are in the final stages of development.

In May the TB CARE I CAR director made an visit to the KNCV office in Kyrgyzstan. During the visit he participated in the Coordination Council and met with partners.

4.6 CAR-Tajikistan

TB CARE I started its activities in Tajikistan from May 2012. Two key activities that were completed included the registration of the KNCV Branch Office. The country Director was hired from June 10, 2012. She attended the PMU Workshop in Almaty, Kazakhstan on June 10-13, 2012. Participation in the Workshop helped her to better understand the main aspects of M&E approaches, financial management principles, KNCV policy and regulations.

As TB CARE I started implementation of activities in Tajikistan, TB CARE I regional team conducted assessment mission on June 3-10, 2012. The main objective of the mission was to analyze the progress of TB control in general and penitentiary health sectors and to discuss priority directions in TB control for further planning and implementing TB activities under TB CARE I in the country.
Two project sites - Dangara, Temurmalik (recommended by NTP/MOH) were visited during the mission. Priority interventions at NTP level as well as at district level have been discussed at a round table with involvement of NTP authorities and key partners by the end of the mission.
As a result of this assessment mission, a set of recommendations was made for TB CARE I activities in Tajikistan, including on TB in prison, PMDT, TB-HIV and outpatient care.

4.7 CAR-Uzbekistan

Due to the delayed registration of the KNCV branch office, TB CARE I secured USAID's approval to implement activities in Year 2 through WHO. The Year 2 workplan was approved in May 2012, and activities began immediately.

The TB CARE I Program Director visited Uzbekistan on June 15-19 to provide programmatic support to the TB CARE I country unit and build a relationship with the NTP and partners working in TB control in Uzbekistan. During the mission, APA3 plans were discussed with key partners.

A TWG on Xpert MTB/Rif implementation was established at the beginning of June. Three NTP representatives were appointed as TWG members. All the arrangements for the workshop of TWG on Xpert MTB/Rif strategy development were made in June and the workshop will take place in Tashkent 10-12 July 2012.

Draft MoU between the WHO and the Ministry of Interior was forwarded to the Ministry of Foreign Affairs for review to ensure the smooth implementation of TB CARE I project activities related to prisons. It expected that MoU will be finalized in July and signed in August 2012.

Three participants (2 NTP representatives and 1 person from TB CARE I) were selected to participate in The Union - Europe Conference in July 2012.

4.8 Djibouti

WHO is the lead and sole implementer of activities in Djibouti. The Year 2 workplan focuses on UA, laboratories, PMDT, HSS, M&E and drug management. New TB treatment regimens in line with the new WHO guidelines were developed and were submitted for the approval of national stakeholders during a workshop organized by the NTP. The workshop was organized by the MOH with funding from the World Bank and TB CARE I provided technical assistance. The treatment revision was decided by the MOH upon recommendation from WHO/TB CARE I.

The GeneXpert 4-module instrument and the first installment of cartridges with all related complementary equipment were procured. Training on the use of the device has been arranged with CEPHEID for 5 days starting 16 July 2012. Training of the physicians on the use of the diagnostic algorithm has also been scheduled for July 2012. The Djibouti team (TB CARE I and NRL) attended the TB CARE I regional Xpert workshop in Mombasa in May. After the training of both physicians and lab technicians, tests will be performed starting next quarter.

After TB CARE I funds were made available, supervisions, which had been regularly conducted using other financial sources, were conducted using TB CARE I funds. The supervisions were carried out using the TB CAP developed supervision guide and checklist.

An annual analysis of the main TB indicators for 2011 was carried out using the data gathered through the national TB surveillance and recording and reporting systems. The same analysis was carried out for Q1 2012. The two were put in a national quarterly report, the first of its kind of a newly established regular series. The analysis was performed with TB CARE I technical assistance. By the time of reporting the analysis is going through the required administrative procedures to be sent as a feedback to the 6 districts, which constitute the lower and lowest level in respect to the national level. This level includes the 16 TB management units. The analysis focuses on the districts' results compared with the national level and between districts. The analysis also highlights achievements and challenges at national level and also by district.

4.9 Dominican Republic

KNCV is the lead partner and sole implementer in Dominican Republic. Activities are conducted in UA, IC, PMDT, HSS and M&E. Year 2 implementation began in May, 2012.

Inauguration of the Stop TB Committee of the Armed Forces General Hospital.

Integration of the Army´s Hospital and School Teachers Hospital Stop TB Committees was a major achievement of this quarter. This gives a great opportunity to develop activities with the population of the hospitals and their institutions. SEMMA is the Medical Center for Teachers of elementary, primary and high school, with over 60,000 members.

Coordination between the MOL and TB CARE I have begun to include basic TB IC Measures and Airborne Control in Congregated Settings Information in the curricula of the School of Hygiene and Safety of the Ministry of Labor for the training of their Supervisors. The MOL has the responsibility to ensure that workers perform their duties in a safe and sanitized space. For the first time such information could be included as part of the requirements to the corporate sector to take into account. Sensitization meeting was held with Managerial and Technical Level Staff. Further collaboration with the MOL and the MOH is needed for consolidation.

Four facilities have completed the development of their TB IC strategies, including the budgets and monitoring systems. The establishment of these plans in the remaining six facilities will continue in the upcoming quarters.

4.10 Ethiopia

KNCV is the lead partner in Ethiopia, working closely with collaborating partners MSH and WHO, as well as subcontractor German Leprosy and TB Relief Association (GLRA). The Year 2 workplan has activities in all eight technical areas.

Tuberculosis Unit renovations at Gondar University Hospital, Ethiopia to make improvements in the TB-IC.

TB CARE I sponsored the national childhood TB consultative workshop. Capacity building of selected Civil Society organizations (CSOs) in Addis Ababa region where TB burden is highest was conducted by training a total of 41 (40 female, 1 male) participants from three CSOs on basic TB. The purpose of the training was to strengthen the engagement of CSOs to contribute to TB case detection, education & raising awareness as well as improving treatment adherence. At the end of the training, participants developed an action plan and the strategies include:

- Awareness creation & sensitization through group discussion and individual house to house visits
- Dissemination of IEC materials
- Improvement of early case detection through identifying those with symptoms of TB, as well as contacts of TB patients advise/ refer to HFs for evaluation
- Support adherence to treatment
- Identify and link defaulters to facilities through providing education and assistance.

It was also agreed to conduct regular joint monthly meetings of stakeholders under the leadership of the health

bureau. The objective of the monthly meeting is to follow up and assess the progress of the planned activities, challenges and the way forward.

A four day workshop on strengthening AFB microscopy and EQA was organized in collaboration with EHNRI to discuss how to strengthen AFB microscopy and EQA in Ethiopia and to review the existing national AFB microscopy and EQA guidelines. The regional laboratories presented their performance report on AFB microscopy EQA, challenges and the way forward. The lack of transport for slide collection, the shortage of human resource at regional laboratories to supervise the health facilities, the shortage of quality microscopes, the shortage of supplies (slide box, frosted slides, reagents), poor quality staining solutions, and the lack of specially training on EQA data management were among the major challenges presented in the workshop.

12 health facilities from Oromiya region, one of the major regions of the country, joined the pool of health facilities implementing TB IC activities. They now have a focal person, plan, budget and monitoring mechanism for TB IC implementation. The TB IC training conducted with the support of TB CARE I served as an opportunity to prepare these facilities for MDR-TB activity.
TB CARE I in collaboration with FMOH organized a serial of panel discussions with various congregate settings (elementary & high schools, universities, cinema & theatre houses and the transport sector). This has given the stakeholders an insight on the basics of TB, TB/HIV, TB IC measures, MDR TB and the significance of adherence to treatment in order to curb the emergence of MDR-TB.

TB CARE I supported Addis Ababa health bureau to organize three rounds of workshops to assess the implementation of the 6-months rifampicin first-line regimen instead of the 8-months ethambutol based regimen and DOT. A total of 93 (52 female, 41 male) participants from public health facilities, private facilities, the sub city health department and the regional health bureau attended the workshop. The outcome of this workshop will be used as an initial document to continue the evaluation of the regimen shift nationwide.

4.11 Ghana

MSH is the lead partner in Ghana with support from KNCV and WHO as collaborating partners. The Year 2 workplan focuses on UA, laboratories, IC, TB/HIV, HSS and M&E.

In response to the general low TB case detection in Ghana and specifically in the Eastern Region, TB CARE I trained 123 health care workers (84 female, 49 male) in the implementation of hospital based intensified TB case finding. The hospital teams developed TB case detection mini plans with clear goals and targets, as well as coming up with individual hospital TB teams. Participants were also oriented on the completion of the TB suspect registers that are now placed in the main hospital departments.

Participants in a practical session performing sputum microscopy at Koforidua Regional Hospital Laboratory in the Easter Region.

During the first month (May 2012) of implementing hospital intensified TB case finding a total of 33,325 clients/patients were registered at the OPD in these six hospitals, 243 (7%) had their sputum examined and 30 (12%) were smear positive. During the first four months of 2012 (January to April) before staff were trained, an average of 175 TB suspects were examined for AFB and 21 were notified as having smear positive TB. TB CARE I in collaboration with the NTP Central Unit, the Regional TB Coordinator for Eastern region is mentoring, coaching and supporting monthly monitoring and supervision as part of building capacity in conducting effecting supervision in these districts. The processes for introducing the hospital based TB case detection will be shared with all the other regions so this becomes a national approach to increase TB case detection.

Quality assurance performance in TB microscopy in the Eastern Region had decreased. To address this, TB CARE I supported the training of 24 microscopists (1 female, 23 male) one from each TB diagnostic center. The national target for performance in TB microscopy is 80% and the microscopists are falling short of this target with a score of 61%. Staining quality of smears was good with an average of 83%. All other parameters were below the 80% target though there was an improvement in sputum quality (54%) compared to the 2011 third quarter EQA performance of 51%. There was also an improvement in performance for size (79%) and evenness (64%) of smears compared to the2011 third quarter EQA where performance scores were 53% for size and 57% for evenness. TB CARE I will support the Regional TB laboratory Supervisors and the NTP Central Unit Laboratory Focal Point to monitor the quality of TB microscopy after the training.

Validation the first draft of the TB guidelines for Ghana was successfully undertaken by a team comprised of all the NTP Central Unit staff, TB CARE I and WHO. Key observations included some chapters and technical areas lacking

clear objectives and strategies as well as that in some instances specific activities are not outlined and no clear guidance as who will carry out those activities. It was also recommended that the TB guidelines should include the following areas: Integrating TB into the maternal, newborn and child health, urban DOTS and improve clinical care of TB patient's concomitant diseases. The comments are being incorporated, taking into consideration other existing guidelines/manuals and SOPs to assure standardization practices.

4.12 Indonesia

Indonesia is the largest of the TB CARE I countries in terms of financial obligations ($10 million per year); KNCV is the lead partner with collaborating partners ATS, FHI360, JATA, MSH, The Union and WHO. TB CARE I-Indonesia works in all eight technical areas.
In addition to the current five GeneXpert sites, seven new sites are prepared for GeneXpert implementation. TB CARE I facilitated the diagnosis of four MDR-TB suspects in inmates from West Java prisons by GeneXpert. Three of the suspects were TB positive and rifampicin resistant and were transferred to Daerah Khusus Ibukota (DKI) prison for treatment in Pengayoman Hospital in DKI. As of 30 June 2012, a total of 751 of suspects were examined using GeneXpert. Out of them, 472 were diagnosed with MTB, of whom, 184 were confirmed as rifampicin resistant. However, immediate enrollment for treatment remains a challenge; only 79 patients were directly enrolled for treatment after GeneXpert diagnosis. Reasons given for this slow enrollment include:

1) diagnosis of certain groups needs to be confirmed through drug sensitivity test (DST)
2) patients are still in pre-enrollment phase
3) limited ward capacity.

Although not in line with WHO and TB CARE I recommendations, the Indonesian national clinical expert team has advised that a GeneXpert rifampicin-resistant results should be confirmed with conventional DST in certain suspect groups before they can be started on second-line treatment. This is caused by a fear of misdiagnosing these suspects with isoniazid resistance and starting them unnecessary on toxic therapy. This issue remains under discussion.

TB CARE I intensively assisted and supported the NTP in meeting Global Fund Conditions Precedent 2012, including the development and implementation of a web-based TB case and logistics recording and reporting system. This system is called SITT (System Informasi Tuberculosis Terpadu/Integrated Tuberculosis Information System). All 33 provinces now have one trained TB focal person (wasor) who is able to utilize this information system. Currently TB district TB wasors are trained as system end-users by these provincial focal points. By June 30 2012, 368 districts out of 497 districts in Indonesia (74%) have their TB case-based and logistics registers uploaded to the SITT, which are now available and accessible online.
During this quarter, 13 large hospitals in TB CARE I supported areas initiated implementation of DOTS. The APA2 target to engage 42% of the hospitals in NTP was achieved. TB CARE I support this quarter was aimed at improving DOTS implementation quality in existing DOTS hospitals; including technical support, on the job training, and supervision to selected general hospitals. Next step is to speed up DOTS expansion to 20 more hospitals.

In-patient room for MDR patients in Pengayoman Hospital. Before (left) and after (right) advocacy and TA from TB CARE I.

An exit strategy guidelines developed by MOH with support of TB CARE I was published and distributed in April 2012. This document outlines strategy and steps to be taken by the NTP at all levels to ensure continuation of control activities during and after the phasing out of external support. This guideline will be part of the National Exit Strategy document including the results of Cost Effectiveness Study (Available by the end of July 2012) and exit strategy indicators.

TB CARE I assisted the Medical Services Department of the MOH to finalize the National TB IC guidelines. Printing will happen in the last quarter of APA2.

4.13 Kenya

KNCV is the lead partner in Kenya; MSH is the only collaborating partner. Sub-agreements are in place with the Kenya Association for Prevention of TB and Lung Diseases (KAPTLD) and Kenya AIDS NGOs Consortium (KANCO). As of Year 2, the project conducts activities in all eight technical areas; Year 2 workplan implementation began in January 2012.

TB CARE I support of supervision at all levels (national, regional & district) plays a pivotal role in the implementation of TB Control activities in Kenya. During the reporting period, TB CARE I supported supervision at all levels in all provinces. As part of the process of development of the patient-based electronic TB surveillance system in Kenya, Draft Data Management Manual was developed with technical assistance provided by a KNCV consultant during the reporting period.

The Division of Leprosy TB and Lung Diseases (DLTLD) in the Ministry of Public Health is in the process of being accredited by ISO 9001:2008 standards. This activity is one of the top priorities not only for DLTLD but also for the Ministry. This certification will make the NTP a well-organized, accountable and transparent entity of the Government of Kenya in designing policies, coordinating national level activities, resource mobilization and appropriate utilization. TB CARE I has been supporting this process. The process requires that two audit sessions be conducted by the Kenya Bureau of Standards before the ISO certification is achieved. During the reporting period, the first stage of audit was conducted. Recommendations made after the first stage of audit are being addressed in preparation for the second stage of audit planned for next quarter.
TB CARE I has been supporting the DLTLD to improve TB case detection; including smear-negative disease often associated with HIV as well as expanded capacity to diagnose MDR-TB. From October 2011 to June 2012, a total of 792 samples have been tested by MTB/Rif Xpert in Coast province, with 172 tested in this quarter. In total, 347 cases were MTB positive, 57 of these were new TB cases and 17 were Rifampicin resistant. All the Rifampicin resistant cases were put on standardized second line TB treatment.

TB CARE I continues to support EQA activities in all the regions countrywide. The DLTLD staff carry out sampling of slides, blinded rechecking of slides as well as providing feedback to the health facilities. This support has resulted in increased countrywide EQA coverage from 78% (October to December 2011) to 86% (January to March 2012). The proportion of high false errors remained below 5%, making an overall performance of more than 95%.

4.14 Mozambique

FHI360, the lead partner for Mozambique, has combined the two TB CARE I workplans in Year 1 to a single workplan for Year 2. FHI360 works with collaborating partners KNCV and MSH and has activities in Universal Access, Laboratories, IC, PMDT, HSS and drug supply and management.

A total of nine implementing agencies are implementing Community-Based DOTS (CB-DOTS) activities in 45 districts. The 11 motorbikes procured by the project in its first year (APA 1) were distributed to the NTP and CB-DOTS implementing agencies during this quarter to strengthen the capacity of TB District Managers to conduct supervision visits, default tracing, and to provide technical assistance to the health facilities and CB-DOTS volunteers. Three agencies trained a total of 157 community activists (39 female, 118 male). Of these, 104 are community volunteers and 53 traditional healers. Trainees referred 9,622 TB/Malaria suspects to health facilities. 838 were diagnosed as SS+, 556 as SS-, and 67 as having Extra-pulmonary TB. Of the total TB patients, 213 are TB/HIV co-infected representing a co-infection rate of 14.6% of all referred patients during this quarter. Out of the total suspects referred by community volunteers, 3,359 were diagnosed as having active malaria, reflecting about 35% of all suspects referred.

TB CARE I in close coordination with the NTP conducted three Advocacy, Communication and Social Mobilization (ACSM) regional workshops. A total of 87 people (26 female, 61 male) participated, comprising of MOH staff (NTP provincial and district supervisors, provincial and district representatives for communication and public health), implementing partners and other health partners supporting the MOH in TB control. At the end of the training, each province developed its ACSM plan, integrated into one regional plan and will be included in the government led Provincial Health Sector Strategic Plan (PESS). These provincial plans will be incorporated into the National TB strategic Plan which is being developed with support of TB CARE I.

Rehabilitation of the Cuamba Rural district hospital is complete. The laboratory structure has been upgraded to fit the requirements of a standard clinical laboratory. Biosafety measures for AFB smear microscopy have been improved, and conditions created for the installation of GeneXpert machines. A quick assessment was conducted in two other sites where GeneXpert machines will be installed, and the conditions at those sites were considered to be adequate for the installation. Minor rehabilitation of the main laboratory in Pabane district in Zambezia Province has also been completed for AFB smear microscopy. The newly rehabilitated AFB smear microscopy unit will improve the biosafety and overall work conditions of the staff. The laboratory is expected to cover 206,000 inhabitants.

An integrated supervision visit (clinical and laboratory) was conducted in Zambézia province in June. The team provided technical assistance to the newly appointed provincial laboratory supervisor and his team in several aspects including laboratory management, quality assurance, referral of MDR-TB samples, and calculation of the annual consumption of reagents and supplies for AFB smear microscopy. As Zambézia is one of the provinces

selected for allocation of GeneXpert, a presentation on new TB diagnostic tools (GeneXpert) was made to the staff, followed with a discussion session.

TB CARE I and other PEPFAR partners provided technical and financial support to a CDC-led assessment of MDR-TB notified patients from 2007 through 2011. Verification of registry information about case management and treatment results was conducted. The TB CARE I project will also support data entry and analysis for the study. The study results will inform the development and finalization of the National PMDT strategy.

Support was also provided to the NTP at central level in carrying out provincial supervision visits. This quarter, five visits were conducted to five provinces by both NTP and TB CARE I staff. The WHO National Program Officer supported in the publishing of the TB epidemiological report for WHO and SADC. The data collection for WHO TB planning and budgeting tool for Mozambique has been completed and the WHO NPO officer will include findings in the APA3 workplan development.

A national three day workshop for Annual Forecast and Quantification (F&Q) of TB Drugs was conducted by NTP with support from the TB CARE I Drug Management Specialist. Support was also provided to the NTP in obtaining an advance procurement of anti-TB drugs from the MOH in order to avert an imminent stock out. Another key achievement was the review of Logistic and Management Information System (LMIS). Additionally, a new tool/ report was developed for second line drugs.

4.15 Namibia

KNCV is the lead partner and sole implementer in Namibia under TB CARE I. Activities are implemented in UA, IC, PMDT, TB/HIV, HSS and M&E. Implementation of the Year 2 workplan is ongoing.

TB CARE I Namibia continues to provide support to the NTLP through technical assistance. Representatives from TB CARE I participated in NTLP meetings to consolidate 2012 plans and review implementation progress. This was a part of the joint planning and review process, and the continuation of these meetings has helped focused implementation of APA2 throughout the quarter.

A total of 66 (60 female, 6 male) participated in the annual retreat for CBTBC workers. This group included field promoters, supervisors and district TB and Leprosy coordinators. The two and a half day event was held in Windhoek.

Members of the Tsumkwe constituency marching to the World TB Day commemoration venue in Tsumkwe, Picture by Penny Uukunde (ACSM Technical Expert, NTLP).

TB CARE I hosted a number of trainings, including a 5-day international PMDT training in Walvis Bay, Erongo region; 19 (8 female, 11 male) attended this training, through collaboration with The Union. TB CARE I, in coordination with ITECH, facilitated training of 14 nurses (3 female, 11 male) from the Ministry of Defense as well as for 15 doctors (4 female, 11 male) from the private sector. In addition to these trainings, TB CARE I facilitated a TB/HIV TWG meeting that was focused on TB/HIV OGAC proposal development/implementation. TB IC planning and review meetings were held with 27 (20 female, 7 male) TB IC focal persons. Finally, TB CARE I engaged private practitioners in TB, and TB/HIV care through CME sessions in Erongo region; a total of 15 (5 female, 11 male) attended the CME session with support from TB CARE 1.

Supportive supervision was a major activity of the quarter. Consultations for DR TB cases with district and regional teams through Central Clinical Review Council (CCRC); all planned CCRC weekly meetings were held during the quarter. This allowed the regions to timeously commence DR TB patients/suspects on second line TB medicines as well as reviews of noneffective regimens. The project supported ambulatory care for TB patients through support visits from 2 national level staff during the quarter. This also provided an opportunity for on-site supportive supervision and participation on a delayed commemoration of the World TB Day in the constituency.

4.16 Nigeria

KNCV, is the lead partner for Nigeria and works closely with collaborating partners, FHI 360, MSH and WHO. These partners are implementing two workplans: one for TB and the other for TB/HIV-funded activities through PEPFAR.

TB Workplan:
The Year 2 TB workplan began implementation in March 2012 and focuses on UA, laboratories, PMDT, HSS and M&E.

Universal and early access had notable achievements in the quarter. PCA activities, including the sensitization of stakeholders in the selected states, have commenced. Ethical approval for the activity has been received from the

national ethics committee. Forty DOTS and 20 Laboratory centers were established PPM sites in 2 States. Trainings were conducted in the States for a total of 78 GHCWs (29 female, 49 male) and 29 laboratory staff (10 female, 19 male). These sites were linked to the States TBLCP for effective implementation; however laboratories are awaiting microscopes.

TB CARE I supported the coordination of the implementation of GeneXpert/NTB Rif by all partners/stakeholders during the quarter, to ensure strategic expansion and, utilization of standardized R&R and training materials. One more GeneXpert machine was installed and operational in June 2012, bringing the total number of GeneXpert machines in Nigeria to 9.

As part of TB CARE I support for strengthening M&E system, mentoring visits were conducted in five challenged states within the quarter, follow-up visits are schedule for July/August. Upstream support was provided to the NTP in the organization and conduct of the state program managers re-treat. The meeting discussions centered on DR TB especially on the need for referral for diagnosis and enrollment for treatment at designated center. The role of program officers for patient management was also discussed, especially for patients discharged for ambulatory treatment.

TB CARE I provided technical assistance during the TB/HIV strategic framework development workshop; resulting in a draft national TB/HIV strategic framework. TB CARE I supported the NTP in the harmonization of DR TB R&R tools to aligned with GeneXpert/MTB Rif and global WHO and TB CARE I reportable indicators. The tools were finalized and currently awaiting printing and distribution. Additionally TB CARE I supported the Nigerian Thoracic Society (NTS) conference on TB and other chest infections. The conference provided an opportunity for the NTP to update participants on TB programmatic approaches and the current management of MDR-TB including the use of GeneXpert/MTB Rit.

CTBC activities were implemented in some of the supported Local Government Areas (LGAs) include community mobilization, sensitization and referrals by CVs. These activities were primarily led by the umbrella CBOs with support from FHI 360 staff. The community mobilization activities witnessed a sizeable turn out of the general population which provided the forum to educate them on TB and other related disease areas as well share information on available TB services within the LGA. Only a few LGAs held monthly M&E meetings within the quarter due to delayed project start up processes which affected implementation. Five quarterly LGA management CTBC meetings were convened within the quarter with representation cutting across CTBC committee members, key traditional, religious and political leaders. The focus of these meetings were issues revolving around strengthening linkages with established TB microscopy and DOTS centers ultimately geared towards increased case detection, early diagnosis and treatment.

TB/HIV (COP) Workplan:
The Year 1 TB/HIV workplan, which runs through June 2012, focuses on IC, PMDT, TB/HIV, HSS and M&E. A TB IC training of clinical and support staff of University College Hospital was conducted and TB IC committees were established in 15 TB CARE I project sites.

Major achievements during the quarter include an increase in the number of facilities sensitized on IC and supported to develop IC plans over previous quarters. In total 627 (627 female, 282 male) staff of health facilities were sensitized on IC during the quarter in which 45 IC plans were developed.

Other key achievements attained during the quarter especially following the disbursement of funds include the renovation of 34 health facilities and 16 laboratories. As a routine ongoing activity every quarter, the twenty six states supported by TB CARE I for of TB/HIV activities were supervised; the NTP instituted the quarterly supervision coordination meetings where all relevant TB stakeholders come together to deliberate and address priority issues arising from all supervisory visits in a systematic manner.

4.17 South Sudan

MSH is the lead partner in South Sudan and works closely with collaborating partners KNCV and WHO. TB CARE I-South Sudan implements activities in UA, laboratories, PMDT, TB/HIV and HSS. Year 2 activities are ongoing.

To improve on quality of services, TB CARE I has continued to support comprehensive visits comprising of clinicians and laboratory personnel to existing and new diagnostic and treatment centers. In total 2238 of all forms of TB and 773 new smear positive cases of TB cases were notified in period 1st January – 31st

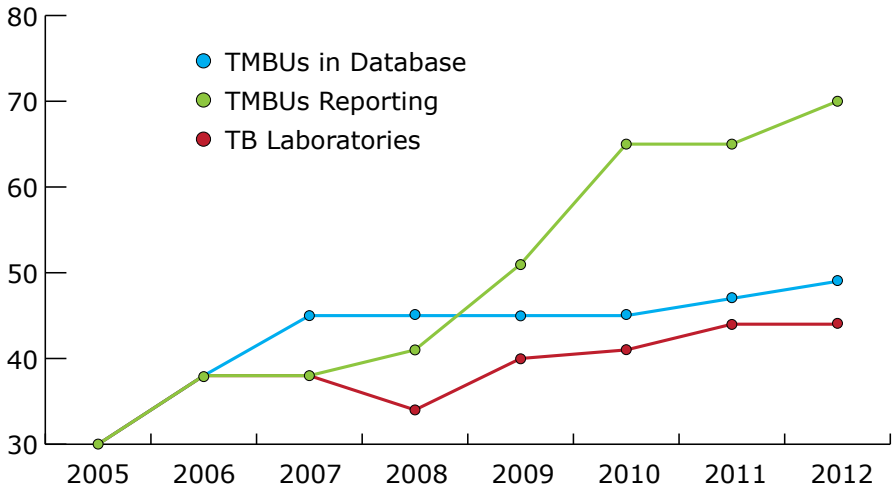


Figure 5: Trends in number TB laboratory coverage in S. Sudan 2005 - 2012

March 2012, which is a 23% and 15% increase respectively when compared to previous quarter. Only 70% (34/48) of the expected facilities reported during the period January – March 2012. An effort is being made to increase on DOTS coverage through integration of TB services into routine PHCC programs. Currently the number of TB diagnostic centers has increased from 65 to 70.

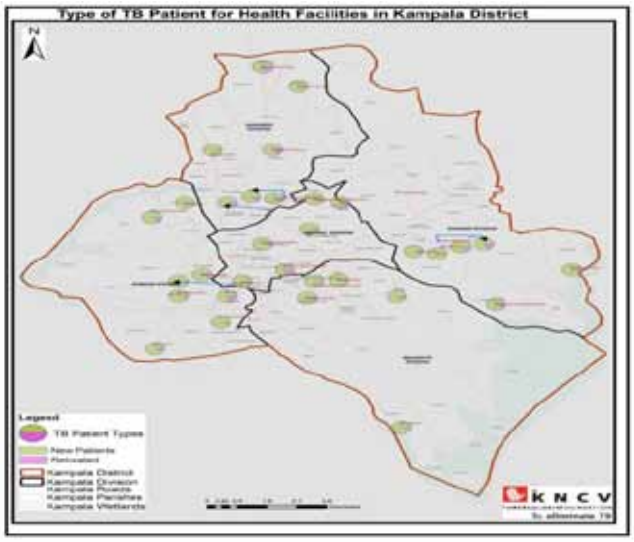
Strengthening of TB laboratory networks by establishing IQC systems in peripheral laboratories of the Central Equatoria State continues. A follow up to the baseline assessment was conducted in 7 out of 7 (100%) laboratories in CES and the information entered into a database. Evaluation of the recommendations given during the baseline visit showed an improvement in quality of TB laboratory services and health workers are motivated through on-job trainings and availability of laboratory equipment and reagents. The laboratory health workers in Yei civil hospital have integrated TB diagnosis into their routine services and all staff now follow a duty roster when performing duties in the laboratory. The capacity of laboratory staff to carry out quality TB diagnosis continued with the training of 20 lab staff from three states. The laboratory Specialist has set up an intensive training procedure for building the capacity of laboratory technicians and the senior laboratory management officers at the level of the NTP. Eight job aids have been developed and validated by MOH/NTP and implementation has begun already (see figure).

The percentage of the DOTS centers providing TB/HIV services is at 65% with about 51% of all diagnosed TB patients (previous quarter 48%) knowing their HIV test results for the period Jan – Mar 2012. The proportion was low because of a lack of HIV test kits in some of the TB/HIV sites. TB/HIV quarterly review meeting was held in Juba and all the 10 states were represented. NTP and TB CARE I participated in a meeting organized by HIV the directorate where the tools were revised to capture adequate data on TB/HIV. TB screening tools were introduced and referral mechanisms discussed including the follow up of patients on TB treatment.

In order to improve the capacity of central level NTP, 2 health workers attended inter-country workshop for MDR-TB community management in Cairo, Egypt and 1 health worker attended a TB IC course in Kigali Rwanda.

4.18 Uganda

TB CARE I-Uganda is in its second quarter of implementation. KNCV is the lead and sole implementing partner in Uganda. The Year 2 workplan was approved in February 2012 and focuses on UA, PMDT, TB/HIV and HSS.



Map that can be produced using the GIS data in and around Kampala

In the area of universal and early access, TB CARE I Uganda is providing supportive supervision in Kampala; a total of 19 health facilities were visited by a team consisting of TB CARE I technical officers, the Kampala City TB control officer and TB and leprosy supervisors from the five divisions. The team focused on on-site support supervision and on-job mentorship in the technical areas of: TB patient management, TB/HIV, laboratory and recording and reporting. Major issues include: low DOTs implementation, low uptake for ART, poor TB IC practices and inconsistent recording and reporting. The team together with health facility staff designed action plans to address the challenges identified. Progress on these will be tracked during subsequent visits. TB Management in Kampala is also being monitored via GIS. TB CARE I conducted a baseline assessment on TB patient management and care in the 38 TB diagnostic and treatment units in Kampala. Key findings on case notification, treatment success, DOT coverage, TB/HIV and combined with GIS mapping are being used to precisely align intervention in Kampala (see map).

PMDT support for now is focused on laboratory improvement. The process to start Mulago ward renovation is underway. 15 Mulago staff (10 female, 5 male) were trained on MDR-TB patient management and care for five days. This is in preparation to start ambulatory treatment for drug resistant patients next quarter.

Country wide TB/HIV support supervision visits were successfully conducted in 3 NTLP Zones. TB CARE I technical staff, together with NTLP staff and implementing partners participated in these visits. On-site support was given during the visits and emerging issues will be addressed to NTLP and the National AIDS Control programs and also during the TB/HIV national coordination committee meeting.

To ensure the effective coordination of partners, TB CARE I funded a Uganda STOP TB partnership coordination meeting. Several Technical Working Groups were formed which include MDR-TB, Child hood TB, Kampala DOTS and ACSM. These groups will increase momentum of implementation, monitoring and evaluation of TB related activities in Uganda.

4.19 Vietnam

KNCV is the lead partner TB CARE I activities in Vietnam; as of Year 2, MSH and WHO began implementing activities as well. The Year 2 workplan has activities in UA, laboratories, IC, PMDT, TB/HIV, HSS and M&E. The MOH of Vietnam officially approved TB CARE I-Vietnam as a project for the period of 2011-2015. This is the legal basis for the implementation of TB CARE I in Vietnam. The Year 2 workplan was officially approved in March.

Training on laboratory bio-safety and quality management for lab technicians in Da nang.

Universal and early access in Vietnam is focused on two key populations: prisoners and children. A study tour to Indonesia has been organized to help Vietnam learn more about the TB, TB\HIV and MDR-TB control in prisons in Indonesia. Officials from Ministry of Public Security and MOH (NTP, VAAC), and National Assembly will travel to Indonesia with the assistance from NTP & KNCV Vietnam and NTP & KNCV Indonesia, FHI 360 Indonesia. Training materials for TB control in children has been completed, adopted by NTP and made ready for training courses for NTP staff, doctors and pediatricians from provincial and district level and communal health workers.

Trainings on laboratory management and bio-safety for lab staff have been organized for lab staff in HCMC and Da nang and scheduled for 3 other provinces in July and August. The upgrade of bio-safety status in 5 MDR-TB laboratories in K74, Thanh hoa, Binh Dinh, Binh Thuan and Tien Giang has been completed and they are ready for final assessment. Laboratory equipment has been delivered, installed and tested for 5 MDR-TB laboratories in May-August. The diagnostic algorithms using GeneXpert and training curriculum and materials are available. 11 Xpert MTB\RIF systems have been provided to 8 MDR-TB centers and 3 Divisional Therapy Units. The contract for the 6 Xpert MTB/RIF systems has been signed. The procurement is also completed with other supplier for 14 LED FMs.

The upgrade of TB IC status for 5 MDR treatment wards in 5 MDR-TB treatment centers and K74 has been completed and they are ready for final assessment and hand over. Proposed TB IC facility plans for District TB Units and HIV clinics from 3/4 provinces has been approved by NTP and KNCV, and the implementation is initiated.

IEC material (flipbook) on MDR-TB is available and ready for printing and delivery. eTB manager: A strategic roadmap for e-TB Manager implementation was written in May 2012 with NTP/PMDT and TB CARE I partners. A new training was conducted in June 2012 at HCM city Hospital for the PMDT team, 24 District TB Units under HCN City Hospital supervision, and for all PMDT/DR-TB Sites. A new platform of e-TBM in Vietnamese contemplating all recent requests of updates and changes was uploaded to allow all DR-TB sites to start encoding real patient data.

The regional advocacy workshop with People Committees and National Assembly and advocacy workshop with central parliamentary members was successfully organized. A health consultation and media award ceremony was held with participation of several journalists.

4.20 Zambia

FHI 360 is the lead partner in Zambia and works closely with collaborating partners KNCV, WHO, and as of Year 2, MSH. Activities are implemented in all eight technical areas.

The Patient Centered Approach (PCA) protocol was submitted to the ethics research committee for approval, and approval was given on June 29, 2012. TB CARE I also supported training in TB DOTS for 30 health care workers (19 female, 11 male) from Central province in May.

Forty three laboratory staff (12 female, 31 male) from all target provinces were trained in the new diagnostic tool of LED based microscopy. TB CARE I also continued to provide EQA support to 112 facilities including 48 health center level diagnostic facilities and 44 district level diagnostic facilities in the six supported provinces. TB CARE I also provided training support in laboratory biosafety and biosecurity for 15 laboratory staff (3 female, 12 male). TB CARE I procured two Xpert MTB/RIF machines for placement at two points of care laboratories. Discussions have been underway this quarter for a task force for GeneXpert roll-out to be in place by July 2012.

Integration of TB IC into facility level plans in six facilities has been supported by TB CARE I this quarter. The project also provided support for regional training of 2 MOH staff in TB IC in Pretoria, South Africa.

TB CARE I provided support to three district level TB /HIV coordinating body meetings and to training of 22 HIV

Adherence Support Workers (10 female, 12 male) who are providing community level support to HIV infected persons in Northern province, under the PEPFAR funded ZPCT II project. TB CARE I is supporting the enhancement of TB knowledge in these community volunteers in all the ZPCT II target provinces as part of the collaborative efforts to control TB in HIV settings. The training in Northern Province included 22 people (10 female, 12 male).

TB CARE I supported the National annual data review meeting held from May 20-24, 2012. The meeting was well attended by TB/HIV/Leprosy coordinators and communicable diseases control specialists from all nine provinces. Also present were partners supporting the MOH for TB and HIV activities including WHO, UNDP, UNAIDS, CHAZ, CIDRZ and the CDC.

TB CARE I provided technical and logistical support during the provincial data review meetings held by the Copperbelt, North Western, Central and Luapula provinces. For OR, a startup national level training was conducted from April 17-20, 2012. Dr. Lisa Dulli, an FHI 360 Scientist was the lead facilitator, with the NTP Manager-Dr. Nathan Kapata, Dr. Pascalina Chanda-Kapata-National Research Coordinator and Dr. Seraphine Kaminsa Kabanje -TB CARE I Project Director, as co-facilitators. The participants developed consensus around high priority research concepts that will be fully developed in a second workshop planned for August 20-24, 2012. A Senior Research Advisor has been hired through FHI 360 to support the TB CARE I OR agenda and other FHI 360 research projects in the country.

4.21 Zimbabwe

Zimbabwe is led by The Union and has KNCV and WHO as collaborating partners. The Year 2 workplan, which began in January, focuses on UA, laboratories, IC, PMDT, TB/HIV, HSS and M&E.

All Provincial Medical Directors and Directors of the Health Services for the cities and towns were visited to discuss implementation modalities of the integrated TB/HIV plan.

TB CARE I Zimbabwe is working to improve the sputum transport system in both rural and urban areas. The sputum transport service commenced in the rural areas during the past quarter. A total of 31 rural health centers are now fully serviced. The remaining three pilot districts are ready to start in July 2012. The well-established urban service was maintained in the cities of Harare, Chitungwiza and Bulawayo.

DOTS Supporters in Zimbabwe.

Zimbabwe will soon begin testing samples with the GeneXpert machines, when the two machines that have been paid for are delivered to Zimbabwe. The DRS protocol was approved by the Zimbabwe Medical Research Council and preparations are underway to start the pilot. The PMDT guidelines had to undergo further revision but the document is now being printed.

An initial assessment for TB IC was conducted in all sites. The assessments confirmed that there were inadequate infrastructure layouts in several clinics for effective integrated care for HIV and TB services and infection control. Facilities are expected to develop plans for renovations to improve the layout and improve TB IC.

Thirteen districts were visited by their provincial teams for support supervision. Districts in turn visited a total of 465 health centers for support supervision (several per day). The district support visits were data driven and focused mainly on TB case finding, TB management and case holding, TB/HIV collaborative activities, as well as recording and reporting.

Twenty three out of the planned 37 district performance review meetings for the quarter were conducted in the 5 provinces. The main objectives of the meetings were to review the TB and TB/HIV program performance in the districts and to map the way forward for any identified gaps. Data quality has significantly improved.

NTP national level working with provincial officers conducted a data verification exercise in five districts (one in each of the five supported provinces). In four of the five districts audited, there were minor data quality issues and one district had major data quality issues. The districts with major data quality issues will be given priority in support supervision and training.

Two health workers were trained per site through attachments to the three existing and well established integrated care sites. A total of 13 health workers (4 female, 9 male) from six sites have been trained.

5. Regional Projects

In addition to the aforementioned country and core programs, TB CARE I also manages five regional projects, four of which receive Year 2 funding (CAR regional funding being Year 1 only). The four Year 2 funded project workplans were approved in January 2012.

5.1 Center of Excellence (CoE) for PMDT

The CoE for PMDT project is implemented by KNCV. This quarter, an MoU was officially signed between the School of Public Health (SPH) of the National University of Rwanda and KNCV. This resulted in the MOH (NTP) successfully handing over the running of the CoE to SPH and the first tranche of funds being transferred to SPH from KNCV in March 2012.

The Second International Training on basic TB infection control course was held from the 18th to 22nd June 2012 in Kigali at the School of Public Health of the National University of Rwanda. 22 participants from the regional TB programs from Ethiopia (2), South Sudan (2), Tanzania (1), Uganda (1), and Rwanda (16) attended the training course. Only one female attended from Rwanda.

Presentation of the CoE PMDT at the TB CARE I Workshop for ECSA member states for Dissemination of Current WHO/UNION Guidelines held in Nairobi, Kenya from 11st to 13 June 2012.

CoE has received from the TB Division (MOH) US $22,793 to support local participants during three trainings planned for 2012 and US $16,000 from paying participants (total US $38,793 so far).

5.2 East Africa Supranational Reference Laboratory (SNRL)

The Union, the lead partner, works closely with KNCV/KIT on the SNRL project. The NTRL has applied for accreditation according to ISO15189 by SANAS.

An SRL link was made official with Zambia, and that with South Sudan is advancing. A modest budget for SRL activities for 1 year was obtained from WHO. The future status of the Kampala lab was cleared up. The outline of a business plan was drafted.

5.3 ECSA (East, Central and Southern Africa)

The ECSA project is led by KNCV. The Workshop for TB guidelines dissemination was held in Nairobi on 11-13th June 2012 and was attended by participants from 11 countries within the east, central and southern Africa region. The participants included NTP managers and staff, Lecturers, ECSA HC secretariat staff, COE and WHO national program officers for TB. It was facilitated by KNCV, WHO-AFRO and the RCQHC in Uganda. The countries represented were Botswana, Kenya, Lesotho, Malawi, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe, Ethiopia and Rwanda. In total seven guidelines were disseminated. In addition participants were also given an overview of many practical tools available on the TB CARE I website, a presentation on the regional PMDT Centre of Excellence (COE) in Kigali, Rwanda and an overview of ECSA HC. Finally each country presented the status of adoption/ adaptation of the guidelines in country, plans for adaptation and the support that will be required. Follow up missions on implementation will be done by ECSA HC secretariat

5.4 Central Asian Republic (CAR) Regional Funding

In addition to the three CAR country workplans, KNCV is the lead implementer of two regional CAR activities: a CAR/PMDT Workshop and a high level meeting on cross border TB control. There is currently only Year 1 funding for these small projects.

A PMDT Regional Workshop was held in Almaty on April 18-20. The workshop was designed to bring representatives of the CARs to review the progress on the management of M/XDR in the region. The workshop laid groundwork for a comprehensive response to M/XDR TB based on the Consolidated Action Plan to Prevent and Combat M/XDR-TB in WHO European Region. During the workshop, the strategic directions of the Consolidated Action Plan were presented and discussed by respective country representatives and facilitated by international experts.

During the three day Regional CAR PMU workshop held in Almaty on June 11-13, TB CARE I staff from regional and country offices gathered together to discuss operational, managerial and administrative aspects of the regional program. The USAID Mission attended the second part of the third day. The workshop helped the TB CARE I staff better understand the policy and regulations of the current cooperative agreement, M&E approaches and financial management principles.

5.5 Kenya Lung Conference

KNCV coordinated this small project to support the travel and lodging for 18 participants from the East African region to attend the Second International Scientific Lung Health Conference in Kenya in October 2011. Further details on the conference can be found in the Kenya section of the October-December 2011 QMR.