TB CARE I

TB CARE I – South Sudan

Year 2

Annual Report

October 1, 2011 – September 30, 2012

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List of Abbreviations

ACF	Allocable Cost Factor
AFB	Acid Fast Bacilli
APA	Annual Plan of Action
ATS	American Thoracic Society
CRL	Central Reference Laboratory
CSO	Civil Society Organization
DOTs	Direct Observe Treatment Short Course
EQA	External Quality Assurance
FHI360	Family Health International
GF	Global Fund
JATA	Japan Anti-Tuberculosis Association
IEC	Information, Education and Communication
IQC	Internal Quality Control
KNVC	KNCV Tuberculosis Foundation
MDR-TB	Multi-drug Resistant Tuberculosis
MOST	Management & Organizational Sustainability Tool
MSH	Management Sciences for Health
NGO	Non-Governmental Organization
NTP	National TB Program
PCT	Patient Centered Treatment
PHC	Primary Health Care
PHCC	Primary Health Care Center
PICT	Provider Initiated Counseling and Testing
PMDT	Program Management of Drug Resistant TB
SOPs	Standard Operating Procedures
TB CAP	Tuberculosis Control Assistance Program
TB CARE	TB **C**ollaboration and **C**oordination **A**ccess to TB Services for All People **R**esponsible and Responsive Management Practices **E**vidence-Based Project M&E
TB IC	TB Infection Control

TFM	Transitional Funding Mechanism
TOT	Training of Trainers
USAID	United State Agencies for International Development
VCT	Voluntary Counseling and testing
WHO	World Health Organization
TBMU	Tuberculosis Management Unit
BHP	Basic Health Package
HSS	Health Systems Strengthening

Executive Summary

South Sudan, the youngest nation in the world, attained its independence over a year ago (9th July 2011), after more than two decades of intensive civil war. The country is re-building the health structure which was destroyed during the war. Three quarters of the health facilities requires some kind of renovation to be functional; while a third need to be completely rebuilt. TB program was established in 2006 to coordinate TB activities. So far, NTP key positions at central and state level have been filled though huge gap exist at the county level. The role of County TB coordination is being played by implementing partners at health facility level.

Through the support of partners and donors, the number of TB diagnostic and treatment centers have increased from 32 in 2006 to 65 in 2012. The program outcomes have continued to improve with case notification of all forms of TB increasing from 4844 in 2006 to 7599 in 2011. The treatment success rate has remained constant at about 79% from 2008 – 2011.

The TB CARE I has been strengthening the capacity of the NTP to coordinate all TB control efforts in South Sudan. Using success and lessons learnt in the implementation of TB CAP project 2005-2010, TB CARE I has continued to strengthen the existing system through implementation of new approaches and scale-up of TB interventions identified in the NTP strategic plan. The focus has been on priority areas 1) Universal and early access of TB treatment; 2) Strengthening of laboratory services; 3) Programmatic management of Drug Resistant TB (PMDT) 4) Collaborative TB/HIV activities; and 5) Health system strengthening.

TB CARE I has supported expansion of TB diagnostic and treatment services through refurbishment of the laboratories and training of health workers (clinicians and laboratory staff) to build their capacity diagnose and treat TB. So far three PHCC have benefited from renovation and integrated services while seven are under renovation. This will bring to 10 the number of laboratories refurbished under TB CARE I. In addition, the staffs have been trained in diagnosis and treatment and mentorship and on-job training is on-going. The assessment tool that was developed has helped to identify facilities for refurbishment and integration of services. TB CARE I will continue to strengthen laboratory services by improving access to TB diagnosis through strengthening peripheral laboratory network and establishing EQA system. TB laboratory manuals and guidelines have been printed and distributed during support supervision.

MDR-TB cases are emerging; 9 cases has been identified since 2010. However, due to lack of SLDs, three of the nine have died. With this challenge, TB CARE I has supported NTP to develop PMDT and TB IC guidelines. Both are in draft form and will be finalized and disseminated. In addition, 3 staff have been trained regionally on PMDT and 2 on TB IC.

TB/HIV quarterly review meetings have been supported where challenges have been discussed and action plans developed for each respective state. Health care workers have been trained on PITC though TB patients tested for HIV have declined due to lack of HIV test kits. Due to competing priorities, the planned training on Basics of TB for HIV VCT counselors has not been conducted. World TB day was marked with radio talk shows, distribution of IEC materials and road side show.

One of the key strategies to expand TB diagnostic and treatment services in South Sudan is to ensure that TB services are integrated into Primary Health Care (PHC). TB CARE I supported NTP to develop framework for integrating TB into PHC. This approach will ensure rapid, efficient expansion of TB services in a sustainable and cost-effective way. TB CARE I has supported development of GF TB TFM proposal and also review of the proposal based on TRP comments. In addition, NTP and TB CARE I staff will be supported to attend international trainings and conferences.

Introduction

South Sudan, the youngest nation in the world, attained its independence over a year ago (9th July 2011), after more than two decades of intensive civil war, and violent episodes dating back to half a century. As a young nation with multiple competing priorities, government contribution to health services is still progressing through support for the staff salaries and maintenance of health infrastructure. The general health service coverage is only 30%. The country has one of the highest maternal mortality rates (2054/100,000 live births) and under 5 year's mortality rates (135/1000 live births). More than 90% of the population lives on less than a dollar a day. According to the South Sudan Health Facility Mapping conducted from 2009-2011 (Annex 1), about three quarters of health facilities in the country are in a poor state requiring renovation and a third of them need total reconstruction. Integration of human resources within the Ministry of Health (MoH) payroll remains a challenge. The 2012 Global report estimate that the case detection rate is at 48% and the treatment success rate at 75%.

The National TB Programme established in 2006 has been strengthened to coordinate all TB activities in the country. Currently the NTP has all the key staff position at the national level filled and TB coordinators in all the 10 states. TB services are provided by the government in collaboration with many different NGOs. With the Global Fund, USAID and other partners' support, the country has made tremendous progress in TB control. The number of notified TB patients has increased from 4,844 in 2006 to 7,599 in 2011 (nearly a 57% increase) while treatment success rate has remained above 75% over the years.

TB services (diagnostic and treatment centers) have increased from 32 in 2006 to 65 in 2012. TB CARE I has strengthened the NTP human resource capacity through trainings of health care workers at central, state and facility levels. The HIV/AIDS prevalence in South Sudan has already reached epidemic levels at 3% in the general population and as high as 30% among high risk groups in border areas. NTP routine HIV testing data of 2011 among TB patients showed 12.6% HIV positive. An HIV prevalence survey among TB patients [in all ten states] revealed that 14.7% is co-infected with HIV. Implementation of 3Is just started: Intensified case finding using an SOP takes place in HIV care clinics; Infection Control assessment has been done, confirming potential risk of transmission of TB in health care and congregate settings; IPT is not yet an accepted policy in South Sudan.

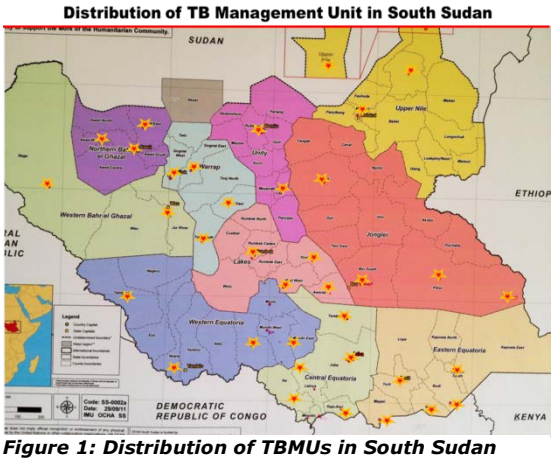


Figure 1: Distribution of TBMUs in South Sudan

Despite the above achievements, TB control is facing a number of key challenges; 1) Funding constraints (no government funding); 2) Low DOTS coverage of 6% (65 out of 1147) of functional health facilities and low HIV care coverage of 2% (22/1147) providing ART; 3) Lack of TB coordination at the county level; and 4) Few and inadequately skilled health care staff. Low community involvement in TB care (14 out of 79 counties) is also a challenge in South Sudan.

In 2010, USAID awarded TB CARE I to TB Coalition of Technical Assistance (TBCTA). The buy-in in 2011 was USD 1,219,000 up from USD 890,000 in 2010. TB CARE works at national level. MSH is the lead partner for TB CARE I in South Sudan and WHO and KNCV are collaborating partners TB CARE I

has been strengthening the capacity of the NTP to coordinate all TB control efforts in South Sudan. Through success and lessons learnt in the implementation of TB CAP project 2005-2010, TB CARE I has continued to strengthen the existing system through implementation of new approaches and scale-up of TB interventions identified in the NTP strategic plan. The focus has been on priority areas 1) Universal and early access of TB treatment; 2) Strengthening of laboratory services; 3) Programmatic management of Drug Resistant TB (PMDT) 4) Collaborative TB/HIV activities; and 5) Health system strengthening

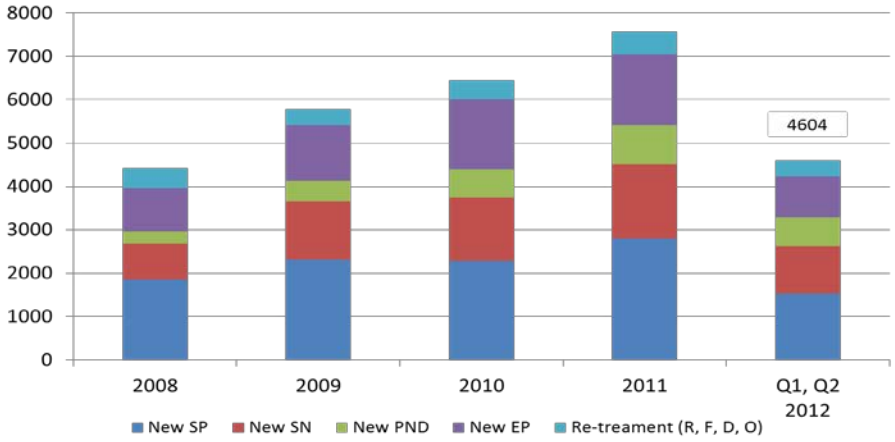
Universal Access

This technical area focused on increase on case notification and improves treatment outcomes through expansion and strengthening of DOTs services. The project focused on expansion of TB diagnostic and treatment facilities, training of health workers to build their capacity diagnose and treat TB and improving the quality of TB services provided. An assessment tool was used to identify facilities that need to integrate TB services into general health services. Health workers from the facilities were trained, supervised and mentored through joint visits. SOPs, job aids and other tools have been printed and disseminated.

Technical Outcomes

Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target Y2	Result Y2	Comments
1.2	Increased quality of TB services delivered among all care providers (Supply)	1.2.4 CB-DOTS program is implemented	Indicator Value: Score (0-3) based on definition.	2 (2011)	3	3	Implemented through CSO in 14 out of 79 counties in 33 out of 43 TBMUs in South Sudan.
		1.2.5 Increase TB case notification by 10% in the country	Proportion of cases notified (Number of cases notified out of expected cases to be notified)	6426 (2011)	7400	90% of cases were notified in Year 2; 6653 of the expected 7400 cases were notified.	Data for the period Jul – Sep 2012 is not included

Figure 2: Trend of TB notification 2008 - 2011



Key Achievements

- The TB Strategic plan was revised to be in line with the health sector development plan. This will ensure that TB control is embedded as a priority disease in the country with commensurate domestic financing and engagement of partners.

- PCT guidelines have been drafted and which once adopted will provide a framework for implementation of community based DOTS (including health facility based DOTS) in South Sudan.

- There is notable increase in cases notified (figure 2). Though data of period covering July – September 2012 has not been included, there is an increase of 3.5%

- Increased DOTS coverage through integration of TB services into routine PHCC programs. Currently the number of TB diagnostic centers has increased from 65 to 70.

Challenges and Next Steps

- Huge funding gap in the strategic plan. Increase government commitment to fund TB control program by advocating for TB through available forums.

- Coverage of community involvement in TB care is low. Only TB programs in 14 out of 79 counties have CB-DOTs activities which are implemented through CSOs. In government supported health facilities, patients are supervised by family members.
- Delay in reporting from health facilities to the central unit. Poor infrastructure development has largely contributed to late reporting. Use of mobile phone to report to the central level is being used in difficult to reach areas.

Laboratories

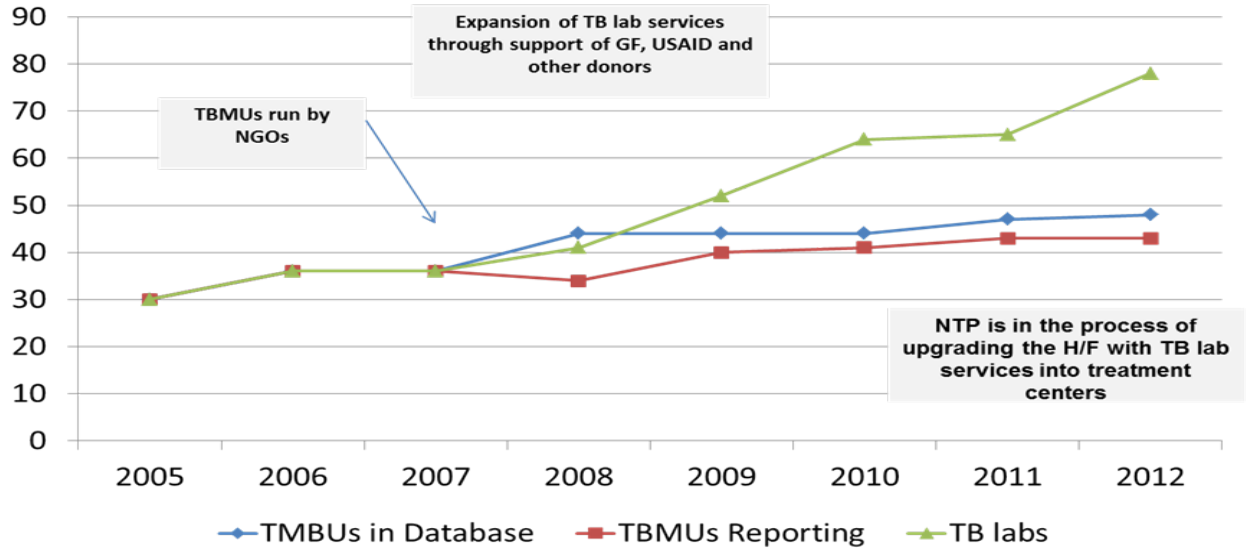
TB CARE I continue to strengthen laboratory services by improving access to TB diagnosis through strengthening peripheral laboratory network and establishing EQA system. Activities include minor refurbishment (renovation and equipment) of the laboratories to enable them provide quality TB

services, train Laboratory staff and support EQA system. In addition, TB laboratory manuals and guidelines have been printed and distributed during support supervision.

Technical Outcomes

Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target Y2	Result Y2	Comments
2.1	Ensured capacity, availability and quality of laboratory testing in country needed to support the diagnosis and monitoring of TB patients	2.1.1 A national strategic plan developed and implemented for providing the TB laboratory services needed for patient diagnosis and monitoring, and to support the NTP	Indicator Value: Score (0-3) based on definition.	3	3	3	TB laboratory is included in the National Strategic plan.

- **Figure 3: Expansion of TB diagnostic centers from 2005 - 2012**



Key Achievements

- Strengthening of TB laboratory networking by establishing IQC systems in 7 peripheral laboratories in Central Equatoria State (CES) continues.
- Eight job aids have been developed and validated by MoH/NTP and implementation has begun already
- Integration of TB laboratory into routine lab services continues through TB CARE I and other partners (figure 3). The integration process has been exemplified in Yei Civil Hospital.
- Increase in the capacity of laboratory staff to carry out quality TB diagnosis through training of 20 laboratory staff from WBG, NBG and Warrap states and senior lab management officers at the central level.

Challenges and Next Steps

- The main challenge is that the CRL is not being functional to date which is affecting the setting up of an EQA system in the improved laboratories. The MoH with support of donors is finalizing on the redesigning the CRL.
- Lack of human resources and poor integration of laboratory staff working for NGOs in laboratory network.

Figure 4: Dr. Gladys during one of the joint support supervision in Kator, Juba County

Figure 5: Renovated laboratory in Military hospital, Juba County

Programmatic Management of Drug Resistant TB (PMDT)

MDR-TB has been confirmed in 9 patients in South Sudan some of whom have died from the disease due to unavailability of SLDs. NTP through GF support have developed MDR-TB guidelines. Health workers have been trained both locally and regionally to build capacity for establishing MDR-TB management in the country. Training materials have been developed. In due of the importance of infection control in the management of TB disease, Infection control guidelines have been developed.

Technical Outcomes

Technical Outcomes

Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target Y2	Result Y2	Comments
4.1	Improved treatment success of MDR	4.1.1Patients, suspected of MDR-TB, dying between request for lab examination and start of MDR treatment	Percentage Numerator: The number of TB patients (Cat I, Cat II) with confirmed HR or R resistance, who died between the date of the lab request and the start of MDR treatment Denominator: The total number of TB patients (Cat I, Cat II) with confirmed HR or R resistance.	n/a	n/a	0	46 samples have been sent to Nairobi for Culture and DST. No results received so far.

Key Achievements

- Development of PMDT guideline was supported with grants from GF and thus the funds will be re-programmed.

- In line with the 3I's, TB IC guidelines have been developed after assessment of health facilities at different levels.

- 46 samples have been sent to Nairobi for Culture and DST. No results received so far.

Challenges and Next Steps

- Through the surveillance for MTR-TB among the re-treatment cases, 9 MDR-TB patients have been confirmed since 2010, three of whom have died due to lack of SLDs in the country. The confirmed cases have not been put on treatment because MDR TB case management is not available. The government is seeking for support from other donors.

- Referral of samples to Nairobi is expensive and unsustainable. There is need to have the CRL functional. GF has re-program funds to complete the re-designing of the TB CRL.

- Through the assessment done on TB infection control, it was established that there is a significant potential risk of transmission of TB among the health care workers. It is recommended that TB IC committees are formed and WHO guidelines and standard operating procedures adopted. This is to be followed by trainings of HCWs on TBIC.

Figure 6: NTP staff attending a PMDT training in Cairo, Egypt

Figure 7: Outpatient department, Juba Teaching hospital during TBIC assessment visit

TB/HIV

TBCARE I has continued to support coordination meetings between the NTP and HIV/AIDS program. TB/HIV quarterly review meetings have been supported where challenges have been discussed and action plans developed for each respective state. Health care workers have been trained on PITC though TB patients tested for HIV have declined due to lack of HIV test kits. Due to competing priorities, the planned training on Basics of TB for HIV VCT counselors has not been conducted. World TB day was marked with radio talk shows, distribution of IEC materials and road side show.

Technical Outcomes

Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target Y2	Result Y2	Comments
5.1	5.1 Strengthened prevention of TB/HIV co-infection	5.1.2 Facilities that are providing HIV prevention message at TB services	Numerator: Number of randomly-selected facilities, providing DOTS, which have a trained staff on HIV counseling. Denominator: Total number of facilities providing DOTS	67% (2011)	90%	72% (31/43) Reporting facilities.	Data not available for the period Jul - Sep 2102
5.2	5.2 Improved diagnosis of TB/HIV co-infection	5.2.2 TB patients with known HIV status	Numerator: Total number of all TB patients registered over a given time period who were tested for HIV (after giving consent) during their TB treatment Denominator: Total number of TB patients registered over the same given time period.	56% (2011)	80%	45% (1239/2511)	Timeliness of reporting and lack of test kits have resulted in poor performance on this indicator

Key Achievements

- TB CARE I supported the World TB day that was observed in Torit, Eastern Equatoria State. IEC material were printed and distributed during the celebrations. TB CARE I supported radio talk shows to disseminate TB/HIV messages nationally and locally using local FM stations.

- TB and HIV coordination has improved at the central level through participation of NTP and HIV coordinators at central and state level in quarterly review meetings. Share of data and information across the two programs and within the programs from different states has improved communication between the two programs.

- TB screening tools that was jointly revised with TB and HIV working group has been introduced and referral mechanisms established.

Challenges and Next Steps

- The proportion of DOTS centers providing TB/HIV services is low 65% (28/43). There are only 22 ART centers in the country which implies that in some centers, HIV positive TB patients have to be referred for ART services. Efforts are being made to have all TB center provide ARV.

- The proportion of patients knowing their HIV status among TB patients has dropped from 56% in 2010 to 47% in 2011. This is due to lack of HIV test kits which have generally affected TB diagnostic and treatment centers supplied with GF HIV kits.

- Although TB/HIV collaboration at the national level is functional, this collaboration is still weak at state and health facility level. Other challenges include lack of TB coordination at the county level. TB CARE I continue to support quarterly review meetings for State TB coordinators and State HIV directors where challenges are discuss and exchange of information.

- MOST for TB was cancelled due to competing priorities in the NTP. This activity will be carried out in APA 3. Training of VCT counselors in the basics of TB has also been delayed due to the same reasons. However, this activity has been planned to take place in November 2012.

Figure 8: World TB day (2012) celebrations in Torit, Eastern Equatoria

Figure 9: Quarterly review meeting for TB coordinators and HIV directors

Health System Strengthening (HSS)

One of the key strategies to expand TB diagnostic and treatment services in South Sudan is to ensure that TB services are integrated into Primary Health Care (PHC). TB CARE I supported NTP to develop a framework for integrating TB into PHC. This approach will ensure rapid, efficient expansion of TB services in a sustainable and cost-effective way. TB CARE I has supported development of GF TB Transitional Funding Mechanism (TFM) proposal which was placed in category 4 and thereafter supported review of the proposal based on TRP comments. The TFM proposal has been successfully been re-submitted to the GF. In addition, NTP and TB CARE I staff will be supported to attend international trainings and conferences.

Technical Outcomes

Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline (Year or timeframe)	Target Y2	Result Y2	Comments
6.1	6.1 Ensure that TB control is embedded as a priority within the national health strategies and plans, with commensurate domestic financing and supported by the engagement of partners	6.1.2Government budget includes support for anti-TB drugs	Indicator Value: Yes/No	No	Yes	No	Austerity measures following closure of oil fields
6.2	6.2 TB control components (drug supply and management, laboratories, community care, HRD and M&E) formed integral part of national plans, strategies and service delivery of these components	6.2.3 People trained using TB CARE funds	Number of people trained disaggregated by gender and type of training.	99 (F:33,M:66) 2011	200 (F:80,M:120)	222 (F:52,M:170)	Low female participation due to few women in the workforce
		6.2.4 Establish 20 new TB diagnostic and treatment centers	The number of facilities providing TB diagnosis and treatment Number of health facilities with TB diagnosis and treatment among functional state, county and PHCC in the Country	42	62	65	

Key Achievements

- Integration of TB services into PHC is a policy of the MOH
- Support to the development of GF TFM proposal and the review process following TRP comments.

Challenges and Next Steps

- Three quarters of health facilities in the country are in a poor state requiring renovation and a third of them need total reconstruction. Through TB CARE I, seven laboratories are undergoing refurbishment ready for integration.

- Integration of human resources within the Ministry of Health (MoH) payroll remains a challenge. Limited government resources because of the oil shut down which was contributing to 98% of the government budget.

Figure 10: Handover of TB and HIV TFM proposal to the CCM in March 2012

Figure 11: Presentation of revised TB TFM proposal to the CCM based on TRP comments