



TB CARE I

TB CARE I - UZBEKISTAN

Year 3

Annual Report

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List of Abbreviations

CAR	Central Asian Republics
CDC	Center for Disease Control and Prevention
CDR	Case Detection Rate
DOT	Directly Observed Treatment
DOTS	Directly Observed Treatment Short Course
DR	Drug Resistance
DRS	Drug Resistance Survey
DST	Drug Susceptibility Testing
FLD	First Line Drug
GFATM	Global Fund to fight Aids, Tuberculosis and Malaria
GLC	Green Light Committee
HRD	Human Resource Development
HSS	Health System Strengthening
IC	Infection Control
IEC	Information, Education and Communication
MDR	Multi Drug Resistance
MDR-TB	Multi Drug Resistant Tuberculosis
M&E	Monitoring and Evaluation
MOA	Memorandum of Agreement
MOH	Ministry of Health
MSF	Médecins sans Frontières (Doctors without Borders)
NGO	Non-Governmental Organization
NTP	National TB Program
NRL	National Reference Laboratory
OR	Operations Research
PMDT	Programmatic Management of Drug-resistant Tuberculosis
PMU	Program Management Unit
QHCP	Quality Health Care Project
SLD	Second Line Drug
SRL	Supra-national Reference Laboratory
USAID	United States Agency for International Development
WHO	World Health Organization
XDR-TB	Extensively Drug Resistant Tuberculosis

Executive Summary

The USAID-supported five-year (2010-2015) TB CARE I project is implemented in the Central Asian Countries since the first year of the project, beginning in May 2011. In Uzbekistan, TB CARE I administered and implemented by the WHO country office in collaboration with the WHO European Regional office and KNCV Tuberculosis Foundation (KNCV) regional office for CAR. In APA3, US\$899,557 was obligated to support TB CARE I program in country.

WHO as a TB CARE I collaborating partner started implementation of project activities in May 2012. TB CARE I activities are implemented within WHO country office in collaboration with NTP/MoH, MoI USAID, PIU GFATM, KfW, Quality Healthcare and Dialogue on HIV and Tuberculosis projects, MSF, and other local and international partners working in TB control in Uzbekistan. In Year 3, TB CARE I was presented in six technical areas: Universal Access, Laboratories, Infection control, Programmatic Management of Drug Resistant TB, Health system strengthening and Monitoring & Evaluation.

The summary of major achievements of TB CARE I in Uzbekistan Year 3:

Universal Access:

National policy on outpatient TB care was developed and included into consolidated order on TB control. Currently document is under review of MOH for further approval. It was the first time that a detailed model of psycho-social patient support for TB patients was described in such a high-level document and it creates a legislative basis for improvement of psycho-social services in TB service.

Laboratory:

National Xpert MTB/RIF, developed in the frame work of TB CARE I project, was included it into a consolidated MOH's order on TB control. Ministry's approval of the document is expected in October-November 2013.

Infection Control:

The national guidelines on "Infection control in TB facilities" were approved by the MoH in January 2013, and were used as the methodological basis for serial trainings in three pilot regions. By the end of APA3 the NTP has established a trained team of specialists who will assist the NTP in the implementation and scale-up of effective infection prevention and control measures to reduce TB transmission in facilities and in patients' living places.

PMDT:

Since 2012 MDR-TB diagnosis and treatment is being scaled up rapidly across the country with new oblasts in 2012 and an ambitious goal to cover the whole country with enrolment of 5995 patients by the end of 2013 (4 times more than in 2012). With intensive support of WHO, The Global Fund and partners, the National M/XDR TB action plan was updated according to latest developments in scaling up of MDR TB treatment, to address all bottlenecks in expansion of MDR TB treatment.

HSS:

TB CARE I significantly increased NTP's technical capacity on various aspects of TB control - TB IC, outpatient care, rapid TB diagnosis, M&E, transitional TB care for ex-prisoners etc - by training of 464 specialist (F=217) from all levels of TB service – from central to district levels. Seven percent more specialists were trained than was planned in the APA 3 workplan.

Introduction

TB CARE I is one of the main mechanisms for implementing the United States Agency for International Development (USAID) TB strategy. It is a 5-year program aimed at building and expanding upon previous programs, particularly the Tuberculosis Control Assistance Program (TB CAP 2005-2010).

TB CARE I in Uzbekistan is led and managed by WHO Country Office based in Tashkent in collaboration with the TB Unit of the WHO Regional Office for Europe, and KNCV as a coalition partner. As part of the regional strategy, the project is coordinated through the TB CARE I Regional Office for Central Asia.

WHO CO launched the TB CARE I project in Uzbekistan in May 2012. Overall guiding principles for implementing TB CARE I in country are:

- To align with the National TB program for TB Control for 2011-2015, WHO recommendations and USAID TB strategy;
- Focus on technical assistance (TA) at the national level, and through collaboration with other key TB stakeholders and other USAID funded TB partners wherever possible;
- Introduce innovations and implement pilots introducing the new diagnostic technologies and concepts.

Project activities focused on interventions at the national and regional (oblast) levels (Samarkand and Tashkent regions). Ongoing interventions included support to effective implementation of Xpert MTB/Rif technology nationwide, introduction and development of TB-IC measures at the facility level and improvement of outpatient care for TB patients. In APA3, \$899,557 was obligated to support TB CARE I program in Uzbekistan.

Core Indicators

TB CARE I has seven core indicators that the program as a whole is working to improve across all countries. Table 1 summarizes the core indicator results across the life of the project for TB CARE I-Uzbekistan. Results for 2013 will be reported on next year.

Table 1: TB CARE I core indicator results for Uzbekistan

Indicators	2010 (Baseline)	2011 (Year 1)	2012 (Year 2)
C1. Number of cases notified (all forms)	16,883	15,858	15,374
C2. Number of cases notified (new confirmed)	15,734	13,992	14,125
C3. Case Detection Rate (all forms)	50%	52%	n/a
C4. Number (and percent) of TB cases among HCWs*	n/a	n/a	n/a
C5. Treatment Success Rate of confirmed cases	81%	81%	79%
C6. Number of MDR cases diagnosed	1,023	1,385	1,728
C7. Number of MDR cases put on treatment	628	858	1,491

*Data is not available, as the NTP does not collect this data.

TB CARE I started in May 2012. Data presented in this table are the data for 2012.

Summary of Project Indicators and Results

Table 2: TB CARE I -<insert country name> Year 3 indicators and results

Expected Outcomes	Outcome Indicators	Indicator Definition	Baseline or Y2 (timeframe)	Target	Result	Comments	
				Y3	Y3		
Universal Access							
1.2	Increased quality of TB services delivered among all care providers (Supply)	1.2.11. Status of outpatient care model implementation supported by TB CARE I	Percent of (MDR) TB patients enrolled in outpatient care under TB CARE I model. <u>Description:</u> Proportion of (MDR) TB patients put on outpatient care Indicator Value: percentage Level: Samarkand region Numerator: Number of (MDR) TB patients enrolled in outpatient care under TB CARE1 model Denominator: Total number of (MDR) TB patients put on treatment. Values 0%-2012 10%-2013	0% (2012)	10% (2013)	0% (2012)	In APA3 TB CARE I supported development of outpatient treatment protocol with psycho-social patient support model. Developed protocol was included into MOH's consolidated order on TB control submitted for approval in September 2013 Enrollment of TB patients in outpatient care under TB CARE I model will be started after approval of the consolidated order (expected in November 2013).
Laboratories							
2.3	Ensured optimal use of new approaches for laboratory confirmation of TB and incorporation of these approaches in national strategic laboratory plans	2.3.1 Diagnostic sites offering advanced technologies for TB or drug-resistant TB	Description: Number of diagnostic sites, in which GeneXpert MTB/RIF, HAIN MTBDRplus or liquid culture/DST are implemented and routinely used for diagnosis, stratified by testing type. Indicator Value: Number Level: National and TB CARE I areas Source: NTP and TB CARE I Means of Verification: Laboratory register, treatment register, EQA reports from supervising laboratories, implementer report, National Strategic Plan	3 GeneXpert (2012)	5 GeneXpert (2013)	5 GeneXpert (2013)	TB CARE I provided TA on GeneXpert implementation, and didn't procure machines in APA3

			Numerator: Number of diagnostic sites using GeneXpert MTB/RIF, HAIN MTBDRplus or liquid culture/DST disaggregated by type of technology				
		2.3.2 Rapid tests conducted	Description: Number of rapid tests conducted using GeneXpert MTB/RIF. Indicator Value: Number of tests Level: TB CARE areas Source: NTP and TB CARE Means of Verification: Lab register, TB suspect register, TB treatment register Numerator: Annual number of GeneXpert tests conducted	140 (2012)	5000 (2013)	9000* (2013) <i>* Estimated data Final data on Xpert MTB/RIF testing results will be available by the end of 2013</i>	TB CARE I provided TA on GeneXpert implementation, and didn't procure machines in APA3. NTP conducted more rapid tests than expected than when indicator targets for APA3 were developed (August 2013)
		2.3.3 Patients diagnosed with GeneXpert	Description: This indicator measures the number and percent of patients diagnosed using GeneXpert (disaggregated by RIF-resistance) Indicator Value: Percent Level: TB CARE areas Source: NTP and TB CARE Means of verification: lab register, TB treatment register Numerator: Number of TB patients diagnosed using GeneXpert disaggregated by RIF-resistance Denominator: Number or TB suspects tested with GeneXpert	(2012) 37% (52 of 140) Rif-R 22% (11 of 52)	(2013) 80% (4000 of 5000) Rif-R 25% (1000 of 4000)	(2013)* roughly MTB+ estimated rate: 22% , Rif-R estimated rate 40% <i>* Final data on Xpert MTB/RIF testing results will be available by the end of 2013</i>	In the summer 2012 when the APA3 proposal was submitted, the positivity rate among those tested by Xpert MTB/RIF GeneXpert was overestimate since there was no real experience on Xpert MTB/RIF. Machines were launched in September 2012, and in initial stage a lot of cartridges were lost due to unstable electricity and lack of experience on choosing a priority group for testing etc. Final data on Xpert MTB/RIF testing results will be available by the end of 2013
Infection Control							
3.1	Increased TB IC Political	3.1.1 National TB-IC guidelines that are in accordance with the WHO TB-		No 2012	Yes 2013	Yes 2013	National TB-IC guideline was approved in January 2013

	Commitment	IC policy have been approved					
3.2	Scaled-up implementation of TB-IC strategies	3.2.2. Facilities implementing TB IC measures with TB CARE support		0 2012	6 2013	6 2013	Six TB facilities in Tashkent city and Tashkent and Samarkand regions were piloted
3.4	Improved TB-IC human resources	3.4.1 Personnel trained on TB IC	Description: Number of medical specialists trained on TB IC in pilots based on new Guideline on TB IC Indicator Value: Number Level: TB CARE pilots Source: TB CARE Means of Verification: Training and monitoring visits reports	0 2012	70 2013	76 2013	Trainings were organized for selected TB facilities. In agreement with the TB facilities management, six more TB staff was invited for training sessions.
Programmatic Management of Drug-Resistant TB (PMDT)							
4.1	4.1 Improved treatment success of MDR TB	4.1.4 A functioning National PMDT coordinating body	Description: National PMDT coordinating body has been established, is recognized by the MoH and is functioning. Indicator Value: Yes/No Level: National Source: NTP Mean of verification: Meeting notes/agenda	No 2012	Yes 2013	Yes 2013	PMDT nationwide is coordinated by NTP in collaboration with partner organizations in TB control. One of the significant events in APA3 was MOH's approval of the National action plan to combat M/XDR TB in Jan2013. Moreover, with intensive support of WHO, The Global Fund and partners, the National M/XDR TB action plan was updated in July 2013 according to latest developments in scaling up of MDR TB treatment, to address all bottlenecks in expansion of MDR TB treatment.
Health System Strengthening							

6.2	TB control components (drug supply and management, laboratories, community care, HRD and M&E) form an integral part of national plans, strategies and service delivery	6.2.2 People trained using TB CARE funds	Description: Health care workers at all levels trained on any area of TB control using TB CARE funds. Indicator Value: Number Level: National Source: TB CARE project Means of Verification: Training reports Numerator: Number of people trained disaggregated by technical area	122 (Universal Access 32 Labs 37 TB IC 25 PMDT 20 HSS 8) 2012	434 (Universal Access 69 Labs 137 TB IC 70 PMDT 24 HSS 115 M&E 19) 2013	464 (f=217) (Universal Access 70 Labs 153 TB IC 76 PMDT 24 HSS 104 M&E 37) 2013	Planned number of trained specialist was exceeded by 7 %.
Monitoring, Evaluation & Surveillance							
7.2	Improved capacity of NTPs to analyze and use quality data for the management of the TB program	7.2.2 NTP provides regular feedback from central to intermediate level	Description: NTP prepares and disseminates regular, written and comparative feedback from central to intermediate levels based on analysis of national surveillance and programmatic data. Comparative feedback is when results from various areas are displayed and compared with each other to provide context for good/poor results. Intermediate levels are any level between the health facility/peripheral level and national level (i.e. regional, district or zonal level). Indicator Value: Yes/No Level: National and TB CARE geographic areas Source: NTP and TB CARE Project Means of Verification: Annual/quarterly feedback reports	No 2012	Yes 2013	Yes 2013	Comprehensive training on M&E fundamentals, data processing and analysis was organized for M&E ventral unit of NTP in September 2013. Comprehensive report on recently finished nationwide 2013 Q3 monitoring of TB service, organized by WHO-USAID PARTNERSHIP project, was prepared according to international standards. Regular data flow between NTP's central unit and regional TB service is organized in line with regular quarterly monitoring launched by WHO-USAID PARTNERSHIP project since June 2013.

Universal Access

In Universal Access, TB CARE I provided on demand technical support to program implementers to facilitate a shift to ambulatory care in Tashkent and Samarkand regions. Special attention to each region's specific characteristics, available local resources, and capacities was given. Since psychosocial support for TB patients should be an essential part of outpatient TB (MDR-TB) care, WHO provided a technical assistance to develop and implement a Psycho-social patient support model in pilot sites.

In an effort to address excessive hospitalization of TB/MDR TB patients, the WHO country office in Uzbekistan in collaboration with KNCV brought together NTP, local government and health departments along with TB practitioners and other players, to design a protocol for a pilot outpatient TB care model and took responsibility to facilitate the shift to ambulatory care in Tashkent and Samarkand regions, further enabling the primary health care network (PHC) to achieve better treatment outcomes, reduce costs and improve patient satisfaction.

As an element of "TB in prisons" component, TB CARE I coordinated development of informational material for ex-prisoners.

Key Results

Outpatient care

- National Technical Working Group (TWG) on the implementation of ambulatory TB care established in January 2013. It is a first official MOH's mechanism to update/upgrade current practices on ambulatory TB treatment.
- Achieved consensus with the Ministry of Health, National TB Program, international partners and national health professionals to work on programmatic approach of outpatient model of care and Psycho-social patient support model for TB patients.
- Developed and agreed draft model on outpatient model of care and Psycho-social patient support model.
- Admission criteria for outpatient treatment developed jointly by NTP, WHO, KNCV consultants and partner organizations in the framework of TB CARE I, have been included into consolidated order on TB control and submitted to the MOH for approval in July 2013. This will reduce time of hospital stay for most patients and allows treatment of eligible patients including SS+ patients in their homes, provided appropriate TB-IC measures are implemented. Expected date of MOH's approval - November 2013.
- A study tour to Kazakhstan on the patient support system for MOH-WHO TWG members was organized in mid-April 2013. The results of the study tour was a brief concept note on the establishment of psycho-social services for TB patients submitted to the MOH within consolidated order on TB control.

Prisons

- Brochure on TB for prisoners and ex-prisoners "TB: manual for patients" was developed, agreed with NTP and submitted for printing in September 2013. 1000 copies will be distributed in APA4 in the framework of related TB CARE I activities.

Challenges

- Main challenges yet to be addressed in the near future have to do with current regulations and funding mechanisms that are focused on hospital, in-patient care, and excessive screening, which make almost the entire population eligible for TB screening. Long hospitalization practices need to be revised and rationalized with the focus on considering the ambulatory treatment from the very beginning of treatment.
- Targeted social support of TB patients is not established yet.
- There is no specialized psychological service available for TB patients, which could ensure strong patient adherence, specifically during long MDR-TB treatment.
- Due to unavailability of SES regulation allowing to infectious patients to stay at their homes even if TB IC measures are kept, there was some resistance in some divisions of MOH during agreement of extended outpatient TB care. Currently this issue is being solved through technical assistance on updating SES TB IC regulations organized by WHO for SES central unit in line with WHO-USAID Partnership project for TB control.

- APA3 target to enroll 10% of TB patient in outpatient care under TB CARE1 model was not achieved in APA3 due to absence of MOH-approved TB CARE I supported outpatient model. Developed protocol was included into MOH's consolidated order on TB control submitted for approval in September 2013. Enrollment of TB patients in outpatient care under TB CARE1 model will be started after approval of the protocol (expected in November 2013).
- Using ambulatory treatment from the beginning in settings without PMDT experience could be risky in correct program implementation, patient management, and drug side effects management. It requires for more gradual transition.

Next Steps

- Treating patients in healthy and supportive environment, treating patients near their homes, training and supervision of health workers, and progressive use of chemotherapy – all these topics TB CARE I will continuously follow up with NTP/MOH to protect Uzbekistan citizens from a hidden infectious threat.
- Facilitate continuation and expansion of ambulatory TB treatment for non-infectious cases, giving possibility for new patients start MDR-TB treatment in hospital. It will save money for drugs and diagnostics for program to be sustainable.
- Following the release of the united MOH order on TB control, workshops with representatives of all national TB dispensaries to introduce them to the new requirements on the administration of outpatient care, should be organized. TB CARE I will continue supporting Samarkand region in the expansion and further adoption of outpatient care through supervisions and monitoring visits. The region will be also supported in finding sources for an effective patient support system.
- Continue technical assistance to local TB and PHC services to implement the Protocol of Outpatient Care and Psychosocial Support through Monitoring and Participation in Coordination meetings at TB CARE I district levels.

Photo1. Study tour to Kazakhstan, Apr 2013. Members of the TWG on outpatient model implementation discuss details of psychosocial support services in Semey.



Photo 2 The National TWG on the implementation of ambulatory treatment is taking the responsibility to facilitate a shift to ambulatory TB care, Feb 2013, Tashkent



Photo 3.

Study tour to Kazakhstan, Apr 2013.
Participant from Uzbekistan: We have to follow TB IC rules, please put on your respirators!



Photo 4. Working meeting with social rehabilitation center representatives of Tashkent city, Aug 2013, Tashkent



Laboratories

In **Laboratories**, WHO country office through TB CARE I project provides lead technical assistance for the introduction of Xpert MTB/RIF technology in Uzbekistan and, in collaboration with KNCV/TB CARE I experts, development of the national strategy for its implementation in the country. Since 2011, four players (PIU GFATM, EXPAND TB/FIND, MSF and TB CARE I) are involved in Xpert MTB/Rif implementation in Uzbekistan. In total, 11 Xpert MTB/Rif machines are used in the country.

TB CARE I project is focused on building local capacity for strong coordination and supervision roles of the National TB Program to effectively implement Xpert MTB/Rif technology in Uzbekistan.

TB CARE I has made substantial investments to improve case finding by improving principles of Xpert MTB/RIF using targeted at high risk groups. Also, TB CARE I impacted to increased effectiveness of Xpert MTB/RIF testing (% of effectively used cartridges and detection rate using Xpert MTB/RIF).

Key Results

- The national Xpert MTB/RIF algorithm and implementation strategy were submitted to the MOH for approval. NTP upgraded status of the national Xpert MTB/RIF strategy and included it into the consolidated order on TB control which was finalized and submitted to MOH in July 2013. Ministry's approval of the document is expected in October-November 2013.
- To build technical capacity and ensure NTP ownership, TB CARE I supported a training of trainers on the practical use of Xpert MTB/Rif for laboratory specialists, managers and clinicians of TB and PHC services. Event covered 32 laboratory and clinical specialists and managers (F=21). The draft 2013 implementation workplan for Xpert MTB/Rif in Uzbekistan, the draft training curriculum, and the schedule for Xpert MTB/Rif trainings were developed during the event.
- A series of trainings for sites where six Xpert MTB/Rif machines are placed (Tashkent and Samarkand regions and prisons) covered 193 specialists (management, TB specialists and general practitioners) from Tashkent city and region and 83 specialists from Samarkand region were trained on the introduction of rapid diagnostic methods for tuberculosis, including Xpert MTB/Rif.
- Technical assistance provided within APA3 effected the reduction of # of lost cartridges due to initial incorrect testing procedures from approx. 10% in beginning of APA3 (Oct-Dec 2012) to approx. 3,4% in Jan-Sep 2013. .

Challenges

- Low access to rapid (MDR) TB diagnosis in regions of Uzbekistan. In light of recent significant MDR-TB treatment scale-up, low diagnostic lab capacity is a major bottleneck in PMDT expansion nationwide.
- NTP's managerial capacity in planning, budgeting, monitoring and maintenance of Xpert MTB/RIF machines needs to be strengthened.
- The Head of the NRL has resigned which resulted in decrease of capacity of central laboratory unit in coordination of lab network.
- Optimization of laboratory tests use is needed for diagnosis of TB and DR-TB, to ensure cost-effective use of available tests.
- Most medical workers in Xpert sites were not good computer users.
- Selection of patients eligible for XpertMTB/RIF testing were not properly made in the beginning of APA3, therefore the MTB positivity rate and RIF resistance rate in NRL nationwide were low.
- NTP performed more XpertMTB/RIF tests than anticipated in 2012 (~9000 against 5000). This increase gives signals that need in GeneXpert cartridges' forecasting and planning should be well organized.
- Machines were launched in September 2012, and in initial stage a lot of cartridges were lost due to unstable electricity and lack of experience on choosing a priority groups for testing.

Next Steps

- TB CARE I will provide Xpert MTB /RIF technology (procure four machines for four regions of Uzbekistan, install them and make them operational through trainings) and all comprehensive lab and clinical support for programmatic introduction of this rapid technology.
- National lab network will be trained in Xpert MTB /RIF maintenance, troubleshooting and planning. Ongoing support shall be provided to TB CARE I Xpert MTB /RIF sites through monitoring and supervision visits.
- TB CARE I will also offer technical assistance in the potential revision of the national Xpert MTB /RIF strategy based on the initial results of Xpert MTB /RIF implementation in country. Monitoring of Xpert MTB /RIF performance and final results of using of Xpert MTB/Rif machines will be conducted in the end of APA4.
- To assist the NTP in development of job description for the National Coordinator on Xpert MTB/Rif implementation.
- Revision of National Xpert MTB/Rif strategy based on the lessons learnt from TB CARE I and GF Xpert MTB/Rif sites
- To continue monitoring proper use of Xpert MTB/RIF in pilot sites.

Photo 5. Training of Trainers on the Practical Use of Xpert MTB/RIF. NTP manager is explaining his expectations on Xpert MTB/RIF implementation, Dec 2012, Tashkent



Photo 6. Series of trainings for Xpert MTB/Rif sites, Feb 2013, Tashkent



Photo 7. Series of trainings for Xpert MTB/Rif sites, Feb 2013, Samarkand
WHO, NTP, NRL and KNCV experts are exploring a most effective placement of Xpert MTB/RIF machines in Samarkand region.



Photo 8. Working meeting on development of consolidated order on TB control, July 2013, Tashkent region.



Infection Control

In **Infection Control**, TB CARE I focused on activities to strengthen the capacities of local specialists at the national, oblast and TB CARE I pilot districts levels by conducting training on TB-IC and supervision monitoring visits to TB CARE I pilots with on-the-job trainings. Also NTP's capacity in TB IC was strengthened by introduction of new TB IC guidelines and establishment of TB IC measurement teams trained and equipped in APA3.

Key Results

- The national guidelines on "Infection control in TB facilities" were approved by the MoH in January 2013, and were used as the methodological basis for whole project impact in this technical area. National guidelines on TB IC were also translated and published in Russian and Uzbek languages.
- Six TB facilities in Tashkent city and Tashkent and Samarkand regions implemented TB IC measures with TB CARE I support.
- National TB-IC human resources were improved by training of 76 TB, PHC, SES and prison service representatives.
- A group of national trainers participated in the national TOT course. TB specialists and TB IC coordinators from general and prison services built their capacity on TB-IC measures.
- The "Comprehensive TB-IC Training" course for specialists from the TB Service and the Sanitary Epidemiologic Services (SES). At this event, improved collaboration on TB IC was achieved between the TB Service and SES, as representatives from both services worked together to update their knowledge and skills.
- NTP, Tashkent and Samarkand regions were trained on IC measurements and equipped with modern TB IC measurement equipment not available before even in SES service. Now both TB IC implementing (TB service) and supervising (SES) parties are ready to reach a consensus by keeping effective measurable infection control rules.

Challenges

- Comprehensive TB IC demands very strong financial investments. Due to facilities' budget limits, NTP agreed that more cost-effective way to be focused on administrative measures and individual protection.
- National TB-IC guidelines need to be introduced in TB facilities in TB CARE I pilots.
- SES regulatory documents need to be introduced in compliance with National TB-IC guidelines.
- TB-IC activities plans with budgets need to be developed and approved by the head doctors in all TB facilities in TB CARE I pilots.
- Ongoing supervision visits and on-the-job trainings in TB-IC needed to support the implementation of modern IC standards.

Next Steps

- TB CARE I will assist the TB facilities of new four pilot regions (Tentatively Bukhara, Navoi, Kashkadarya and Khorezm regions):
 - with development of TB-IC implementation and equipping those regions with sets of TB IC measurement tools. Facility level TB IC plans will be developed with project's support as well.
 - complementary to serial trainings on TB IC planned by WHO-USAID PARTNERSHIP project, TB CARE I will support introduction of TB IC via trainings for TB specialists;
 - SES specialists will be trained in the use of TB-IC monitoring tools, modern TB-IC assessment and monitoring approaches.
- Supervision and monitoring of the TB-IC activity plans implementation will be continued in the APA3 pilots (Samarkand and Tashkent regions)

Photo9.

TB IC assessment mission, visit to laboratory.
Dec 2012, Samarkand



Photo 10

TB IC assessment mission measuring an air flow
in TB dispensary. Dec 2012, Samarkand



Photo11.

ToT on TB IC, Jan 2013, Tashkent



Photo11.

ToT on TB IC, Jan 2013, Tashkent



Photo 13-15

Moments of the training on TB IC measurements.
September 2013, Tashkent



Programmatic Management of Drug Resistant TB (PMDT)

In PMDT, TB CARE I supported NTP/MOH in the approval and updating of the national Comprehensive Plan of Action for the Prevention and Control of M/XDR Tuberculosis for 2012- 2015. Since 2012 MDR-TB diagnosis and treatment is being scaled up rapidly across the country with new oblasts in 2012 and ambitious goal to cover whole country with enrolment 5995 patients by the end of 2013 (4 times more than in 2012). With intensive support of WHO, The Global Fund and partners, the National M/XDR TB action plan was updated according to latest developments with GF supported MDR TB treatment expansion, to address all bottlenecks in growing PMDT program.

Also, NTP with TB CARE I's support agreed to use of Xpert MTB/Rif results as direct indication for MDR TB treatment, and provided ongoing support and supervision to the PMDT program in Tashkent.

Key Results

- Comprehensive Plan of Action for the Prevention and Control of M/XDR Tuberculosis for 2012-2015, developed under TB CARE I in APA2, was approved in January 2013
- National PMDT Workshop for key stakeholders involved in MDR TB program implementation from TB services, PIU GF, DOTS Center and partners (34 participants) organized in July 2013. Gap analysis and recommendations were done for the National M/XDR TB plan for further implementation in Uzbekistan. It was agreed that a detailed operational plan of activities for the next two years (2014-2015) will be prepared within the next month, based on the agreed recommendations. One of discussed challenges was that NTP should enroll in MDR-TB treatment 5995 patients in 2013 (4 times more than in 2012), and national and international partners agreed to joint efforts to ensure universal access to TB/MDR TB diagnosis and treatment and organize a qualitative clinical management of those patients by the end of 2013.
- Draft order on using Xpert MTB/Rif results for starting MDR treatment has was put under united order on TB control. Document was submitted to MOH for approval, which is expected in November 2013.

Challenges

- The NTP started rapid extension of a program in the new oblasts in late 2012 with an ambitious goal to cover the whole country with SLD treatment for 5,995 patients until the end of 2013. It represents a fivefold increase compared to 2012. This situation is a challenge for the NTP since the program is not fully capable to diagnose this number of patients as well as to organize clinical management of those patients in 2013.
- Expansion of PMDT countrywide should be ensured to achieve full country coverage (all 14 regions of Uzbekistan instead of 4 current MDR treatment sites) and equal access to treatment. Training, workshops, regular quarterly supportive supervision on treatment, case management, and drug management should be part of it, according to WHO recommendations
- In settings without PMDT experience start MDR-TB treatment in specialized hospitals with adequate patient, and drug side effects management. Gradual transition to ambulatory treatment as soon as patients improve can be used.

Next Steps

- To develop PMDT module for training of different target groups involved in providing TB services (TB doctors, PHC physicians, TB and PHC nurses, TB and PHC managers).
- To train representatives of NTP (in pilot oblasts) on comprehensive programmatic management of DR TB based on developed PMDT module.
- To conduct supervisory visits in TB CARE I pilots to provide mentoring, on-the-job training and review of clinical practice in pilots.
- To organize a practical support to clinicians on MDR TB treatment in new TB CARE I pilots.

Photo16.

Participants of National PMDT Workshop for key stakeholders on updating National action plan to combat M/XDR TB



Photo17.

National experts are discussing the future steps on implementation of PMDT activities in line with the National action plan to combat M/XDR TB



Health System Strengthening (HSS)

In HSS, WHO in the framework of TB CARE I provided on-demand technical support to program implementers to facilitate a shift to ambulatory care in Tashkent region, while keeping in focus PHC preparedness to provide TB care and treatment, patient satisfaction, treatment outcomes and financial implications.

Additionally, TB CARE I supported NTP in improvement of its technical capacity on various aspects of TB control - TB IC, outpatient care, rapid TB diagnosis, M&E, transitional TB care for ex-prisoners etc - by training of 464 specialist (F=217) from all levels of TB service – from central to district level.

TB CARE I also addressed the role of local community groups and NGOs in TB control, including prevention, patient support and stigma reduction and improve the capacity of national health system in ensuring continuum of care for released prisoners with TB.

Key Results

In total 464 TB and PHC specialist from central to district levels of TB service were covered with TB CARE I activities organized by WHO country office in Uzbekistan (Table 3). Seven percent more specialists were trained than was planned in the APA 3 workplan.

- Three NTP representatives attended the 43rd UNION World Conference on Lung Health and STOP TB department meetings in Kuala Lumpur, on November 12-16, 2012, and Wolfheze meeting in March 2013.
- 68 PHC and other care providers from three pilot regions were updated their skills and knowledge in the administration of outpatient care, DOT, patient counseling, treatment adherence. It was an important support to currently happening nationwide scaled up of MDR TB treatment.
- New MDR-TB guidelines that integrate most recent WHO recommendations, including utilization of rapid diagnostic tools, new clinical aspects of DR-TB case management (dosages & schemes & length of treatment) as well as management of TB in children, TB IC is adopted in a new Consolidated Order (prikaz) on TB control in the summer 2013 and submitted for MOH's approval.

Table 3. Number of trained specialist in the framework of TB CARE I project in APA3*.

WHO CO in Uzbekistan

Period: 1 October 2012 – 30 September 2013

Technical area	Pax			Facilitators	WHO staff	Planned PAX	Planned vs trained
	M	F	Total				
Universal Access	30	30	70	13	12	69	101%
Laboratories	89	76	155	9	8	137	112%
TB IC	40	36	76	10	8	70	109%
PMDT	14	8	22	0	0	24	100%
HSS	50	54	104			115	90%
M&E	24	13	37	2	5	19	195%
Total	247	217	464			434	107%

* divided by technical areas

Challenges

- There is a need to train TB specialists from new MDR TB treatment pilots in PMDT, TB IC, Xpert MTB/RIF.

Next Steps

- To continue supporting training activities for health professionals in APA4.

Photo18.

ToT for PHC service, Aug 2013, Tashkent region



Photo 19

Training for PHC and TB services on TB control in outpatient setting, Aug 2013, Samarkand region



Monitoring & Evaluation, Surveillance and OR

In recent years, the country has made significant progress in the implementation of recording and reporting according to WHO recommendations. A unified system for monitoring and evaluation of TB activities is in place, covering all TB facilities and starting with primary health care units in institutions at the national level. Additionally, NTP established new M&E department which appointed to coordinate TB M&E nationwide and ensure quality data flow.

WHO country office (WHO CO) in Uzbekistan supports NTP on M&E in order to increase capacity of monitoring and evaluation units of NTP in systematic data analysis and using it for operational management on routine basis.

Key Results

- NTP's capacity to analyze and use quality data for the management of the TB program was improved in the following ways:
 - TB CARE I conducted a regional training on the basics of monitoring and evaluation for CAR NTPs in April of 2013.
 - Comprehensive training on M&E fundamentals, data processing and analysis was organized for M&E central unit of NTP in September 2013. It is expected that knowledge and practice received during a 5-day event improved feedback provided by NTP regularly from central to intermediate level. Comprehensive report on recently finished nationwide 2013 Q3 monitoring of TB service, organized by WHO-USAID PARTNERSHIP project, was prepared according to international standards.

Challenges

- New WHO's "Definitions and reporting framework for tuberculosis – 2013 revision" should be introduced nationwide to ensure compliance of National M&E system with the global TB data collection system

Next Steps

- To provide supervisory visits and on-the-job training on revised R&R forms in TB CARE I pilots.
- To provide technical support to pilot sites to ensure that surveillance data as well as M&E indicator data are used routinely for evaluation of TB program performance, and as such to inform (MDR)TB management and policy decisions.
- To organize training on new WHO definitions for regional TB services.

Photo20. M&E Training for M&E central unit in NTP, Sep 2013, Tashkent

Photo21. Regional TB CARE I training on M&E: Uzbek participants exchange National M&E Plan specifics with colleagues from Kazakhstan prisons. Almaty, Apr 2013

