PROGRAM YEAR 1
Third Quarter Performance Monitoring Report
April 1, 2011 – June 30, 2011

August 15, 2011
TB CARE I Partners

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

1. Introduction ........................................................................................................................ 5
2. Knowledge Exchange ........................................................................................................... 6
3. Project Management Unit (PMU) ........................................................................................ 7
4. Core projects ...................................................................................................................... 8
   5. Country projects ............................................................................................................... 15
      5.1 Afghanistan ...................................................................................................... 16
      5.2 Botswana ......................................................................................................... 16
      5.3 Cambodia ........................................................................................................ 16
      5.4 Central Asian Republics (CAR) .......................................................................... 17
         CAR-Kazakhstan: ........................................................................................................ 17
         CAR-Kyrgyzstan ........................................................................................................ 17
         CAR-Uzbekistan ....................................................................................................... 17
      5.5 Djibouti ........................................................................................................... 18
      5.6 Dominican Republic ........................................................................................... 18
      5.7 Ethiopia ............................................................................................................ 18
      5.8 Ghana .............................................................................................................. 19
      5.9 Indonesia ........................................................................................................ 20
      5.10 Kenya ............................................................................................................. 20
      5.11 Mozambique ..................................................................................................... 21
      5.12 Namibia ........................................................................................................... 22
      5.13 Nigeria ............................................................................................................ 23
      5.14 Pakistan .......................................................................................................... 24
      5.15 South Sudan ..................................................................................................... 24
      5.16 Vietnam .......................................................................................................... 24
      5.17 Zambia ............................................................................................................ 25
      5.18 Zimbabwe ........................................................................................................ 25
6. Regional Projects ............................................................................................................... 26
   6.1 Center of Excellence (CoE) for PMDT ........................................................................ 26
   6.2 East Africa Supranational Reference Laboratory (SNRL) ............................................. 26
   6.3 ECSA (East, Central and Southern Africa) ................................................................. 26

List of Tables and Figures

Table 1: Summary of TBCTA website use, October 2010 – June 2011 ........................................ 6
Table 2: Tools, Publications and Guidelines Planned for Year 1 ................................................. 6
Table 3: Overview of Year 1 Core Projects, April 2011 – June 2011 ........................................... 9
Table 4: Geographical distribution of TB CARE I partner countries ........................................ 15
Table 5: MDR TB cases diagnosed and put on treatment by country and year ......................... 15
List of Abbreviations

ACSM  Advocacy Communication Social Mobilization
AFB  Acid Fast Bacilli
CAR  Central Asian Republics
CDC  Center for Disease Control and Prevention
CoE  Center of Excellence
CDR  Case Detection Rate
CSO  Civil Society Organization
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
ILEP  International Federation of Anti-Leprosy Associations
JATA  Japan Anti Tuberculosis Association
KIT  Royal Tropical Institute
KNCV  KNCV Tuberculosis Foundation
MDR  Multi Drug Resistance
MDR TB  Multi 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
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 (Uganda)
OR  Operational Research
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
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 CAP  Tuberculosis Control Assistance Program
TBCTA  Tuberculosis Coalition for Technical Assistance
USAID  United States Agency for International Development
WHO  World Health Organization
1. Introduction

TB CARE I is a USAID five year cooperative agreement (2010-2015) that builds and expands upon previous USAID tuberculosis (TB) prevention and treatment efforts over the last eleven years, particularly the success of the Tuberculosis Control Assistance Program (TB CAP). TB CARE will be one of the main global mechanisms for implementing USAID’s TB strategy as well as contributing to TB/HIV activities under the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR). TB CARE I follows on from the Tuberculosis Coalition for Technical Assistance program (TBCTA, 2000-2005) and TB CAP (2005-2010) and it is implemented by the TBCTA coalition, a partnership of seven international organizations in TB control. KNCV Tuberculosis Foundation (KNCV) is the prime partner and the collaborating partners are American Thoracic Society (ATS), FHI 360 (FHI), International Union Against Tuberculosis and Lung Disease (The Union), Japan Anti-Tuberculosis Association (JATA), Management Sciences for Health (MSH) and World Health Organization (WHO).

There is a second project, TB CARE II, which shares the same objectives, technical strategies and indicators as TB CARE I. TB CARE II is led by University Research Co., LCC (URC) and collaborating partners include Partners in Health (PIH), Jhpiego and Project HOPE. TB CARE I and II share a strategic board and collaborate on a few strategic core projects.

The TBCTA coalition is pleased to present USAID with the Year 1 Quarter 3 report of the TB CARE I program. Nine months into the project, after its start in October 2010, considerable progress has been made in development, approval and implementation of core, country and regional projects. As of June 30, 2011, 19 out of 20 country projects, 3 regional projects and all 26 core projects have approved workplans and have started activities. This report provides a technical and financial update on progress towards planned outputs and main activities for these approved projects. Below is a brief summary of TB CARE I’s main achievements to date and challenges for the next quarter.

Main Achievements:

- Standardized workplan templates and reporting system installed
- Activity-based financial reporting system installed
- Rapid Implementation of the Xpert MTB/RIF Diagnostic Test: Technical and Operational ‘How-to’ Practical Considerations has been completed
- In total 31 GeneXpert machines have been procured in four countries
- In Indonesia, engaging 23 pulmonologists through the project "Engaging Pulmonologists in DOTS" resulted in the diagnosis of 1,049 TB patients
- In Mozambique, TB CARE I works in both TB and malaria control. Next year Mozambique will be the first TB CARE I country to execute a comprehensive TB and malaria workplan.
- In Cambodia, the MTP successfully held another International DR TB training with support from TB CARE I. A total of 31 participants (M=19, F=12) attended, of which nine were international participants from Ethiopia, Zimbabwe, The Netherlands, Mozambique and Zambia.
- The Center of Excellence (CoE) for PMDT in Rwanda conducted a TB IC training for 15 participants from nine countries: Ethiopia, Uganda, Kenya, Tanzania, Malawi, Burundi, Rwanda, Nigeria and Zambia.
- Based on a WHO-headquarters assessment, the National Reference Laboratory of Uganda has been recognized as a serious candidate to become a Regional Supranational Reference Laboratory (SNRL).

Main challenges for next quarter:

- Due to the late start of core and country projects, accelerating activity implementation will be crucial
- Close monitoring of under-spending while also preventing over-spending
- Continuing to increase accruals reporting for all projects as 30% of projects did not report any accruals this quarter (10 of 26 core projects and five of 20 country projects)
- Monitor and provide support to countries with large variances between workplan completion and expenditures (i.e. Nigeria, Kenya and Dominican Republic)
- Monitor and provide support to countries with low expenditures to date (i.e. Central Asian Republic countries, Mozambique, Pakistan, Vietnam, Zambia, and two regional projects, COE and SNRL)
2. Knowledge Exchange
This quarter’s activities have mainly been devoted to the design and construction of a new website for TB CARE I which is due to be launched in the fall. The new site will replace that of TBCTA and aims to be more user-friendly, streamlined and more easily accessible in countries with slow internet connections. It will have more country-specific information available than before and every tool, report and publication will be available no matter how large in a well-organized library. General use of the current TBCTA website (www.tbcta.org) is summarized below (Table 1):

<table>
<thead>
<tr>
<th>Table 1: Summary of TBCTA website use, October 2010 - June 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of visitors</td>
</tr>
<tr>
<td>Percent that were new visits</td>
</tr>
<tr>
<td>Number of countries visitors came from</td>
</tr>
</tbody>
</table>

The new brochure highlighting the goals and unique qualities of the TB CARE I program has been approved and sent for printing (photo below).

Tools, publications and guidelines developed under TB CARE I will be monitored by the PMU, and when completed, will be available on the TB CARE I website, together with those tools developed under the previous projects, TBCTA and TB CAP. Table 2 provides an initial list of tools that are expected in Year 1. This list will be updated quarterly, including the addition of new documents.

<table>
<thead>
<tr>
<th>Table 2: Tools, Publications and Guidelines Planned for Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Area</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>1. Universal and Early Access</td>
</tr>
<tr>
<td>2. Laboratories</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
### 3. Project Management Unit (PMU)

The PMU has made significant progress in the recruitment of additional team members and the overall management of the project. As mentioned last quarter, in order to successfully implement the different TB CARE I projects and to better support the partners of the coalition, the PMU decided to expand staffing. As of July 1, 2011, Claire Moodie (previously a Senior Technical Officer at MSH), began as M&E Officer with the PMU. Although still based out of the MSH-Cambridge USA office, she is remotely seconded to the PMU and is supervised by the Monitoring, Evaluation and Knowledge Exchange Team Lead. The part-time Project Officer position, based in The Hague, has been officially filled by Mischa Heeger. A new financial officer was in place for four months, but recruitment has commenced again for this position.

A significant achievement was the updating of the core, country/regional workplan templates (both the narrative Word document, as well as the Excel-based workplan, which includes an action plan, M&E plan and budget templates). After soliciting feedback from the partners, these templates were revised to be more user-friendly. The new versions were shared with partners in June and early July and trainings were conducted with all country directors and partner project officers on the new templates to be used for the Year 2 projects.

The PMU also developed a new monitoring protocol for TB CARE I projects, which was rolled out with Q1-2 reporting and has now been implemented systematically for Quarter 3. Reporting templates for core, regional and country projects were revised and adapted to the new workplan templates, reporting by activity for country projects. Country lead partners submitted draft reports to the PMU by July 21 (with partner input already included), the PMU provided comments and financial information by the 28th, and lead partners submitted PDF versions of the final report to their respective missions by July 29th. All 19 country offices with approved work plans submitted a quarterly technical and financial report to the USAID mission by July 29th, in accordance with the deadline set in the cooperative agreement. These reports can be found on the TB CARE I eRoom.
The PMU formed "country specific teams "comprised of the Director or Deputy Director, an M&E team member, a Project Officer and a Financial Officer to facilitate closer and consistent follow-up of country projects. In this respect the Director and the Deputy Director have made visits to Nigeria, Kenya, Mozambique and Indonesia.

The PMU has also supported projects through its Technical Officers in the areas of HRD, PMDT, IC and recently also in Laboratory Services; technical missions were made to Ethiopia, Indonesia, Nigeria, Rwanda and Vietnam during this quarter.

4. Core projects

Approval was received for all 26 core projects by March 31st, 2011. Therefore, all core projects have had at least a full quarter to implement activities. As of June 30th, 12 Year 1 core projects are on track to be completed by September, one is complete and no projects have been cancelled; 13 projects require extensions, nine of which have approved 3-month no-cost extensions through December 2011 and the other four will be requesting extensions. Ten Year 1 core projects were proposed for continuation in Year 2. The following table (Table 3) provides detailed information on the progress of each of the 26 core projects.
<table>
<thead>
<tr>
<th>Technical Areas</th>
<th>Code</th>
<th>Lead &amp; collaborating partners</th>
<th>Title</th>
<th>Expected Outcome(s) APA1</th>
<th>Progress to date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal and Early Access</td>
<td>C1.1.1</td>
<td>KNCV, ATS, MSH, WHO, JATA</td>
<td>Tool to identify TB most at risk &amp; vulnerable populations</td>
<td>• Framework format developed</td>
<td>A writing workshop with stakeholders was conducted in May in The Hague. An inventory of NTP wishes for the envisioned tool is being made through standardized interviews. This project has been granted a 3-month, no cost extension through December 2011.</td>
<td>Extended</td>
</tr>
<tr>
<td></td>
<td>C1.1.5</td>
<td>KNCV, ATS, FHI, WHO</td>
<td>Adapt and pilot patient centered package</td>
<td>• Methodology developed • Two kick-off workshops conducted</td>
<td>A conference call was held on June 14 with ATS and FHI to discuss the draft implementation methodology. Cambodia, Nigeria and Zambia have appointed focal points, as well as Mozambique which will replace Kenya. Indonesia is still pending but a positive reaction is expected. Regional workshops are planned for September in Indonesia and November in Nigeria. This project has been granted a 3-month, no cost extension through December 2011.</td>
<td>Extended</td>
</tr>
<tr>
<td>PMDT</td>
<td>C2.1.1</td>
<td>PMU, WHO, Union</td>
<td>Strengthening of regional and local technical collaboration centers (TCC) for PMDT</td>
<td>• Assessment of technical collaboration center in India • Functioning exchange between TCCs</td>
<td>An assessment and planning mission for the strengthening of a Technical Assistance Centre (TAC) in Ahmedabad, India is planned for late July (or September as a backup option). The second activity under this project is a meeting with representatives from TACs and technical agencies which will take place around the Lille Conference.</td>
<td>On track</td>
</tr>
<tr>
<td>Infection Control</td>
<td>C3.1.1</td>
<td>WHO, KNCV, FHI, MSH, Union, TB CARE II</td>
<td>Develop a tool to measure TB incidence in health care workers</td>
<td>• A tool to measure TB incidence in health care workers</td>
<td>WHO led the organization of a two-day meeting in The Hague in July. Expert consensus was reached on the content of the two guides and writing committees were developed. One guide will be written on measuring prevalence (KNCV led) and a second guide will be on monitoring incidence (WHO led).</td>
<td>On track</td>
</tr>
<tr>
<td></td>
<td>C3.2.1</td>
<td>PMU, WHO, KNCV, MSH, FHI, TB CARE II</td>
<td>Core Package of IC Interventions</td>
<td>• Core TB IC package developed</td>
<td>Partners in Health led a two-day meeting in The Hague in July to reach consensus on an essential core package of TB IC interventions for a campaign in Year 2.</td>
<td>On track</td>
</tr>
<tr>
<td>Code</td>
<td>Partners</td>
<td>Title</td>
<td>Expected Outcome(s)</td>
<td>Progress to date</td>
<td>Status</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>C3.3.2</td>
<td><strong>KNCV, WHO, MSH</strong></td>
<td>Training and mentoring on TB IC</td>
<td>• 9 IC consultants trained and underwent one mentored field visit</td>
<td>Training was delivered successfully to 12 consultants (M=10, F=2). Three mentored field visits were completed and six are planned.</td>
<td>On track</td>
<td></td>
</tr>
<tr>
<td>TB/HIV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C4.1.1</td>
<td><strong>FHI, MSH, JATA, PMU</strong></td>
<td>TB Infection Control at Community Level</td>
<td>• ToT Curriculum developed • How-to manual developed</td>
<td>The manual is 85% complete and TOTs are planned in Kenya and Zambia over the next 8 weeks. This project has been granted a 3-month, no cost extension through December 2011.</td>
<td>Extended</td>
<td></td>
</tr>
<tr>
<td>C4.2.2</td>
<td><strong>ATS, WHO, FHI</strong></td>
<td>Guidelines for evaluations of contacts to infectious cases of tuberculosis</td>
<td>• WHO-approved set of guidelines developed</td>
<td>The Guideline Steering Committee met following the WHO STAG meeting to finalize the schedule for guideline development. A draft document will be presented at the Union Conference in Lille on October 28th. This project has been granted a 3-month, no cost extension through December 2011.</td>
<td>Extended</td>
<td></td>
</tr>
<tr>
<td>C4.3.1</td>
<td><strong>KNCV, MSH</strong></td>
<td>Assessment of TB/HIV mortality data</td>
<td>• Five high-burden countries assessed • Strategy to improve M&amp;E systems developed</td>
<td>The Kenya assessment was completed. Assessments are planned in August for Mozambique, Namibia, Ethiopia, and Zambia. Tools are ready for use. Sixteen NTP surveys have been completed and data analysis is on-going. A half-day TB/HIV mortality M&amp;E improvement workshop is being planned for September. The project needs an extension for data analysis and has been granted a no cost extension through December 2011.</td>
<td>Extended</td>
<td></td>
</tr>
<tr>
<td>M&amp;E, OR and surveillance</td>
<td></td>
<td>Guide on electronic recording and reporting for TB care and control</td>
<td>• Guide on ERR developed</td>
<td>A meeting was held in late April to review the draft manual. Editing of all four chapters is ongoing, but has been slower than anticipated due to pressure of work on all authors. A PDF will be published on the WHO website by 30 September.</td>
<td>On track</td>
<td></td>
</tr>
<tr>
<td>C5.1.1</td>
<td><strong>WHO, MSH, KNCV</strong></td>
<td>Guide on inventory studies to assess the level of TB under-reporting</td>
<td>• Guide on inventory studies developed</td>
<td>About 60% of the guidelines are written. Work is ongoing. The PDF version is expected to be available by the end of September.</td>
<td>On track</td>
<td></td>
</tr>
<tr>
<td>C5.1.2</td>
<td><strong>WHO, JATA</strong></td>
<td>Guide on inventory studies to assess the level of TB under-reporting</td>
<td>• Guide on inventory studies developed</td>
<td></td>
<td>On track</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Partners</td>
<td>Title</td>
<td>Expected Outcome(s)</td>
<td>Progress to date</td>
<td>Status</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>C5.2.1</td>
<td>MSH, PMU, TB CARE II</td>
<td>Develop M&amp;E COP for NTPs</td>
<td>• Increased use of data for decision-making in TB CARE countries</td>
<td>The M&amp;E needs assessment was finalized and disseminated to NTP and TB CARE I/II M&amp;E Officers in 15 countries in May. An 80% response rate was achieved. A report on the results of the needs assessment is anticipated in mid-July. Planning for the September 19-21 workshop in The Hague is underway.</td>
<td>On track</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Laboratories</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C6.1.1</td>
<td>KNCV, The Union, WHO, MSH</td>
<td>Practical handbook for the development of a national laboratory strategy</td>
<td>• Practical handbook developed</td>
<td>A consensus meeting took place in The Hague in May with KNCV, The Union, CDC, two NRL directors (Pakistan and Benin) and an external expert. The workshop provided a proposed outline of the handbook's seven chapters. Situational analysis chapter is nearly drafted. The first draft of the handbook is expected in September. A pilot in Africa is expected in October or November. A no cost extension was granted until December 2011.</td>
<td>Extended</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C6.1.2</td>
<td>The Union, WHO, KNCV, MSH</td>
<td>• Consensus tool developed and tested</td>
<td>The start-up workshop with partners served to define the outline and list of contents of the tool. A first draft is now under revision. A final document will be available by December, with training, trial accreditation assessments and adaptation of the tool during Year 2. This project has been granted a no cost extension through December 2011.</td>
<td>Extended</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C6.2.1</td>
<td>KNCV, WHO, MSH, The Union</td>
<td>• Lab accreditation toolbox and templates drafted</td>
<td>A two-day consensus meeting was hosted by WHO/GLI in Geneva in July with 40 stakeholders (supported by CDC and TB CARE I funding). KIT had developed a first draft of the national accreditation tool, which was very well received by stakeholders.</td>
<td>On track</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C6.3.1</td>
<td>WHO, KNCV, MSH</td>
<td>• Guidance made available on scaling up &amp; implementing new testing algorithms incorporating Xpert MTB/RIF</td>
<td>100% completed. Available at: <a href="http://whqlibdoc.who.int/publications/2011/9789241501569_eng.pdf">http://whqlibdoc.who.int/publications/2011/9789241501569_eng.pdf</a></td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Partners</td>
<td>Title</td>
<td>Expected Outcome(s)</td>
<td>Progress to date</td>
<td>Status</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>C6.4.1</td>
<td>WHO, KNCV, MSH, The Union</td>
<td>Assess quality of WHO-GLI SRLN and individual SRLs using GLI assessment tool</td>
<td>• Draft of GLI assessment tool revised</td>
<td>A field evaluation of the revised tool was conducted at the National TB Reference Laboratories in Uganda and Kenya in May. A follow-up visit was made to the Central Reference Laboratory in Kenya in late June. The tool has been revised following the assessments but requires a process of peer review.</td>
<td>On track</td>
<td></td>
</tr>
<tr>
<td>C6.4.2</td>
<td>The Union, KNCV, MSH, WHO</td>
<td>Develop Benin NRL in Africa to join SRLN</td>
<td>• Benin NRL is staffed with trained and competent personnel; quality management system in place and adherence to procedures ensured</td>
<td>An agreement between Benin NRL and Antwerp SRL was formalized. DST rechecking showed excellent performance. A TOT was organized on quality management. GFATM approval of the plan for NRL renovation has still not been given. A second and probably third year will be needed. This project has been granted a no cost extension through December 2011.</td>
<td>Extended</td>
<td></td>
</tr>
<tr>
<td>C6.4.3</td>
<td>WHO, KNCV, MSH, The Union</td>
<td>Meeting of the SRLN</td>
<td>• Meeting of SRLN convened and consensus workplan and strategy developed</td>
<td>An SRLN meeting is planned to take place in early October. This meeting will look at the lab strengthening efforts of the SRLN for the previous 18 months, develop plans for 2011-2013 and identify funding gaps. A process of mapping linkages with SRLs and NRLs was undertaken and formal collaboration agreements were established.</td>
<td>On track</td>
<td></td>
</tr>
</tbody>
</table>

### Health Systems Strengthening

<table>
<thead>
<tr>
<th>Code</th>
<th>Partners</th>
<th>Title</th>
<th>Expected Outcome(s)</th>
<th>Progress to date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>C7.1.1</td>
<td>WHO, ATS, FHI</td>
<td>Increased and sustained political and financial commitment to TB prevention, care &amp; control</td>
<td>• Improved TB plans, indicators and budget embedded within national health plans and/or strategies.</td>
<td>Profiles have been drafted that map the synergies and discordant areas between health plans and TB plans for three countries. A meeting with partners is planned for August and field visits are being started. A three-month no-cost extension will be requested for this project.</td>
<td>Extension to be requested</td>
</tr>
<tr>
<td>C7.1.2</td>
<td>ATS, WHO, MSH</td>
<td>Create political commitment and financing database</td>
<td>• Political commitment (measured by domestic financing for TB) increased</td>
<td>WHO is completing the analysis of domestic/other financing trends in TB CARE I countries; the next steps involve development of profiles for selected TB CARE I countries, planning for workshop consultations with countries and development of best practice approaches.</td>
<td>Extension to be requested</td>
</tr>
<tr>
<td>Code</td>
<td>Partners</td>
<td>Title</td>
<td>Expected Outcome(s)</td>
<td>Progress to date</td>
<td>Status</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------</td>
</tr>
</tbody>
</table>
| C7.1.3 | WHO                    | Enhancement of the planning and budgeting tool                        | • Planning and budgeting tool enhanced  
• 15 participants trained on its use                                                                 | A questionnaire to seek feedback from the countries on tool use has been developed. A three-month no-cost extension will be requested for this project. | Extension to be requested |
| C7.4.1 | MSH, KNCV, WHO, The Union | Training national leaders on HRD Tools                                | • Action Plan on HRD in place in NTPs                                               | The Virtual Leadership Development program was launched in June and runs through August with eight teams: Afghanistan (2), Ghana, Indonesia, Kenya, Pakistan, Uganda, and Zimbabwe. | On track     |
| C7.5.1 | KNCV, FHI, ATS         | Build capacity of civil society in TB Control                         | • Methodology to build capacity of civil society organizations (CSOs) in TB control developed and pilot tested  
• 6 CSOs in 2 countries have a TB activity plan and started implementation  
• 6 CSOs in 2 countries have partnered with national and/or local stakeholders in TB control | Nigeria and Indonesia have been selected as implementing sites for this project. Four CSOs in both Nigeria and Indonesia, two mentoring organizations in Nigeria and one mentoring organization in Indonesia were selected. Training curricula were developed and three training workshops were implemented in both countries. Mentee CSO’s in Nigeria started implementing their workplan. This project has been granted a no cost extension through December 2011. | Extended     |
<table>
<thead>
<tr>
<th>Technical Areas</th>
<th>Code</th>
<th>Partners</th>
<th>Title</th>
<th>Expected Outcome(s)</th>
<th>Progress to date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overarching elements</td>
<td>C0.0.1</td>
<td>WHO, The Union</td>
<td>Support to the Sub Working Groups of the Stop TB Partnership</td>
<td>- Strategic areas of work discussed and agreed in seven groups &lt;br&gt; - Reports from all meetings available</td>
<td>Five working groups of the Stop TB Partnership are funded through this project.  &lt;br&gt; - <strong>GLI</strong>: The meeting will take place October 3-4 in Annecy, France in collaboration with the Fondation Merieux.  &lt;br&gt; - <strong>PPM</strong>: Preparations are advancing well for the PPM meeting on October 23-24 in Lille, France.  &lt;br&gt; - <strong>TB-IC subgroup</strong>: Preparations have begun for the TB-IC meeting on October 24.  &lt;br&gt; - <strong>HRD TB subgroup</strong>: The secretariat of the HRD TB subgroup has moved from WHO to KNCV. Preparations for the meeting on October 24 have started.  &lt;br&gt; - <strong>Poverty</strong>: An extended core-group meeting is planned for October 25-26 in Lille. Participants from low-income countries, who may join the core team, will be invited.</td>
<td>Extension to be requested</td>
</tr>
<tr>
<td></td>
<td>C0.0.2</td>
<td>KNCV</td>
<td>Support to CSHGP and CORE Group</td>
<td>- CORE PVOs improved competence in providing TB services</td>
<td>A mid-term evaluation of the CARE project in India has been supported through this project. Another final evaluation of the Malawi Project Hope project is planned for July.</td>
<td>On track</td>
</tr>
</tbody>
</table>
5. Country projects

As of June 30th, 19 out of 20 country work plans have been approved by both the USAID missions and USAID Washington. The Afghanistan workplan was submitted for review in June and was approved in July, bringing the total number of expected partner countries within Year 1 of TB CARE I to 20. Please note that for this total, each of the Central Asian Republics (CAR) has been counted as a separate country, although the region is treated as a single (regional) program for financing reasons. See Table 4 for the geographical distribution of the countries. Fifty-four percent of country funds to date have been obligated within Africa ($25.3 million), 44% within Asia ($20.6 million) and 3% in Latin America ($1.3 million).

Table 4: Geographical distribution of TB CARE I partner countries

<table>
<thead>
<tr>
<th>Africa (11)</th>
<th>Asia (8)</th>
<th>Latin America (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>Namibia</td>
<td>Kazakhstan*</td>
</tr>
<tr>
<td>Djibouti</td>
<td>Nigeria</td>
<td>Kyrgyzstan*</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>South Sudan</td>
<td>Uzbekistan*</td>
</tr>
<tr>
<td>Ghana</td>
<td>Zambia</td>
<td>Dominican Republic</td>
</tr>
<tr>
<td>Kenya</td>
<td>Zimbabwe</td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>Afghanistan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cambodia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indonesia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pakistan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vietnam</td>
<td></td>
</tr>
</tbody>
</table>

As a part of the country quarterly reports in Year 1, countries provide an update on country-specific indicators. Most TB CARE I standard indicators will only be collected on an annual basis. However, due to the importance of monitoring PMDT scale-up, beginning this quarter the PMU has asked country projects to provide national data on MDR TB cases that were diagnosed and put on treatment in 2010 and to date in 2011. Table 5 summarizes the available information by country and by year and will be updated quarterly. In total, 8,650 MDR TB cases were diagnosed in TB CARE I-supported countries in 2010, 80% (6,946) of which were put on treatment. In the first six months of 2011, 4,776 MDR TB cases have been identified and 75% (3,624) were put on treatment.

Table 5: MDR TB cases diagnosed and put on treatment by country and year

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number diagnosed</td>
<td>Number put on treatment</td>
<td>Number cases diagnosed</td>
</tr>
<tr>
<td>Botswana</td>
<td>102</td>
<td>92</td>
<td>31</td>
</tr>
<tr>
<td>Cambodia</td>
<td>31</td>
<td>41</td>
<td>23</td>
</tr>
<tr>
<td>CAR-Kazakhstan</td>
<td>7,336</td>
<td>5,740</td>
<td>4,015</td>
</tr>
<tr>
<td>CAR-Kyrgyzstan</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>CAR-Uzbekistan</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Djibouti</td>
<td>8</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>140</td>
<td>85</td>
<td>N/A</td>
</tr>
<tr>
<td>Ghana</td>
<td>14</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>Indonesia</td>
<td>182</td>
<td>142</td>
<td>176</td>
</tr>
<tr>
<td>Kenya</td>
<td>112</td>
<td>67</td>
<td>94</td>
</tr>
<tr>
<td>Mozambique</td>
<td>165</td>
<td>86</td>
<td>N/A</td>
</tr>
<tr>
<td>Namibia</td>
<td>N/A</td>
<td>214</td>
<td>N/A</td>
</tr>
<tr>
<td>Nigeria-OP</td>
<td>N/A</td>
<td>23</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Unable to provide number of MDR TB cases diagnosed due to the Medi-Tech electronic system that captures the number of samples tested rather than cases. TB CARE I is working with NTP & CDC to modify the R&R system, expected to be operational by year's end.
Pakistan
South Sudan
Vietnam
Zambia
Zimbabwe
<table>
<thead>
<tr>
<th></th>
<th>Afghanistan</th>
<th>Botswana</th>
<th>Cambodia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>8650</td>
<td>6946</td>
<td>4776</td>
</tr>
</tbody>
</table>

N/A - not available

Due to the rolling nature of approvals not all countries could start at the same time. Each country will now be briefly discussed in turn.

### 5.1 Afghanistan

MSH, the lead partner in Afghanistan, submitted a workplan in June with an anticipated start date of July 1, 2011 under TB CARE I. The project has wrapped up activities and closed out TB CAP-Afghanistan as of June 30, 2011. The TB CARE I-Afghanistan workplan has subsequently been approved on July 25th and will report on TB CARE I activities next quarter. The project will be working in universal and early access, laboratories, IC, health system strengthening (HSS) and M&E. WHO and KNCV will continue as collaborating partners in country along with the subcontracting of community-based DOTS work to BRAC.

### 5.2 Botswana

KNCV is the lead partner and sole implementer in Botswana. The project focuses on universal and early access, laboratories, IC, PMDT, TB/HIV and M&E. A KNCV Senior International Consultant facilitated the development of action plans for TB-IC, PMDT, Community DOTS and TB/HIV during a workshop with approximately 40 stakeholders in total (2 full-day training sessions). TB CARE I technical assistance in collaboration with partners developed a first draft of a TB prevalence survey protocol (co-financed by the Global Fund). The KNCV Chief Medical Laboratory technician supported the training of 28 laboratory technicians (M=19, F=9) in AFB smear microscopy. KNCV Senior Technical Advisor developed an M&E tool for laboratory quality indicators and trained 12 technicians.

The renovation of the laboratory has delayed the accreditation process and validation of MGIT DST. Recruitment of a Senior TB Advisor for the NTP has been delayed due to new PEPFAR requirements.

### 5.3 Cambodia

The work plan was officially approved by USAID Washington on the 19th of April. JATA is the lead partner in Cambodia, with collaboration from FHI, KNCV, MSH, and WHO. The project has activities in all eight TB CARE I technical areas (universal and early access, laboratories, IC, PMDT, TB/HIV, HSS, M&E and drug supply and management).

A group of four children hospitals claiming to treat more than 25,000 cases of children with TB every year regularly publishes reports in local and international newspapers challenging internationally accepted policies. After repeated attempts, TB CARE I and the NTP met with hospital leadership and staff in April. The hospital has agreed to be a member of the national
childhood TB working group and to participate in the Stop TB Partnership Childhood TB Working Sub-Group meeting in Geneva later this year, if invited.

TB CARE I participated in meetings and facilitated meetings with NTP staff to contribute to the revision of the Integrated Management of Childhood Illnesses (IMCI) guidelines coordinated by the Department of Communicable Disease Control, Ministry of Health. For the first time, the IMCI guidelines for Cambodia will include TB and HIV in the protocol.

Expansion of activities planned for 2011 have been completed. This includes:
- Provision of TB/HIV services in three additional prisons
- Provision of childhood TB services in five additional operational districts
- Diagnostic Capacity improvement in one additional province

While there has been a slow and late start to activities in Year 1, activity implementation is expected to pick up in the last quarter. Several NTP staff have been occupied with the ongoing national TB prevalence survey, thus joint activities such as supervision, NTP peer-review, and annual mass screening of prisoners have to be planned around the existing prevalence survey schedule.

5.4 Central Asian Republics (CAR)

KNCV is the lead and sole implementer of TB CARE I activities in all three CAR countries: Kazakhstan, Kyrgyzstan and Uzbekistan. Official approval of all three country workplans was received on June 15, 2011. All three CAR country projects have activities in the eight technical areas (universal and early access, laboratories, IC, PMDT, TB/HIV, HSS, M&E and drug supply and management). There is also a small regional CAR workplan and budget for Year 1 that has not yet been approved.

CAR-Kazakhstan:
The TB CARE I concept vision has been developed. Joint TB CARE I and Quality Health Care Project plans have been developed. A regional TB IC consultant was identified. A collaboration agreement with SNRL Borstel in Germany was reached. Assessment missions were conducted to all project sites.

TB CARE I is working with the USAID-funded Quality Health Care Project to reach final agreement on the division of work between the two projects. Since both projects are busy with project implementation it has been difficult to have regular coordination meetings. The project is looking for qualified staff in the region that will facilitate the expansion of the office.

CAR-Kyrgyzstan
A mission was conducted to introduce the TB CARE I project to the MoH, NTP, Prison System and other partners working in the TB field. Bakyt Myrzaliyev was selected as Country Representative Officer and began work on July 1st. The project is preparing for the assessment mission that will take place in late July.

CAR-Uzbekistan
Activity implementation had not yet started. The project workplan was introduced and discussed with the NTP, PIU GF and Médecins Sans Frontières (MSF). An agreement was achieved with MSF on implementation of project activities through MSF until official registration of the country office takes place. MoH’s approval of the workplan is still needed to be able to implement activities. Sharaff Yuldashev was selected as the Country Representative Officer for Uzbekistan. Collaboration with SNRL Gauting has almost been agreed. A laboratory consultant was identified by SNRL and a TA plan was developed.
5.5 Djibouti

WHO is the lead and sole implementer of activities in Djibouti. The project focuses on laboratories, IC, PMDT and HSS. The implementation status is fair with a potential for a substantial acceleration during the next quarter as most preparatory work has already been made. The process of updating the NTP manual in the context of introducing new rapid diagnostic technologies has begun. As a first step, the current WHO guidelines have been reviewed and an analysis of the current disease and programmatic situation in the country has been conducted.

The procurement of sputum containers and laboratory reagents for TB microscopy has been initiated in coordination with GDF staff so that no shortages will be experienced by the NTP. The introduction of new and rapid diagnostics in the National Reference Laboratory with the support of the Foundation for Innovative New Diagnostics (FIND) is at its final stage. Coordination is taking place with FIND to make sure that reagents and commodities for solid culture and DST that will be purchased through TB CARE I will compliment the items made available by the FIND-supported project.

5.6 Dominican Republic

KNCV, the lead partner and sole implementer in Dominican Republic, began activity implementation in April 2011. Activities are conducted in universal and early access, IC, PMDT, HSS and M&E. The technical personnel were contracted in May. Activities will be more advanced next quarter. The big challenge is to find an adequate candidate with sufficient technical knowledge in ACSM and Monitoring & Evaluation.

Through the strategy "Photovoices", a tool of participatory research that uses photography to support and mobilize people affected by TB to address decision makers, the project has engaged 10 people affected by TB. These 10 patients are actively involved in taking photographs that represent their experience, their feelings and their own realities related to tuberculosis. The work will culminate with an exhibition of photographs in public places.

A referral form and system were designed to measure systematically the community contribution to TB diagnosis. Trainings are being planned for the systematic application of this new system.

5.7 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 project implements activities in all eight technical areas. The overall work plan implementation has greatly improved compared to the previous quarter. The smooth relation between collaborating partners with FMOH and other stakeholders contributed to the increased overall work plan implementation.

TB CARE I is currently working at the national level, which can be challenging due to competing priorities and requests of the Federal Ministry as well as not having a specific contact person/group at FMOH.

Sixth National TB Research Conference: The sixth national TB conference was organized by the National Tuberculosis Advisory Committee (TRAC) and University of Gondar, College of Medicine & Health Sciences in early June with the theme of "Challenging the Challenges of TB Case Detection and MDR TB in Ethiopia". This TB CARE I-supported conference was a key event for TB control in Ethiopia because it helps to push research agendas and influence policy decisions. TB CARE I has supported this important event both financially & technically. TB CARE I staff have attended the event and technically assisted the conference by chairing two sessions (‘Challenges on MDR TB in Ethiopia and beyond’ and ‘TB/HIV’), serving as a panelist in "Panel discussion on preparedness in handling MDR TB in Ethiopia" and actively participating in the discussions.

Apart from the 23 research papers presented at the conference, 22 research papers were displayed as posters. "Assessment of factors affecting the pulmonary case detection" was one of the graduate theses sponsored by TB CAP Ethiopia which was selected for presentation during the poster session. The conference was a good opportunity to identify priority research areas and training needs on TB.
MDR TB Service assessment: A national MDR-TB service assessment was conducted at Gondar University Hospital and two selected satellite health centers (HCs) to provide technical assistance, identify gaps or problems in MDR TB service and to recommend possible solutions. Key findings included a lack of coordination between Gondar University Hospital, the Regional Health Department and health facilities; lack of capacity of the health facility staff; delayed feedback for culture & DST results from the central reference laboratory; lack of transportation for program monitoring activities; a weak data management system and shortage of auxiliary drugs; and lack of nutritional support.

Based on these findings, TB CARE I supported the NTP to conduct the following activities: 1) training on PMDT for 30 health care workers invited from Gondar University and its satellite HCs (M=16; F=14); 2) onsite orientation on recording & reporting formats of the PMDT program; and 3) procurement of three computers for improving the data management system. Orientation and onsite training on electronic database management are planned for the fourth quarter. Procurement of auxiliary drugs, a sensitization workshop for stakeholders and other major laboratory and social support will be addressed in Year 2.

Strengthened ACSM on TB IC: A brief end-user assessment was conducted to evaluate the TB IEC materials that were produced by TB CAP and distributed to the health facilities and public in 2009 and 2010. This includes leaflets and stickers on the importance of opening windows at the household level and on public transport, as well as posters on cough etiquette and treatment adherence. The main objective of this exercise was to assess the strengths and weaknesses of these materials and get input for the production of the next set of TB IEC materials to be produced under TB CARE I. The assessment identified the layout and visibility of IEC materials as areas needing improvement. Revisions to the materials have been made and the final product will be sent for printing soon. Conducting KAP was beyond the scope of this brief assessment; however should be considered in the next workplan.

5.8 Ghana

MSH is the lead partner in Ghana with support from KNCV and WHO as collaborating partners. TB CARE-Ghana conducts activities in universal and early access, laboratories, TB/HIV, HSS and M&E. The quarter under review saw considerable progress for the implementation of approved activities. By end of September 30, 2011, the project anticipates that at least 90% of the activities will be implemented.

The new M&E Officer (Bismarck Owusu Adusei) officially reported for duties in April. The USAID Mission met the NTP Manager in May to officially introduce the TB CARE I project. The USAID Officials handed over a letter of information to the NTP Manager which outlined TB CARE I’s principle role and key strategic areas of focus during the life of the project.

As per the NTPs guidance all of the schedule TA missions have been uploaded onto the TBTEAM Website. The M&E external technical assistance was successfully completed; the draft M&E plan and framework were reviewed, gaps were identified and revisions were proposed by the consultants. Final revisions will be made by the NTP and the in-country TB CARE I team. Twenty-three microscopists (including 2 females) from Volta Region successfully completed a five-day training on smear sputum microscopy preparation and examination.

According to the guidance from the USAID mission, one of the key principle roles for TB CARE I is to ensure the NTP implements the interventions outlined in the Global Fund Round 10 Proposal in a coordinated fashion and that these interventions yield the largest impact. However, the grant signing has not taken place and this role has not fully commenced, though TB CARE I is involved in establishing a solid foundation for the implementation of the GF Round 10 Grant.

Under the TB/HIV technical area, guidelines for intensified TB case finding among PLHIV were to be developed. However, on further discussions with the National AIDS Program (NAP) Manager, he indicated that there is no need to develop separate guidelines as TB screening activities are outlined in the revised ART guidelines for Ghana. He proposed that part of these funds could be used for printing the TB screening algorithm for use in districts with high HIV rates such Lower Manya Krobo in the Eastern Region.
5.9 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 close collaboration from ATS, FHI, MSH, The Union and WHO. TB CARE-Indonesia works in all eight technical areas. Official approval of the full Year 1 workplan was received during the last week of June, considerably speeding up the implementation process. There have been several achievements during the third quarter of Year 1:

TB CARE I supported a project "Engaging Pulmonologists in DOTS" in three sites in Jakarta (Central Jakarta, East Jakarta and South Jakarta). At present 23 pulmonologists are involved in this project. Their involvement resulted in diagnosis of 1,049 TB patients (893 adult Pulmonary TB patients, 131 extra-pulmonary TB cases and 25 paediatric TB cases). Next steps are to scale-up the same initiative by engaging 50 more pulmonologists.

TB CARE I supported and facilitated a workshop on "DOTS Hospital Accreditation" in Jakarta to develop draft DOTS accreditation standards/guidelines for hospitals. The guidelines are now ready for printing and distribution.

TB CARE I supported a workshop in June to prepare implementation of GeneXpert with assistance from PMU consultants. A national core group advisory team for implementation has been formed. Five sites have already been assessed; 12 other sites are planned for assessment in the 4th quarter. 17 GeneXpert machines will be purchased and will be available in the country by the end of August to scale up PMDT.

Renovation was completed this period for two laboratories (Jayapura and Semarang) to perform culture and DST and three PMDT hospitals to improve the infection control measures and to provide hospitalization support for MDR TB cases. (Photo: Handing over of the new TB laboratory at BLK Semarang)

By the end of June 2011, 392 MDR-TB cases were confirmed, 272 out of them were put on treatment with SLDs. Still there are significant delays in the initiation of treatment resulting in an approximate death rate of 6% before treatment and a high rate of lost to follow-up and refusal of treatment. The project is taking an in-depth look at these important issues for the possible solutions.

TB CARE I supported a workshop on the development of an Advance Course on DOTS Acceleration Training Curricula and Guidelines. This training is important to scale up the management capacity of TB supervisors.

TB CARE I supported the coordination meeting of the TB-HIV program in prisons, attended by the Ministry of Law and Human Rights, NTP, National AIDS Program and FHI.

TB CARE I assisted NTP to finalize the narrative, quantification and justification to Global Fund (GF) Local Fund Agent regarding the Procurement and Supply Management Plan Round 8 Phase 2 and Round 10 with technical assistance from an MSH consultant. Assistance was also provided on the custom clearance process for Second Line TB drugs; the drugs were released on 13 June 2011.

5.10 Kenya

KNCV is the lead partner in Kenya; the collaborating partners are ATS, FHI and MSH and subcontracts are in place with Kenya Association for Prevention of TB and Lung Diseases (KAPTLD) and Kenya AIDS NGOs Consortium (KANCO). The project conducts activities in universal and early access, laboratories, IC, PMDT, TB/HIV, HSS and M&E. During the reporting quarter, the overall workplan implementation has greatly improved compared to the last quarter. Some of the partners like KAPTLD and KANCO started implementing activities which contributed to the increased overall work plan implementation. TB CARE I-Kenya has developed a mini workplan in collaboration with the NTP and all the partners to be implemented in the last quarter of Year 1 (July-September 2011). Achievements this quarter include:
**Strengthening Drug Resistant TB Surveillance:** TB CARE I supported the TB Central Reference Laboratory (CRL) to change its DR TB routine surveillance algorithm to screening of all smear positive re-treatment cases for MDR-TB and XDR-TB before culture; previously the practice was to use molecular techniques after culture and Drug Sensitivity Testing (DST). This was done through procurement of the following Hain lifescience molecular test kits:

a) GenoType MTBDRplus Kit: For diagnosis of MDR TB; resistance to Rifampicin and Isoniazid is available in five hours compared to 1-2 months in conventional methods. Allows for early appropriate treatment, which reduces transmission and spread of MDR TB.

b) GenoType MTBDRsli Kit: For detection of XDR-TB in patients previously diagnosed with MDR-TB. It minimizes extreme side effects through an appropriate therapy scheme. It is also economical as expensive, ineffective drugs can be avoided through screening of all MDR-TB patients for XDR-TB before starting treatment.

The molecular test Kits for identification and differentiation of TB complex and non-tuberculosis mycobacterium (NTM) or Mycobacterium Other Than Tuberculosis (MOTT) from culture were also procured for the CRL. It is expected that the use of these kits will greatly reduce the turnaround time for MDR TB diagnosis and ensure that patients are put on appropriate treatment early enough to reduce transmission. (Photo: *Handing over of Hain Lifescience molecular reagents to the CRL*).

**MDR TB Surveillance:** To enhance surveillance for MDR TB, support for the (CRL) was provided through the facilitation of transport for referral of specimens from peripheral sites to the CRL. A mechanism has been put in place where MDR TB specimens are transported from the peripheral facilities to the nearest courier point and then transported to the CRL via courier. A total of 5,789 specimens have been received at the CRL since October 2010 (1,755 in Q1, 1,904 in Q2 and 2,130 in Q3).

**Provincial TB Coordinators (PTLCs) Review Meeting:** The PTLCs review meetings are usually held once a year to review the previous year’s data and performance of the NTP activities. This year, the meeting was held in April. The participants of the meeting included the PTLCs, Provincial Medical Laboratory Technologists (PMLTs), NTP Central Unit staff and partners. The participating partners included CDC, International Centre for AIDS Care and Treatment (ICAP), KAPTLD, USAID and TB CARE I. The regional teams presented their annual reports while the national data were presented by the Central Unit of the NTP. During this forum, the teams shared their various experiences and also addressed the operational issues to ensure smooth implementation of TB control activities countrywide.

**5.11 Mozambique**

FHI, the lead partner for Mozambique, submitted two separate work plans to USAID: one for its malaria activities, and one for its TB activities. The TB workplan focuses on universal and early access, laboratories, IC, PMDT, TB/HIV, HSS and drug management. The Malaria workplan was approved in mid-May while the TB workplan was approved June 30th. FHI works with collaborating partners KNCV, MSH and WHO on the TB workplan. The project completed a few start-up activities listed below:

**TB workplan:**
A baseline assessment was conducted in the new eleven districts for CB DOTS expansion. This included an assessment of all TB control activities, collection of baseline data and identification of potential local partners. This assessment also represented an opportunity to discuss coordination mechanisms with the Provincial Health Directorate and with the implementing partners. Ten NGOs were selected to support the implementation of the CB-DOTS activities. Eight of these NGOs were partners under TB CAP. The two new NGOs (CISLAMO and ESTAMOS) were selected on the basis of their experience in implementing CB programs and their administrative and financial capacity. The selection was carried out in close collaboration with the provincial health authorities. The interruption of the community-based DOTS due to the transition between TB CAP and TB CARE I is having an impact on TB case detection. A significant effort will have to be made in order to make up for this interruption.
The project also supported a TB national planning meeting which assessed the implementation of the CB-DOTS in Mozambique, among other activities. Four manuals on the implementation of the CB-DOTS, which were developed during the TB CAP, were reviewed and updated in order to include Malaria, MDR TB and the role of traditional healers at the community level.

A 3-day orientation workshop was carried out in April 2011 in Nampula City. The workshop objectives were to: 1) discuss the lessons learned from TB CAP focused on CB DOTS implementation; 2) discuss the financial and administrative management of the sub-agreements; and 3) establish coordination mechanisms with the health authorities and the NGOs. The participants included representatives from the 10 selected NGOs, the 5 provincial TB supervisors of TB CARE I target provinces and the TB CARE I team. The TB CARE I team reviewed the proposals submitted by the NGOs and worked with the contracting office to finalize the sub-agreements and budgets.

A two-day workshop to discuss the M&E plan and data management was organized in Niassa in June. The workshop was attended by the M&E officers of the 10 selected NGOs.

The TB CARE I team participated in joint planning exercises in five provinces (Sofala, Manica, Nampula, Tete and Niassa). These meetings were organized by USAID in collaboration with the provincial governments and allowed a joint planning of the USG activities. The recruitment of five of seven technical staff (STO officer, Technical Laboratory Officer, M&E Officer and 2 Field Officers to Zambézia and Nampula) was finalized. The specifications of all equipment such as GeneXpert, LED microscopes and x-rays were also finalized. The layout for the renovation of the Nampula Regional Reference Laboratory has been finalized.

**Malaria workplan:**
The Malaria workplan is being fully implemented by FHI. With the exception of some M&E activities, all other activities planned for the quarter have been successfully implemented. As of the end of June, achievements include the following:

In Mozambique, uncomplicated malaria caused by *Plasmodium falciparum* is treated using a combination of Artemether-Lumefantrine or Artesunate-Amodiaquine in fixed dose combinations. Resistance of *Plasmodium falciparum* to the common antimalarials represents a serious threat to malaria treatment and to the control efforts. Thus, regular monitoring of drug efficacy represents an important tool for the provision of adequate evidence based treatment policy formulation. In 2001, the efficacy of the Artesunate-Amodiaquine combination was assessed, but the fixed dose combination has never been tested. On the other hand, since its introduction in 2005, no studies were conducted to assess the therapeutic efficacy of the Artemeter-Lumefantrine combination in Mozambique. The present study is aimed to monitor the efficacy of these two combinations in five sentinel sites. The study proposal was adopted from the WHO protocol and ethical approval was sought and obtained from the National Bioethics Committee and the Minister of Health. The study was endorsed by WHO, which provided the drugs. The implementation started in June and after one month, 50% of the 87 children of the Artemether-Lumefatrine arm have been recruited. The results of this study will be used to update the malaria treatment guidelines.

The project supported a meeting that was carried out in June to agree on the process to develop three important documents: the Malaria National Policy, the National Malaria Strategy and the M&E plan. These three documents are to be finalized by September 2011.

**5.12 Namibia**

KNCV is the lead partner and sole implementer in Namibia under TB CARE I. Activities are implemented in universal and early access, IC, PMDT, TB/HIV, HSS and M&E. Apart from the routine and regular TA to the NTP, TB CARE I achieved the following:

With TB CARE I support, the NTP successfully held yet another International DR TB training facilitated by The Union. A total of 31 participants (M=19, F=12) attended, of which nine were international participants (Ethiopia, Zimbabwe, The Netherlands, Mozambique and Zambia).
TB CARE I conducted three TA visits to Tsumkwe constituency in relation to the DR-TB epidemic among members of the San Community ("Bush Men"). During one of these visits, the Chief Medical Officer and another senior officer from the NTLP joined the team and met with relevant stakeholders and partners to discuss the best ways to curb the TB (DR-TB) epidemic in the community, taking into consideration the cultural values and the itinerant nature of the livelihood of members of the San Community.

TB CARE I provided input to the process of Single Stream Funding (SSF) and coming up with a consolidated performance framework, work plan and budget for the two GF grants (GF Round 2, Wave 7, Rolling Continuation Channel, RCC and GF Round 10 TB grants). TB CARE I staff also provided technical inputs to the NTP on the development of the OGAC-driven TB/HIV proposal, worth $6 million, which was submitted on time. The NTP is awaiting the response from OGAC.

Five planned zonal quarterly review meetings were supported by TB CARE I. The TB CARE I team visited Erongo and Karas regions on a CBTBC consolidation and expansion mission with the NTP. The trips revealed that the regions need more Field Promoters and supervisors to replace those who left as well as continued support from TB CARE I.

Computers were procured for use at national level as well as for use in ten districts.

Two posters (from the districts) were developed and presented at a conference in Hong Kong with support from TB CARE I. In addition, with TB CARE I support, seven of the eight submitted abstracts were accepted for presentation at the forthcoming World Lung Health Conference in Lille, France.

### 5.13 Nigeria

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

**TB Workplan:**
The TB workplan focuses on universal access, laboratories, PMDT, HSS and M&E. The PMU selected Nigeria for the core project on rapid expansion of GeneXpert/MTB RIF. PMU representatives visited Nigeria in May to: 1) support development of implementation plans for Xpert MTB/RIF 2) advise on development of diagnostic protocols, M&E and operational research 3) mobilize partners for Xpert roll-out and operation research 4) visit implementation sites and support preparation for Xpert roll-out, and 5) agree on next steps and action points. The Focal Point for the project is Dr. Segun Obasanya, the newly appointed NTP Manager (former Principal of NTBLTC Zaria). Nine sites were selected for introduction of GeneXpert; the assessment visits are scheduled for early July.

Nigeria was also selected for the core project on capacity building for CBOs; the in-country TB CARE I team has been closely involved in mentor organization selection and three capacity-building workshops for CSOs.

**TB/HIV (COP) Workplan:**
The TB/HIV workplan focuses on IC, PMDT, TB/HIV, HSS and M&E. Achievements this quarter include the following:

USAID/CDC had a USG evaluation visit in June 2011. The focus was on TB/HIV collaborative activities. In most facilities (larger hospitals), TB and HIV services are provided at different locations with limited exchange of information or coordination even though some facilities have an HIV/TB focal person to ensure linkages. TB suspect registers are not located at OPDs, but in the DOTS clinics, limiting its proper use. Busy laboratories do not use available LED microscopy. Shortages of HIV test kits hamper screening of all TB patients detected. Treatment of TB patients is done with the new six-month regimen, using patient boxes, but frequently without DOT. Use of community volunteers is only in a few selected areas, with funding from LGA government and implementing partners (IPs). No shortages of TB drugs were mentioned. The main problem is the poorly functioning HIV program which allows IPs to set up/run a parallel program. There is need to re-evaluate the overall approach to a sustainable HIV program. The final report is awaited.
The review of the TB/HIV and HCT Training Materials as well as the TOT on TB/HIV and HCT were an example of a coordinated approach to support for the NTP. The TB CARE I Implementation Workshop organized by the International Federation of Anti-Leprosy Associations (ILEP) was a good kick start of the TB/HIV collaborative activities. The ILEP workplan is well balanced and placed in a logical order to ensure completion of activities and thus leading to functional DOTS sites/laboratories for TB/HIV collaborative activities.

During the second quarter 2011, WHO received 20,000 Double Check Gold and 15,000 STAT PAK HIV test kits from the National Aids and STD Control Program (NASCP). These were distributed to all states receiving support for TB/HIV collaborative activities. The kits for 3rd and 4th quarter are yet to be released by NASCP due to current stock out. The NASCP has now ordered an emergency procurement and the distribution will be done as soon as the test kits are procured.

5.14 Pakistan

KNCV is the lead and sole implementer of TB CARE I activities in Pakistan. The Pakistan workplan, which focuses solely on the prevalence survey (M&E, OR and surveillance) was approved on June 21st; overall implementation is satisfactory. The implementation is in line with the role out plan of the prevalence survey. Fifty-five field clusters have been completed. A total of 95 clusters will be completed by the end November 2011. Challenges include: 1) staff turnover being a persistent administrative challenge particularly of Medical Officers, 2) movement of x-ray machines in difficult to access areas may risk the proper functioning of these machines, 3) increasing temperatures in the summer decreases participation so extra efforts need to be made to achieve the targets, and 4) security remains a challenge in remote areas.

5.15 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 universal access, laboratories, TB/HIV and HSS. Two TA visits were successfully conducted this quarter and the outcome was the development of three policy documents: 1) an assessment tool for integrating TB services into general health system, 2) a framework for integrating TB services into general health services and 3) a strategic plan (2011-2015).

Training of 19 healthcare workers (M=13, F=6) and 18 laboratory staff (M=18) was achieved this quarter. Significant gain in knowledge and skill was noted in the trainings conducted. An assessment was conducted to identify one TB lab for renovation and three Primary Health Care Centers for refurbishment. The project is in the process of requesting bids for these contracts.

5.16 Vietnam

KNCV is the lead and sole implementer for TB CARE I activities in Vietnam. Activities are implemented in universal access, laboratories, IC, PMDT, TB/HIV, HSS and M&E. The Year 1 workplan has been approved to run through December 2011. Achievements from this quarter include:

TB in children: The first TA mission by a pediatric TB-HIV senior consultant was carried out in May for revision of the guidelines on TB-HIV control in children and to develop the training curriculums and materials.

TB control in prison: Meetings were held to discuss with the NTP in March and the Vietnam Administration of HIV/AIDS Control (VAAC) in April on the implementation plan for TB in prisons. The study tour for high level governmental officers from MOH, MOP and Central Parliament was planned.

Laboratory strengthening: Initial assessments were conducted in May of the bio-risks in the laboratories and the TBIS status in the MDR-TB treatment wards in five new treatment centers; local staff and designers have developed the proposal for renovation of the laboratories and MDR treatment wards. The project finalized the inventory list and required equipment for procurement.
An implementation plan and guideline/protocol have been prepared for the introduction of new techniques (LED FM, Hain for FS/SL DST, Xpert); Xpert machine procurement has been arranged.

**TB-IC facility strengthening in 50 DTUs & HIV clinics:** A four-step TB-IC facility strengthening program (training, facility assessment and planning, workshop to develop facility plans, and implementation of facility plans) has been developed by WHO, the National Institute of Health and Epidemics, the NTP and KNCV. Training curriculum and materials for TB-IC trainings have been developed as well.

**Other activities:** The advocacy plan to mobilize finances was developed for parliament members by WHO, KNCV, NTP and Parliament Central. One workshop for central level is planned for August and four are planned for social-geographical regions (September-December 2011). A concept paper on TB screening was developed.

### 5.17 Zambia

FHI is the lead partner in Zambia and works closely with collaborating partners KNCV and WHO. Activities are implemented in all eight technical areas. The TB CARE I-Zambia workplan was approved by USAID Washington on June 7th. Following work plan approval and hiring of staff, the project began implementation of activities in the target provinces and at the national level in June. TB CARE I partners, WHO, KNCV and FHI, agreed on a revised implementation timeline with the National TB control Program (NTP), which should facilitate activity implementation in the next quarter.

### 5.18 Zimbabwe

Zimbabwe is led by The Union and has KNCV and WHO as collaborating partners. The project implements activities in universal access, PMDT, TB/HIV, HSS and M&E. The Year 1 workplan was officially approved on May 12th. The project is working towards minimum carry over into Year 2. Achievements of the quarter include:

**Drug Resistance Survey:** Preparations moved a major step forward when a consultant came in June to conduct a writing workshop to finalize the drug resistance survey protocol. The consultant also facilitated an agreed upon roadmap for survey start up, which is targeted for late 2011.

**Review of the NTP:** A NTP review was conducted in late June with participation all eight rural provinces, three main cities, NGOs, partners and MOH staff. The previous review was carried out in 2005. General challenges that were identified included: 1) inadequate access to TB diagnostic services, 2) inadequate human resource capacity for the implementation of health interventions including TB, 3) very limited government financial resources, 4) drug supplies and laboratory commodities are not assured and 5) low uptake of ART among HIV positive TB patients. The final report has yet to be submitted.

**Data use guidelines:** A draft copy of data use guidelines has been developed and has been shared with other stakeholders before finalization.

At the Provincial level, supportive supervision visits from Province to District were conducted by three provinces: Manicaland, Midlands and Masvingo. Routine TB data was analyzed and discussed with the supported districts. Major recommendations made were aimed at improving case finding, case holding, strengthening TB/HIV collaboration and local use of data for decision making.

District teams from three provinces (Matabeleland South, Matabeleland North and Midlands) conducted 18 supportive supervision visits to peripheral health facilities. Major recommendations were aimed at improving case finding, improving sputum microscopy services, case holding, strengthening TB/HIV collaboration and using local data for decision making. At the District level, 12 training sessions were conducted in three Provinces with a total of 362 health workers (M=142, F=220) trained on TB and TB/HIV management.
6. Regional Projects
In addition to the aforementioned country and core programs, TB CARE I also manages three regional projects which are all follow-ons from TB CAP.

6.1 Center of Excellence (CoE) for PMDT
The CoE for PMDT project is implemented by KNCV. A 4-day TB IC training was conducted successfully in Kigali, Rwanda in June with 15 participants from 9 countries: Ethiopia, Uganda, Kenya, Tanzania, Malawi, Burundi, Rwanda, Nigeria and Zambia.

A KNCV consultant visited in June to give TA on the development of training curriculum for PMDT/IC by harmonizing various processes. Specific objectives included: 1) Revise the existing process for organizing international training courses, 2) Finalize support documents for the course organization process (letters, announcements, country presentations on PMDT and alike), 3) Set up the system for development/revision/updating of training curriculum for health care providers (PMDT, IC, Laboratory), 4) Set up the system for follow up of the International Training course participants, 5) Follow-up with the Regional/country team of facilitators and faculty, 6) Follow up an inventory of trained staff and their direct/indirect involvement in CoE activities, 7) Build individual capacity of staff working for the CoE.

6.2 East Africa Supranational Reference Laboratory (SNRL)
The Union, the lead partner, works closely with KNCV/KIT on the SNRL project. This project has received a no-cost extension through December 2011 as approval was obtained in May. A visit from WHO-HQ took place, which led to the recognition of Uganda as a candidate SRL. Results of the DST EQA panel 2010 were submitted and analyzed and showed excellent results except for streptomycin; second-line drugs were not tested.

KNCV continued TA and advice for the ISO15189 accreditation process provided through weekly Skype meetings between the technical advisor from KIT and the laboratory manager and quality officer of the National Tuberculosis Reference Laboratory (NTRL) in Uganda. In addition, first preparations were made for a mock audit by an external auditing company at the end of September 2011. A visit by a Union/Antwerp SRL consultant is foreseen for next quarter.

6.3 ECSA (East, Central and Southern Africa)
The ECSA project is conducted by KNCV. A PMDT scale up workshop, co-organized with WHO, was held in Kigali in late June for 13 countries. Five participating countries (Kenya, Uganda, Tanzania, Zambia and Swaziland) were supported by TB CARE I and eight (Malawi, Eritrea, Namibia, Rwanda, Ghana, Sierra Leone, Liberia and Angola) were supported by WHO. Draft plans were prepared, which are to be finalized in-country by July. A mission to ECSA secretariat was done to review the M&E framework for monitoring Health Minister Conference (HMC) resolutions on TB/PMDT. The revised format has been sent to the member states with indicator measurements for reporting to the next Health Ministers Conference. The ECSA Manager for HIV/AIDS & Infectious Diseases post has been vacant since March and hence monitoring missions to member states have not been conducted. This position is to be filled by August.