USAID
FROM THE AMERICAN PEOPLE

TB CARE I

Supporting Local Ownership of TB Control Initiatives

Lessons learned from working with local partners

Contents

Acknowledgements

The Global Health Bureau, Office of Health, Infectious Disease and Nutrition (HIDN), US Agency for International Development, financially supports this publication through TB CARE I under the terms of Agreement No. AID-OAA-A-10-00020. This publication is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of TB CARE I and do not necessarily reflect the views of USAID or the United States Government.

This report was prepared by Ineke Huitema, Marleen Heus and Ieva Leimane (all consultants at KNCV Tuberculosis Foundation).

The authors are grateful to all the TB CARE I country directors and consultants who acted as information sources for the desk review and interviews. The authors are also grateful to all those who participated in the interviews during the field visits and generously shared their experiences and views.

Special thanks to the TB CARE I country directors of Kyrgyzstan, Nigeria and Vietnam who supported the field visits and coordinated all the logistics.

Abbreviations and Acronyms

CBO	Community-based organization
CDC	United States Centers for Disease Control and Prevention
CME	Continuous medical education
CSO	Civil society organization
CTB	Challenge TB
DR-TB	Drug-resistant TB
DOT	Directly Observed Treatment
HCS	Health care system
HCW	Health care worker
KNCV	KNCV Tuberculosis Foundation
LOI	Locally owned initiative
MDR-TB	Multidrug-resistant TB
M&E	Monitoring & evaluation
MoH	Ministry of Health
NGO	Non-governmental organization
NTBLCP	Nigerian National TB and Leprosy Control Programme
NTP	National TB Program
NTRL	National TB Reference Laboratory
PA	Professional association
PGI	Post Graduate Institute
PHC	Primary health care
PMDT	Programmatic management of drug-resistant TB
RFA	Request for Application
SES	Sanitary Epidemiological Society
SOP	Standard operating procedure
TA	Technical assistance
TB	Tuberculosis
TB-IC	Tuberculosis Infection Control
USAID	United States Agency for International Development
WHO	World Health Organization

Executive Summary

This document summarizes the lessons learned on locally owned initiatives (LOIs) under the TB CARE I project, the forerunner of the Challenge TB (CTB) project. It describes the key factors for success, the risk factors and the role of technical assistance (TA). These lessons learned can be used under the CTB project by country teams, local and international consultants and staff of the coalition partners who are involved in planning, monitoring and evaluating CTB projects.

As the flagship global mechanism for implementing United States Agency for International Development's TB strategy, CTB is committed to supporting local initiatives of public and non-governmental partners and to including them in all project phases, resulting in local ownership and sustained results in TB control. LOIs refers to successful initiatives in which local, in-country partners took a lead or were substantially involved in the design, implementation and evaluation of the initiative, along with external (not local) stakeholders. This is an important paradigm shift away from traditional long-term external technical assistance and towards supporting and enabling local partners to lead efforts towards achieving national and global targets.

A qualitative study was done from March to July 2015, and data were collected through desk reviews, distance interviews and field visits to three countries. This assessment included data from 20 countries where the TB CARE I project was implemented between 2010 and 2015. In total, 142 projects were screened and distance interviews were held with country office staff in 18 countries and included 76 projects. In addition, the team conducted 45 interviews during field visits to Kyrgyzstan, Vietnam and Nigeria.

The key assessment questions were:

1. What are the factors for success in working with local partners and initiatives?
2. What factors hindered successful partnership and activity implementation?
3. How can local partners be managed effectively to ensure strong local initiatives?
4. What was the role of technical assistance in supporting local initiatives and partners, and how has it changed or should it change to support local ownership and sustainability?

Assessment Results

1. Key Factors for Success

The team found three key factors for successful locally owned initiatives (LOIs):

1.1 Strategic alignment: comprehensive and long-term approach addressing priorities
Successful local ownership is seen in initiatives that address urgent problems and focus on challenges that are high on the agenda of the National TB Program (NTP). Local initiatives that operate within the existing (health) systems and capacitate these systems, have more potential to grow and be sustained. A comprehensive capacity-building approach is necessary for strong local initiatives.

1.2 People: Visionary leadership and personal commitment, staff numbers and competencies
The success of local initiatives often depends on the personal commitment of individuals at different levels of the health care system. In addition, outspoken visionary leaders and decision-makers can be of added value to catalyze and sustain local ownership. Sufficient and capable staff are essential for the performance of local initiatives. Staff need to be able to take the lead, conduct the necessary tasks and manage the initiative appropriately.

1.3 Relationships: Stakeholders' involvement and collaboration including technical assistance
Successful local ownership is seen in initiatives with the productive involvement of different stakeholders, from inside and outside the health sector, public, private, local, national and international. It is essential that the unique strengths of each stakeholder are utilized and that stakeholders work together. This requires openness, trust and strong partner management. Local initiatives are more successful when there is a strong NTP or a local non-governmental organization (NGO) that takes the lead in coordinating stakeholders. Finally, the team found that long-standing collaborations among local partners and between local and international partners improves the chances of successful implementation.

2. Risks

The team found four overarching themes that capture the risks to the success of local initiatives:

2.1 People: Limited staff capacity in terms of number and expertise
A shortage of managerial and implementing staff was mentioned in several countries as a hindrance to local ownership. Competent technical staff need to be equal partners with the external (international) donors and consultants providing technical assistance (TA).

2.2 Tools: An exclusive focus on the introduction of new technologies and tools
Local initiatives are hindered when their focus is mainly on the introduction of new tools, and there is no investment in comprehensive capacity-building.

2.3 Funds: Financial dependency on external donors
Local initiatives will not be sustainable when they continue to be financially dependent on external donors. In some countries the local stakeholders have not diversified their funding sources and have limited fundraising capacity.

2.4 Exit strategy: Absence of an "exit strategy"
The team failed to find local initiatives that had defined an exit strategy at the start of the local initiative. This made these local initiatives vulnerable and dependent on external partners.

3. Changing roles of Technical Assistance

The team found that over time the role of TA is changing with the new demands of TB programs, and the shifting policies of donors and technical agencies. In general, local TA will be used for hands-on activities, bringing in additional staff capacity, knowledge and specific expertise. International TA is recognized by countries as an opportunity to bring in innovations and support their implementation. International TA takes on the role of partner, coach and counselor, and requires technical expertise, mentoring skills, cultural competence, trust and openness. As a result of the assessment, the team expects that the role of external (international) TA will become more process-oriented with several roles:

- Assessment of relevant partners and their expertise
- Mentoring local partners and experts to reinforce technical and managerial capacity
- Providing high-level technical expertise.

These changing TA roles will require a different set of consultant competencies, for which technical partners need to be prepared.

Recommendations

The team defined recommendations on how to strengthen LOIs in CTB:

- Ensure that the LOI is a quality criterion in any project and assess the quality of LOIs during the project cycle, making use of the *Locally Owned Initiatives Benchmarking Tool*
- Local and international partners must define an exit strategy at the start of the local initiative
- Ensure effective partner management of all stakeholders involved in the local initiative
- Build the capacity of local leadership and give them the opportunity to guide local initiatives
- Engage in long-term partnerships among local and international stakeholders
- Provide appropriate TA, based on the needs of local partners and with a strong orientation towards capacity-building.

The *Locally Owned Initiatives Benchmarking Tool* is presented in Chapter 5 of this report. The tool can be used during the planning, monitoring and evaluation of project work plans.

The full LOI stories derived from the field visits can be found in Annex 6.2.

1: Introduction

This report is meant for staff working under the Challenge TB (CTB) project, specifically country teams, local and international consultants, and staff of the CTB coalition partners who are involved in planning, monitoring and evaluating CTB projects.

As the new United States Agency for International Development (USAID) flagship TB project, CTB is committed to supporting the locally owned initiatives (LOIs) of ministries, civil society organizations (CSOs), NGOs, academia/universities, and affected communities. CTB will include local partners in all project phases, including the design, implementation and evaluation of country- and setting-specific approaches to TB control and TB elimination.

This is a paradigm shift away from traditional long-term external technical assistance (TA) and towards supporting and enabling local partners to lead efforts towards achieving national and global targets. This shift is possible because countries have more capacity and more access to information. In the coming years more and more national and local stakeholders will provide TA, and international experts will be limited to introducing cutting-edge technical expertise.

In order to strengthen the approach to local engagement and ownership for CTB, KNCV Tuberculosis Foundation (KNCV) assessed the lessons learned from TB CARE I projects that included local partners and LOIs.

TB CARE I was a five-year global cooperative agreement (2010-2015) funded by USAID. Over the life of the program, 95 core/global projects (including 35 multi-year projects), 10 regional projects and 22 country projects were implemented. In most of these projects, TB CARE I sought to build local ownership of and engagement in, TB control activities to promote sustainable progress after the end of the project. TB CARE I implementing partners worked closely with national governments, other national and international TB initiatives and local organizations to provide technical support to national TB control efforts.

This report describes the lessons learned about local engagement and ownership in TB CARE I supported projects, including key factors for success, risk factors, and the implications for the future role of TA providers.

Chapter 2 gives an overview of the research scope, the methodology and the information sources used. Chapter 3 is devoted to the lessons learned: key factors for success and risk factors affecting local ownership and the changing role of TA. Chapter 4 presents recommendations for actions to strengthen local ownership. In Chapter 5, the "*Locally Owned Initiative Benchmarking Tool*" is presented, this tool can be used during the planning, implementation, monitoring and evaluation of CTB projects in order strengthen local ownership.

In the annexes you can find ten stories from LOIs in Vietnam, Kyrgyzstan and Nigeria, the countries included in the field visits. The annexes also present figures illustrating theoretical models, the tools used during the desk reviews and the field assessment, and reference materials.

2: Study Scope and Methodology

2.1 Definition

In this document, the term "Locally Owned Initiatives" refers to initiatives in which local, in-country partners successfully took the lead or were substantially involved in the design, implementation and evaluation of the initiative, along with external (non-local) stakeholders. "Success" was judged on the local partners' and external stakeholders' pride in the initiatives' results, including successful outputs or more long-term outcomes that are embedded in a well-functioning system, in other words, they considered their efforts to be worthwhile.

2.2 Study Scope

This assessment included data from 20 countries, where the TB CARE I project was implemented between 2010 and 2015 (See Annex 6.3). In addition, field visits were conducted to three countries that were able to facilitate them and had strong LOIs.

The key assessment questions were:

1. What are the factors for success in working with local partners and initiatives?
2. What factors hindered successful partnerships and activity implementation?
3. How can local partners be managed effectively to ensure strong local initiatives?
4. What was the role of TA in supporting local initiatives and partners, and how has it changed or should it change to support local ownership and sustainability?

This report documents the good practices and lessons learned from this assessment.

2.3 Methodology

This qualitative assessment collected data through desk reviews, distance interviews with country office staff, and field visits to selected countries.

Desk Review

The eligibility criteria for LOIs were defined and the eligibility checklist was developed. Two criteria were used to include activities and one criterion was used to exclude activities.

Inclusion criteria were:

- The local partners were substantially involved in the design, implementation and evaluation of the initiative.
- The initiative was delivered within the existing health system.

The exclusion criterion was:

- External TA is the main driving force in one or more of the phases of the initiative.

The eligibility check showed that of the 142 initiatives identified (in 20 countries) 76 initiatives were eligible and 66 initiatives were not eligible. All the initiatives took place within the current health system and the dominance of an external partner in one or more of the initiative stages excluded it from the analysis (see Figure 1: Flow diagram of eligibility assessment).

The eligibility check was done for LOI activities in each country, making use of the TB CARE I end-of-project country reports and a check with consultants working in the country. The end-of-project reports provided limited specific information about local ownership and the consultants gave their personal and thus subjective viewpoints, which hindered an objective eligibility check.

Interviews

Eighteen distance interviews were conducted with country resources persons (country directors and consultants), making use of the standardized questionnaire presented in Annex 6.4.2.

Local partners were not interviewed at this stage and thus the information gathered is from the country directors' and consultants' perspectives.

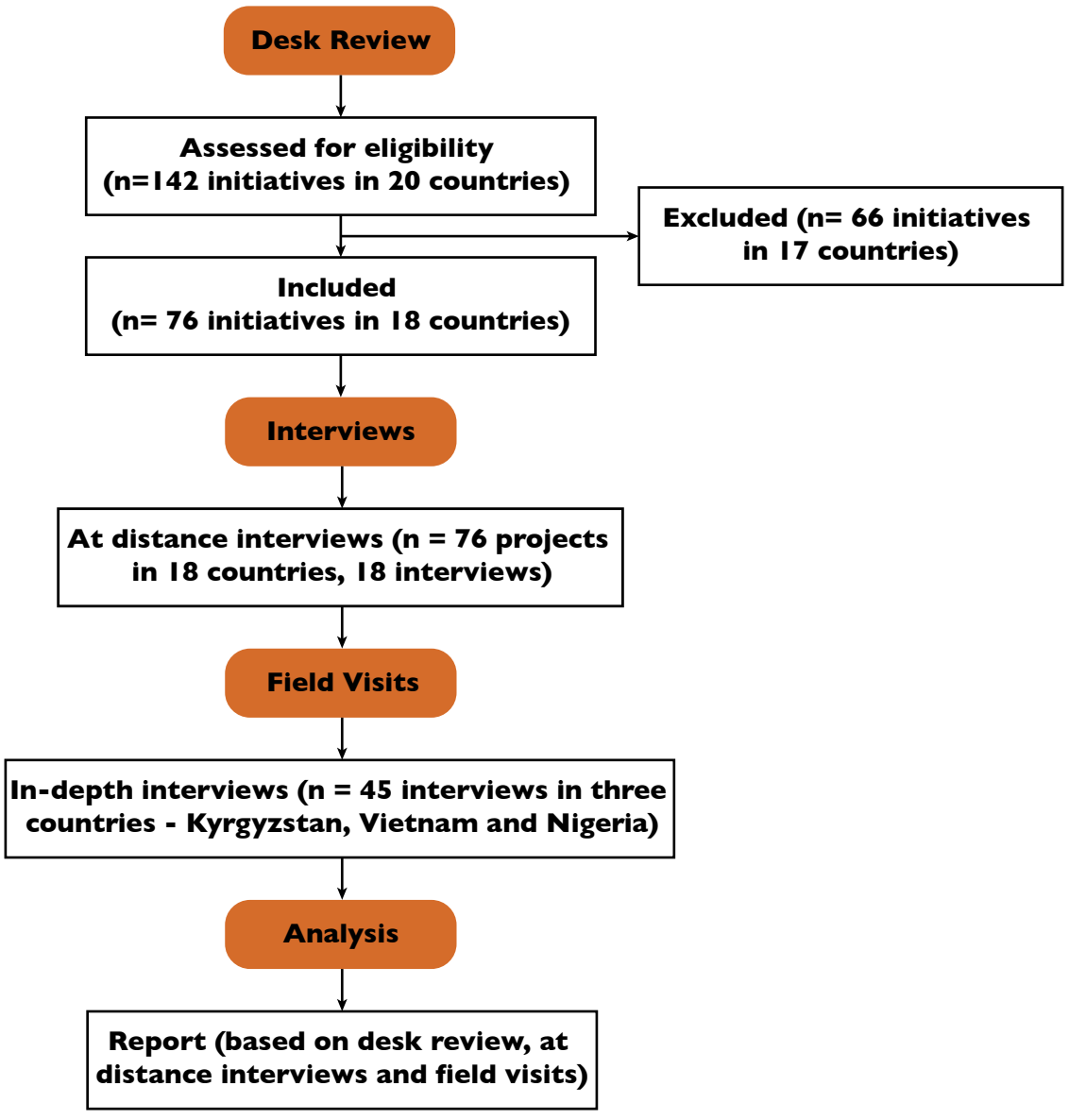
Field Visits

Three countries (one from Africa, Asia and Central Asia) with innovative local initiatives were selected for the field visits. During these field visits, semi-structured interviews were conducted with relevant stakeholders on the three or four most successful local initiatives, making use of the questionnaire in Annex 6.4.3, and stories were written about each of them.

Data Analysis

Guided by the five key questions, the data from the desk review, the interviews and the field visits were collated, analyzed and discussed. The enabling and hindering factors for local ownership in all countries were discussed, and the key factors that played a role in more than one country were identified and presented in further detail. The assessment results were used for this report.

Figure 1: Flow Diagram of Eligibility Assessment



3: Lessons Learned

This chapter presents the results of the desk review interviews with the TB CARE I project country directors and consultants working in the TB CARE I project countries, and the interviews with local partners and external (local and international) stakeholders, during the field visits. It describes the success and risk factors for local ownership. The success and risk factors are illustrated with examples from initiatives that took place during implementation of the TB CARE I project.

3.1 Success Factors

After review and analysis, the team found three overarching themes that capture the essential elements for the successful local ownership of TB control initiatives. These are presented in the below and are described in detail in the text that follows.

The key factors for success:

1. **Strategic alignment:** A comprehensive and long-term approach that addresses priorities
2. **People:** Visionary leadership, staff capacity and personal commitment
3. **Relationships:** Stakeholders' involvement and collaboration

The factors for success are described and illustrated with country examples that were shared with the team during distance interviews and field visits. Table 1 overleaf presents the complete list of stories and the main success factors that were mentioned in the stories. The full stories are presented in Annex 6.2.

Table 1: Success factors highlighted in the stories

Number	Story	Strategic Alignment Comprehensive and long-term approach that addresses priorities	People Visionary leadership and personal commitment	Relationships Stakeholders' involvement and collaboration
1	Patients' needs in the treatment of DR-TB in Nigeria	+++	++	+
2	Local Ownership to the Rescue of the GeneXpert Initiative in Kyrgyzstan	+++	++	
3	Vitimes: Vietnam's Electronic TB Surveillance System	+++	++	++
4	Decentralized MDR-TB management in Kyrgyzstan	+++	++	
5	GeneXpert Implementation in Vietnam	+	+++	+
6	Addressing Childhood TB in Vietnam	+	+++	
7	Improving health and TB control in Nigerian Prisons		+++	+++
8	Missing the Faces of Children: Childhood TB in Nigeria		++	+++
9	The Secret of Sustainable Infection Control in Kyrgyzstan		+	+++
10	Collaboration to Reinforce Medical Education in Kyrgyzstan			+++

+++ = Very important success factor
++ = Important success factor
+ = Success factor

3.1.1 Alignment: A Comprehensive and Long-term Approach, Addressing Priorities

Successful ownership is seen in initiatives that address urgent problems and focus on challenges that are high on the agenda of the NTP, are well-planned with local partners from the beginning, and that address issues in a comprehensive way.

A Sense of Urgency

In several successful initiatives there was a sense of urgency felt by patients, local partners, health care workers and/or policymakers. This sense of urgency motivated people to initiate and strengthen collaboration with stakeholders, to look for allies to support their initiatives (e.g., donors), and to make an extra effort to get things done. The story below shows how this sense of urgency pushed the decentralization of programmatic management of drug-resistant TB (PMDT) services in Nigeria.

Joint Efforts for Ambulatory Care in Nigeria

In Kaduna state, Nigeria, the waiting list for PMDT services was too long and was seen by the national and state TB program, health workers and patients as something that needed to be urgently addressed. The greatest concern of Dr. Gajere, the State TB Manager of Kaduna, was that patients on the waiting list for PMDT would die before they started treatment. With joint efforts at all levels, the provision of ambulatory care for MDR-TB was put in place.

From Story 1: Patients' Needs in the Treatment of Drug-resistant TB in Nigeria page 33

Country Priority

Initiatives have more chance of success when they are in line with a country's strategic priorities. In Vietnam, this was the case with the introduction of GeneXpert, the scale-up of PMDT, and electronic recording and reporting. The electronic recording and reporting story from Vietnam illustrates the importance of priority-setting by the NTP.

Electronic Recording and Reporting a Priority for NTP Vietnam

For years the NTP in Vietnam worked with a paper-based TB surveillance system, but in 2007 the NTP's Board of Directors decided to develop an electronic surveillance system in order to be prepared for the future. An electronic system has the advantage of enabling quicker and easier input and access to patient and program information, and therefore supports health workers in their work and improves patient care. The staff of the national TB Data Management Unit was very committed to this project.

From story 3: Vitimes, Vietnam's electronic TB surveillance system page 37

Within the Existing System

All TB CARE I project initiatives were carried out within the existing health and/or other governmental systems (e.g., the prison and educational systems). In successful initiatives, the local partners were involved

in the design, decision-making, implementation, and monitoring and evaluation of the initiatives from the very start. The initiatives made use of existing institutions/organizations with regard to staff and procedures (making them more sustainable) and the capacity of some systems was built through the initiative's activities. In the desk review and interviews, we found examples of innovations and new tools introduced by external international partners that later became part of the national guidelines. Initiatives that started as pilot projects were later scaled-up/rolled out to other parts of countries. The admission criteria for outpatient care in Uzbekistan are a good example.

Outpatient Care Uzbekistan

Admission criteria for outpatient MDR-TB treatment were jointly developed by both local and TB CARE I partners. The MDR-TB outpatient model now has a legal basis and is incorporated into the existing health care system.

Comprehensive Capacity-Building Approach

A comprehensive capacity-building approach is another success factor for LOIs. Capacity is the "ability to perform functions, solve problems and achieve objectives"[2] at the individual, organizational and institutional levels. In order to further develop and sustain local initiatives and ownership, this capacity needs to be built continuously. Local capacity is a major condition of a LOI, as local staff, organizations and institutions must have the capacity to design, implement and evaluate their own performance, so they are able to lead and sustain ownership. Figure 4 in Annex 6.1 shows the Capacity-building Framework.

"Changing the GeneXpert implementation approach in Kyrgyzstan" and "Introducing TIBU in Kenya" show the practices of a comprehensive capacity-building approach.

Changing the GeneXpert Implementation Approach in Kyrgyzstan

The National TB Reference Laboratory (NTRL)/NTP and their partners introduced GeneXpert machines despite the country not being prepared for the technology. After some time, the NTRL observed that the GeneXpert machines were not being sufficiently utilized because of a lack of health staff competency, clear algorithms, and harmonized standard operating procedures (SOPs).

Partner organization contributions were not being coordinated or streamlined and everyone was doing something different. The NTRL took charge and decided to call in external TA (funded by TB CARE I) to develop the National GeneXpert strategy, that included the creation of diagnostic algorithms and clinical protocols. The capacity of implementing organizational units and individuals in standard processes and technical operations was developed alongside SOPs on the utilization of GeneXpert.

From story 2: Local ownership to the rescue of the GeneXpert initiative in Kyrgyzstan page 35

2 UNDP, Management Development and Governance Division, Bureau for Policy Development. Capacity development. Technical Advisory Paper 2. Capacity Development resource Book, UNDP, 1997; view- http://mirror.undp.org/magnet/cdrb/Techpap2.htm

Introducing TIBU in Kenya

TIBU is the innovative electronic surveillance system of the Kenyan TB program, that makes use of tablets for recording and reporting. TIBU was developed by in-country stakeholders (public and private) with TA from KNCV. It is being used in a well-performing supervision system, with clear roles and responsibilities from the national to the health facility levels. The tools are well-defined, staff have been trained and are supervised and the good results reinforced local ownership. TB CARE I provided crucial support for improving data management quality to ensure TIBU is used to its maximum capacity. TB CARE I worked with the Division of Leprosy, TB and Lung Disease to implement and manage TIBU.

Sources: Interview and TIBU.
http://www.tbcare1.org/pdfs/download.php?file=TIBU_Factsheet.pdf

3.1.2 People: Visionary Leadership and personal Commitment

Successful local ownership is seen in initiatives that have strong and visionary leadership, and sufficient, capable, and dedicated staff at all levels.

Strong Leadership

Outspoken visionary leaders and decision-makers can be of added value in catalyzing and sustaining the ownership of local initiatives. They play an important role in mobilizing both human and financial resources and the initiation of new approaches. The stories about the integrated health approach in Nigerian prisons and GeneXpert implementation in Vietnam are good examples of how leadership can catalyze change and local ownership.

A Visionary woman Heads the Prison Health Care Services in Nigeria

TB in prisons is a serious public health concern and inmates and staff are at high risk of TB infection. The new head of the prison health services launched an initiative to systematically screen, diagnose, treat and control TB infection within the prison system with an integrated public health care approach. Her long-term vision, enthusiasm and persistence led to visible improvements in patient care, health workers' performance and the Nigerian prison health care system.

From story 7: Improving health and TB control in Nigerian Prisons page 45

National Leadership for GeneXpert implementation in Vietnam

With support from various donors, the NTP and the NTRL led the process of installing 50 GeneXpert machines in provincial, pediatric and district hospital laboratories and at the NTRL. TB CARE I funded and procured 17 GeneXpert machines and also gave TA for installation, management and monitoring the test results. The NTP and the NTRL created a pool of 12 laboratory technicians for maintenance and troubleshooting. This has increased the NTP's independence and substantially reduced maintenance costs. The leadership of the NTP is currently exploring the option of including GeneXpert tests in insurance packages.

From story 5: GeneXpert implementation in Vietnam page 41

Committed and Capable Staff

The success of local initiatives often depends on the personal commitment of individuals. In all three countries visited, we met very committed people at all levels of the system: mothers concerned about their children, nurses caring for their patients, and doctors, managers and policymakers dedicated to TB treatment and control. The desire of health care workers (HCWs) to serve their communities is an important factor for local ownership. People told us how important it is to be recognized as a professional, and to experience support from their supervisors, colleagues and patients. In Indonesia, peer educators who had experienced TB themselves told us that they have a high-level of motivation to give psychosocial support to their peers. They serve as role models and help to improve adherence to treatment. In Zambia, committed community volunteers felt their work was important for the patients they supported, their families and the whole community. Some of these community volunteers continued working after the TB CARE I Project was closed, even though they no longer received an allowance or any other kind of incentive.

The story of isoniazid preventive therapy (IPT) introduction in Vietnam illustrates how committed HCWs at different levels can make and sustain change. Staff capacity-building through training and supervision reinforces and sustains this commitment. The story of the MDR-TB Consilium in Kyrgyzstan shows that decentralizing these functions is only feasible if the capacity of their members is built.

Dedicated Health Care Workers in Vietnam Introduce IPT Successfully

Dr. Tue worked for more than 10 years as a pediatrician, and saw at first hand the suffering of children with TB. He is the chair of the Childhood TB group that is responsible for Vietnam's childhood TB policy and activities. Dr. Tue strongly feels that preventive treatment of latent TB, early diagnosis and improved treatment of TB among children is necessary to reduce suffering and eventually eliminate TB in Vietnam. The NTP started an IPT program for children at risk and improved the diagnosis and care at community and district levels, bringing it closer to the patients.

Dr. Dung works as medical doctor in the Hanoi Lung Hospital and is committed to participating in the childhood TB pilot program. From her work with children with TB and their parents, she became convinced that more attention to prevention and early diagnosis can save lives.

HCWs from the communal up to the national level showed a strong commitment to improve the childhood TB program. They were eager to learn more about childhood TB and to improve their medical practice. Supportive supervision from experienced clinicians and inter-professional sharing were shown to be effective ways of building the skills and commitment of clinicians.

From story 6: Addressing Childhood TB in Vietnam page 43

Capable Staff to Equip the Decentralized MDR-TB Consilium in Kyrgyzstan

The introduction of new rapid diagnostics has led to a much higher number of people diagnosed with MDR-TB in Kyrgyzstan. Consequently, the workload of the Central MDR-TB Consilium team that decides on the treatment of these patients has skyrocketed. It was decided to decentralize the work of the Consilium to the regional level and include the development of regional capacity to work with new equipment. The idea behind the Consilium is to provide the same quality of services across the country. The process of decentralization was set in motion, and organizational capacity was built. On-the-job training and supervision of new Consilium members became a part of the scope of work of the Central MDR-TB Consilium team members, and the head in particular. The NTP also decided that clinically difficult cases should still be presented to the Central MDR- TB Consilium team members to make sure that human error is kept to a minimum.

From story 5: Decentralized MDR-TB management in Kyrgyzstan page 41

3.1.3 Relationships: Stakeholders' Involvement and Collaboration

Successful local ownership is seen in initiatives with the productive involvement of different stakeholders, from inside and outside the health sector, public and private, local, national and international. This requires openness, trust and strong partner management.

Include All Relevant Actors

Several respondents underlined the need to carry out an analysis across a wide range of stakeholders at the start of the initiative, so that the perspectives of all relevant parties, such as professional associations, patients and communities were included. The most important perspective should be that of the TB patients, their families and the community, and they should be invited to express their needs, their roles and contributions. Professional associations are another important stakeholder, as they play a valuable role in providing information, advocacy and capacity-building. This is the case with the Professional Association of Pediatricians in Nigeria illustrated in the story below.

Professional Association of Pediatricians in Nigeria Boosts TB Control in Children

TB in children is of serious concern and a challenge for TB control in Nigeria. The Professional Association of Pediatricians has been the main driving force behind strengthening the diagnosis and management of childhood TB. They took the lead in revising the national TB guidelines for childhood TB, spearheaded the development of training curricula, and helped to build a critical mass of facilitators in capacity development for pediatricians, medical doctors, nurses and program managers. Their involvement has been key to the success of the childhood TB program.

From story 8: Missing the faces of children: Childhood tuberculosis in Nigeria page 47

Ignoring relevant stakeholders from the outset may frustrate the initiative and lead to unexpected results. The story of Infection Control (TB-IC) in Kyrgyzstan shows how important it is to include all the relevant partners, the necessary expertise and have a specific mandate, to achieve the project goals.

Including Essential Stakeholders for TB Infection Control in Kyrgyzstan

The NTP is the leading TB-IC implementer, but the role of the Sanitary Epidemiological Service (SES) is to institutionalize all innovations through laws and regulations, as well to monitor and evaluate the implementation of activities at facility level. Both organizations operate under the Ministry of Health.

TB CARE I technical advisors advised the NTP to choose a wider public health approach for TB-IC. As the SES is one of most important players, this institution was able to implement the latest infection control guidelines and monitor the progress providing external quality assurance. In 2015, the SES initiated a cooperation platform for all stakeholders involved in TB-IC in Kyrgyzstan. The SES took a strong leadership position in harmonizing initiatives and building on the existing good practices. The cooperation platform will ultimately lead to greater sustainability of TB-IC measures, as innovations become embedded in the regulatory framework and will be monitored by the SES as the country's regulatory body.

From story 9: The story of sustainable infection control in Kyrgyzstan page 49

Strong Partner Management

Partner management is essential to create synergy, avoid duplication and achieve the collaborative ambition. In the interviews, several country directors and NTP managers reported that programs sometimes felt overwhelmed by the number of partners, each with their own activities, approaches and working conditions. The implementation of GeneXpert was mentioned in several countries as an example where different partners were involved, with different SOPs, different capacity-building approaches, and sometimes different algorithms for their use.

Local initiatives are more successful when there is strong leadership from a local (non)governmental institution (e.g., the NTP or a local NGO) that is responsible for coordinating all stakeholders to achieve common goals. The successful management of partnerships was seen in countries where a strong local institution was in the driving seat and a structure was in place with clear roles and responsibilities for reporting and accountability. Successful partner management was shown in Kyrgyzstan (story 2, page 35) where after a false start, the NTRL/NTP took the lead in coordinating all the partners that were involved in GeneXpert funding and implementation. In Vietnam and Kenya the NTP successfully led the development of an electronic surveillance system, which is a complex, long-term project, with multiple stakeholders. The story of Vietnam is presented in the below.

Long Term Stakeholders' Coordination by the NTP Vietnam

Moving from a paper-based to an electronic surveillance system cannot be done overnight. The national Data Management Unit staff coordinated the development and implementation of an electronic surveillance system (Vitimes) and worked closely with an IT Company, the users at national, provincial and district level and KNCV as the technical agency. They followed a step-by-step approach, developing the electronic surveillance system bit by bit, fully including the users in testing and using the lessons learned to improve Vitimes. The collaboration between the NTP, the IT Company and the KNCV consultant was productive, with clear roles and responsibilities, trust and openness and excellent information sharing.

From story 3: Vitimes, Vietnam's electronic TB surveillance system page 37

Constructive Collaboration

How well stakeholders work together is essential for local ownership. The strength of the whole chain will depend on the weakest link, so good collaboration and strengthening the ties between the stakeholders is crucial. It helps when trusted and respected stakeholders are involved.

Each stakeholder has unique strengths and capacities. Local initiatives are more successful when the unique strengths of each stakeholder are recognized and properly utilized. An agreement, with well-defined roles and procedures, will formalize the collaboration, and could be a step towards a more sustainable partnership. The Consilium of experts who advise on the treatment of patients with DR- TB in Kyrgyzstan is an example of this formal collaboration. The Stop TB partnerships in several countries are also formal collaborative mechanisms.

The story "Fruitful collaboration with the Post Graduate Institute (PGI) in Kyrgyzstan", shows the beneficial results of a partnership where the roles and responsibilities were well defined and the unique strengths of each stakeholder were acknowledged.

Fruitful Collaboration with the Post Graduate Institute in Kyrgyzstan

Continuous medical education (CME) activities are an important way for busy medical staff involved in TB service provision to keep up-to-date, expand their professional network and improve their quality of service. When selecting capacity-building activities, health care cadres are increasingly choosing activities where they can be certain that credits will be awarded by an accredited CME provider. In 2011 TB CARE I closed a Memorandum of Understanding with the PGI for capacity-building in the field of TB prevention and care. This initiative was endorsed by the MoH of Kyrgyzstan and implementation was started through the existing capacity-building system in the country. All capacity-building activities were coordinated with or by the PGI. During the development of guidelines, curricula and implementation of capacity-building activities, the PGI had an active implementing role and dedicated facilitators involved in the process. The collaboration among the TB CARE I partners, the NTP and the PGI was constructive, each organization brought their individual expertise which resulted in high-quality and up-to-date accredited TB trainings for all levels of HCWs. The CME activities are all embedded in a well functioning national health education system.

From story 10: Collaboration to reinforce medical education in Kyrgyzstan page 51

In Zambia, a good example is the TB/HIV collaborative forum where key local partners (NGOs, community based organizations, CSOs, the TB program and the AIDS program) are brought together. The forum was initiated by the NTP, who also take the leadership role. Stakeholders share experiences, coordinate activities and collaborate, making use of each other's expertise. In Botswana, public-private engagement is seen in the mining sector. Mining companies work autonomously and the NTP has well established public-private linkages with them. Both the mining companies and the NTP play their own role, they rely on each other's competencies and together they achieve good detection and treatment results.

Finally, we found that it takes time to build good relationships, and also the so called "soft skills"[3] to maintain these relationships. Long-standing collaboration among local partners and/or external (international partners) improves the chances of successful collaboration in local initiatives. In the local initiatives assessed, some local partners had already been working successfully together for several years.

3 Soft skills definition: is a term often associated with a person's "EQ" Emotional Intelligence Quotient, the cluster of personality traits, social graces, communication, language, personal habits, interpersonal skills, managing people, leadership, etc., that characterize relationships with other people.

In several countries there are examples of long-standing successful collaboration among local partners and between local and international partners, especially where KNCV already has well-established relationships, such as in Vietnam, Ethiopia and Indonesia.

3.2 Risk Factors

The team found four overarching themes that capture the risks factors that impede the success of local initiatives. These are presented below and are described in more detail in the text that follows.

Risk Factors for Local Ownership

1. **People:** Limited staff capacity in terms of numbers and expertise.
2. **Tools:** An exclusive focus on the introduction of new technologies and tools without investing in capacity-building at individual, organizational and institutional levels.
3. **Funds:** Financial dependency on external donors without the ability of local stakeholders to take over these activities.
4. **Exit Strategy:** The absence of an "exit strategy" that anticipates and plans for an end to the project and/or the cessation of external donor funding.

3.2.1 People

Limited Staff Numbers

The shortage of managerial and implementing staff in several countries was raised as a hindrance to local ownership, sometimes there are just not enough staff to get the work done. In many of the countries where TB CARE I was working, the number of health staff was limited and staff turnover was high. Local partners and TB CARE I developed ambitious plans, that increased the workload of the already existing staff. In some countries the work plans and initiatives risked not being implemented in the given time. In several countries TB CARE I partners took over some tasks and responsibilities from local partners in order to finish the work plans on time.

Staff Under Pressure

"Here at the national level the staff workload has substantially increased because of the increasing number of donors and activities. How far can we go?"

Mentioned during the field visits in Vietnam

In the long run, innovations such as GeneXpert and electronic surveillance systems will save staff time. In the short term, the introduction of these innovations under project conditions requires extra staff, as new ways of working need to be developed and put in place and the staff needs to grow in expertise and experience. In some countries, there was a strong push from TB CARE I for the timely implementation of the initiatives; sometimes extra staff were recruited and more external TA was given to accelerate the implementation process and achieve results.

Donor investments in staffing seem an attractive short-term solution, but gap-filling by donors is unsustainable, as staff will leave when the donor pulls-out.

Limited Staff Competencies

Competent technical staff are needed to own technical developments and to partner on an equal level with external (international) donors and consultants. Local stakeholders were sometimes overwhelmed by the presence of external (international) organizations and high-level experts, giving them limited space to set their own country priorities.

TB CARE I invested strongly in staff capacity-building, mainly focusing on individual staff performance. In many countries, a strong mechanism for team and organizational learning was lacking and there was no planned comprehensive capacity-building approach. With high employee turnover, the TB program, from health facility to national level, continuously lost competent staff, limiting program performance and local ownership.

TB CARE I mainly invested in "technical"[4] capacity-building, but for local ownership, managerial skills at all levels are a must, as are language competency and computer literacy. The skills to manage projects, to communicate and collaborate fruitfully with partners, to raise funds and to advocate for TB control are the basic competencies needed to lead an organization, facilitate collaboration, meet patients' needs and take local ownership.

3.2.2 Tools

Focusing Only on Tools

TB CARE I made large investments in new tools and technologies such as the GeneXpert and electronic surveillance systems, both of which program staff found to be big steps forward. The implementation was not always accompanied by investments at individual, organizational and institutional levels, such as staff capacity-building, new job descriptions (as task shifting needed to be foreseen), new SOPs and algorithms, work planning, and monitoring and evaluation (M&E) systems. This hampered implementation and led to the underutilization of these new tools. In some countries the donor kept strong control over these new tools, hindering their full integration into the health system and thus local ownership. The story of GeneXpert implementation in Kyrgyzstan below, illustrates this.

GeneXpert Implementation in Kyrgyzstan

GeneXpert machines were placed in Kyrgyzstan by different donors and under different conditions and with different algorithms for their use. Individual health workers were trained but an implementation plan was not developed. The fact that people needed to know English and have the computer skills to be able to use GeneXpert was overlooked, and as a result the GeneXpert machines were underutilized.

From Story 2: Local ownership to the rescue of the GeneXpert initiative in Kyrgyzstan page 35

3.2.3 Funds

Financial Dependency on Donor Funding

In most countries, the government funds staff salaries and the health infrastructure. In regards to implementation of new initiatives, TB CARE I funded the capacity-building activities (such as training

4 Technical is defined as knowledge and capabilities to perform specialized tasks.

and supervision), renovations, new tools, piloting of approaches, TA, community volunteers and support packages for patients.

When TB CARE I ended, many of these initiatives were defunded and there was no TB CARE I exit strategy in place. As a result, the government was not ready to take over the initiative and local ownership was jeopardized. This affected both the implementation and the continuation of activities.

For example, the community DOTS program in Mozambique was implemented by local and international NGOs with the financial support of TB CARE I. The entire program stopped when TB CARE I came to an end.

Limited Fundraising Capacity

In some countries the local stakeholders had not diversified their funding sources which made them dependent upon one donor. NTPs and local NGOs had limited fundraising capacity, but there is an increasing awareness of the need to diversify funding and to look for local funding.

For example, in Vietnam, all GeneXpert cartridges are currently donor-funded, but the NTP management is exploring the possibility of including GeneXpert diagnosis in the government health insurance package (Story 5: GeneXpert implementation in Vietnam).

3.2.4 Exit Strategy

An Up-front Exit Strategy

During the assessment, the team didn't see an explicit description of an exit strategy for any external (international) assistance (human and/or financial) providers at the end of a project. The example of the community DOTS program in Mozambique, mentioned above, showed that the absence of such an exit strategy leads to the abrupt end of the activities and therefore patient care.

The NTP, donors and local partners must define an exit strategy at the start of the project. The strategy should pay special attention to human and financial resources, such as how this intervention will become financially sustainable at the end of the funding phase and how local and additional funding sources will be identified.

3.3 The Changing Role of Technical Assistance

Why TA Roles are Changing?

Donors and technical partners, including the CTB coalition, assume that changes in the role of TA are possible because countries have more expertise themselves. In the coming years more and more national and local stakeholders will provide TA, and international experts will be limited to introducing cutting-edge technical expertise.

During the field visits with local stakeholders, the team discussed the experiences with, and the need for TA. We focused specifically on what roles and expertise local partners expect from TA at the different stages of local initiatives.

The team found that the role of TA is changing with the altering demands of TB programs, and the shifting policies of donors and technical agencies. Technical assistants will need to adjust to these demands, and develop new profiles. These changing TA roles will require a different set of consultant competencies, and technical partners need to be prepared for that.

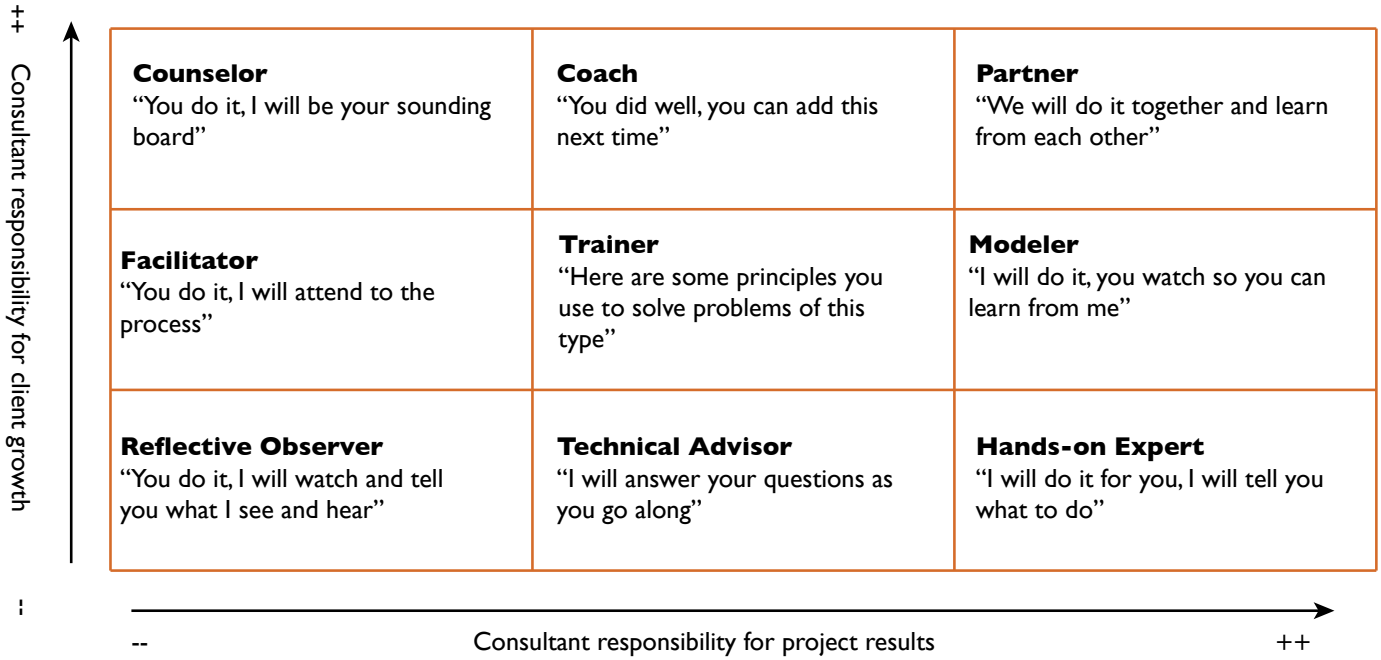
Countries' TA Needs

The local partners stated that local and international TA should have different tasks, roles and competencies.

Local TA

Local TA needs to be practical and hands-on in order to implement project activities and to act as additional staff with specific technical expertise. Those providing local TA play the role of hands-on experts, technical advisors, modelers and trainers as shown in Figure 2: Consultancy Roles. Local partners also expect local TA to contribute to the capacity-building of the local team.

Figure 2: Consultancy Roles



Counselor "You do it, I will be your sounding board"	**Coach** "You did well, you can add this next time"	**Partner** "We will do it together and learn from each other"
Facilitator "You do it, I will attend to the process"	**Trainer** "Here are some principles you use to solve problems of this type"	**Modeler** "I will do it, you watch so you can learn from me"
Reflective Observer "You do it, I will watch and tell you what I see and hear"	**Technical Advisor** "I will answer your questions as you go along"	**Hands-on Expert** "I will do it for you, I will tell you what to do"

Consultancy Roles
Champion, Kiel, McLendon Consulting Role Grid
(Lynton and Pareek 1992:124-130)

Some examples from the field interviews illustrate which tasks and roles of local TA are appreciated by local partners.

"TB CARE I funded and procured 17 GeneXpert machines and also gave TA for the installation, management and the monitoring the test results". From story 5: GeneXpert Implementation in Vietnam.

"The NTP received technical and financial support from WHO and TB CARE I. Partner support gave a significant boost to the childhood TB initiative". From story 6: Addressing Childhood TB in Vietnam.

"Together with KNCV, Dr. Udom developed a screening tool for TB and other health issues to be used in all prisons, and following that, SOPs for TB control. She also developed SOPs for the other diseases". From story 7: Improving health and TB control in Nigerian Prisons.

"TB CARE I technical advisors took the initiative to extend the approach from the single disease perspective to the wider public health perspective. As the SES is one of most important players, this institution was able to make a significant change, by implementing the latest infection guidelines and monitoring the progress by providing external quality assurance". From story 9: The secret of sustainable infection control in Kyrgyzstan.

International TA

Local partners expect that international TA has a high-level of technical competence, knows the latest global polices and is familiar with the country context. They want international TA to bring innovations, experiences from other countries and to support the implementation of these innovations at country level. This is illustrated by the following quotes:

"International consultants must know the country context to be able to translate innovations to country level." - NTP Manager Vietnam.

"International consultants are of great value as they bring in experiences from other countries." - Head of National TB and Reference Laboratory, Kyrgyzstan.

Local partners expect the international TA to be a partner, as defined in Figure 3: Consultancy Roles. The international TA needs to build capacity and take responsibility for the project results. To play these roles effectively, international consultants must be experts in their technical field, have mentoring skills, and an attitude of trust and openness. Some examples from field interviews illustrate the roles of international TA:

"International TA brings in ideas from other countries and oversees the whole process. This gives us the confidence that we are on the right track." - Nam, NTP Data Management Unit, Vietnam

"Halfway through the project term, the National TB and Reference Laboratory took charge. It decided to call in external TA to develop the national GeneXpert strategy, including creating diagnostic algorithms and clinical protocols, as well to develop the capacity of implementing organizational units and individuals in standard processes and technical operations." From Story 2: Local ownership to the rescue of the GeneXpert initiative in Kyrgyzstan.

As a result of the assessment, the team expects that the role of external (international) TA will become more process-oriented with several additional roles:
- Assessment of relevant partners and their expertise
- Mentoring local partners and experts to reinforce technical and managerial capacity
- Providing high-level technical expertise.

4: Recommendations

The team defined the following recommendations to strengthen LOIs, based on this assessment:

1. Planning, Monitoring and Evaluation

Local ownership needs to be one of the criteria for a quality project, and part and parcel of the whole project cycle. The team developed the *"Locally Owned Initiatives Benchmarking Tool"* (Chapter 5) to regularly assess the conditions that are in place for local ownership and to define the actions needed to strengthen them. The tool facilitates discussion and decision-making on local ownership among local and international partners.

2. Exit Strategy

Local and international partners must define an exit strategy at the start of the initiative. This strategy must include the roles, responsibilities and accountability of parties involved. It must also describe how these roles and responsibilities are expected to change over time. The strategy should pay special attention to human and financial resources, such as how will this intervention become financially sustainable at the end of the funding phase and how local and additional funding sources will be identified.

3. Partnership

All the stakeholders involved in the initiative must invest in constructive collaboration. They must meet regularly, share information, and acknowledge/make use of each stakeholders' strengths. Partner management is essential to create synergy, avoid duplications and achieve the collaborative ambition. In the interviews, several country directors and NTP managers reported that programs sometimes felt overwhelmed by the number of partners, each with their own activities, approaches and working conditions. The successful implementation of local initiatives is only feasible if all stakeholders are well managed by local partners who know the country context.

4. Leadership

Local leadership is an essential driving force for local initiatives and international partners need to welcome and support this leadership.

5. Comprehensive Capacity-Building Approach

A comprehensive capacity-building approach with a balanced focus on the individual, organizational and institutional level can lead to sustainable capacity growth (see Figure 3: Capacity-building Framework, in Annex 6.1).

Within each partner organization the capacity of the whole team must be built, including managers, administrators, doctors, nurses, laboratory staff, community members and others. Both technical and managerial capacity is needed to ensure sustainable organizational performance.

6. Long-term Approach

All stakeholders, including donors and technical partners have to commit to a long-term approach. LOIs need time to become stronger and long-term commitment can support this process.

7. Technical Assistance

Appropriate TA needs to be based on the needs of local partners and with a strong focus on capacity-building. As local initiatives develop, the competency profile of local and international TA will change.

5: The Locally Owned Initiatives Benchmarking Tool

The development of the *Locally Owned Initiatives Benchmarking Tool* was based on the assessment of the success and risk factors for local ownership. The tool aims to assess the conditions that are in place for local ownership, and to define the actions needed to strengthen them. This tool guides discussion and decision-making between the CTB country office and local partners on how local ownership could be enhanced and sustained.

The *Locally Owned Initiatives Benchmarking Tool* provides insights in five different areas:
1. Strategic Focus: Comprehensive and long-term approach addressing priorities
2. People: Visionary leadership and personal commitment, staff numbers and competencies
3. Relationships: Stakeholders' involvement and collaboration
4. Funding
5. Technical Assistance.

Every focus area has a set of benchmarks that together describe the quality standard for this specific focus area.

Instructions for Use

Per focus area the team scores whether and at what scale (Yes, No, partly) the benchmarks are met and summarizes per benchmark the current situation.
In the field "conclusion" the team indicates:
1. 'Yes' for a focus area if all associated benchmarks are satisfied
2. 'Partially ' if not all but at least one benchmark is satisfied
3. 'No' if none of the associated benchmarks is satisfied

If the benchmarks are not or only partially met, the team should develop plans for future actions to improve the performance. It would be useful to also mention the partner leading this action and the timelines for completion.

This assessment needs to be done annually, before starting the annual planning.
While discussing the benchmarks think about following guiding questions:
1. What are the improvements compared to the previous assessment?
2. What are the negative changes compared to the previous assessment ?
3. What changes are needed to strengthen local ownership?
4. What action do you plan, to make this change happen? How will you prioritize them?

Location:			
Date of assessment:			
Chair:			
Reporter:			
Participants			
Name	Organization	Post address or e-mail	Telephone number

Focus areas and Benchmarks							
Focus area	Benchmark(s)	Yes', 'no' or 'partly'	Description of current situation	Indicate whether the quality standard for this focus area is 'Met', 'Partially met' or 'Not met'	Agreed next steps	By who	When
1. Strategic focus: comprehensive and long term approach addressing priorities	Initiative addresses country strategy & priorities						
	Initiative is implemented within the health or other governmental (e.g. education) system						
	Initiative's exit strategy is developed and implemented						
	Long term comprehensive capacity building approach is developed and implemented						

Focus areas and Benchmarks							
Focus area	Benchmark(s)	Yes', 'no' or 'partly'	Description of current situation	Indicate whether the quality standard for this focus area is 'Met', 'Partially met' or 'Not met'	Agreed next steps	By who	When
2. People: Visionary leadership and personal commitment; numbers and competencies	Management, at different levels, takes leadership for the implementation of the initiative						
	Staff is trained on new skills to implement the initiative						
	There is dedicated staff at to implement the initiative						
	Staff has clear roles and responsibilities to implement the initiative						
	Supportive supervision in implemented by initiative owner (local partner)						

Focus areas and Benchmarks							
Focus area	Benchmark(s)	Yes', 'no' or 'partly'	Description of current situation	Indicate whether the quality standard for this focus area is 'Met', 'Partially met' or 'Not met'	Agreed next steps	By who	When
3. Relationships: stakeholders' involvement and collaboration	All stakeholders are included in a generous manner						
	The Initiative makes use of each stakeholder strengths						
	Role and responsibilities of each stakeholder are clearly defined						
	Stakeholders are managed properly by the Initiative's owner (local partner)						

Focus areas and Benchmarks							
Focus area	Benchmark(s)	Yes', 'no' or 'partly'	Description of current situation	Indicate whether the quality standard for this focus area is 'Met', 'Partially met' or 'Not met'	Agreed next steps	By who	When
4. Funding	The initiative is supported by local investments						
	Local partner is successfully raising funds for the continuation of the Initiative						
	Local Funds are foreseen in the exit strategy						

Focus areas and Benchmarks							
Focus area	Benchmark(s)	Yes', 'no' or 'partly'	Description of current situation	Indicate whether the quality standard for this focus area is 'Met', 'Partially met' or 'Not met'	Agreed next steps	By who	When
5. Technical assistance	Necessary technical assistance for the initiative is assessed						

6: Annexes

6.1 Comprehensive Capacity-Building Framework

Figure 3: Capacity-Building Framework

The Capacity-Building Framework shows the three levels of capacity and their interdependency. Capacity-building will only be effective when all levels are addressed equally (see figure 4), this requires a planned and long-term approach, including the involvement of relevant public and private stakeholders.

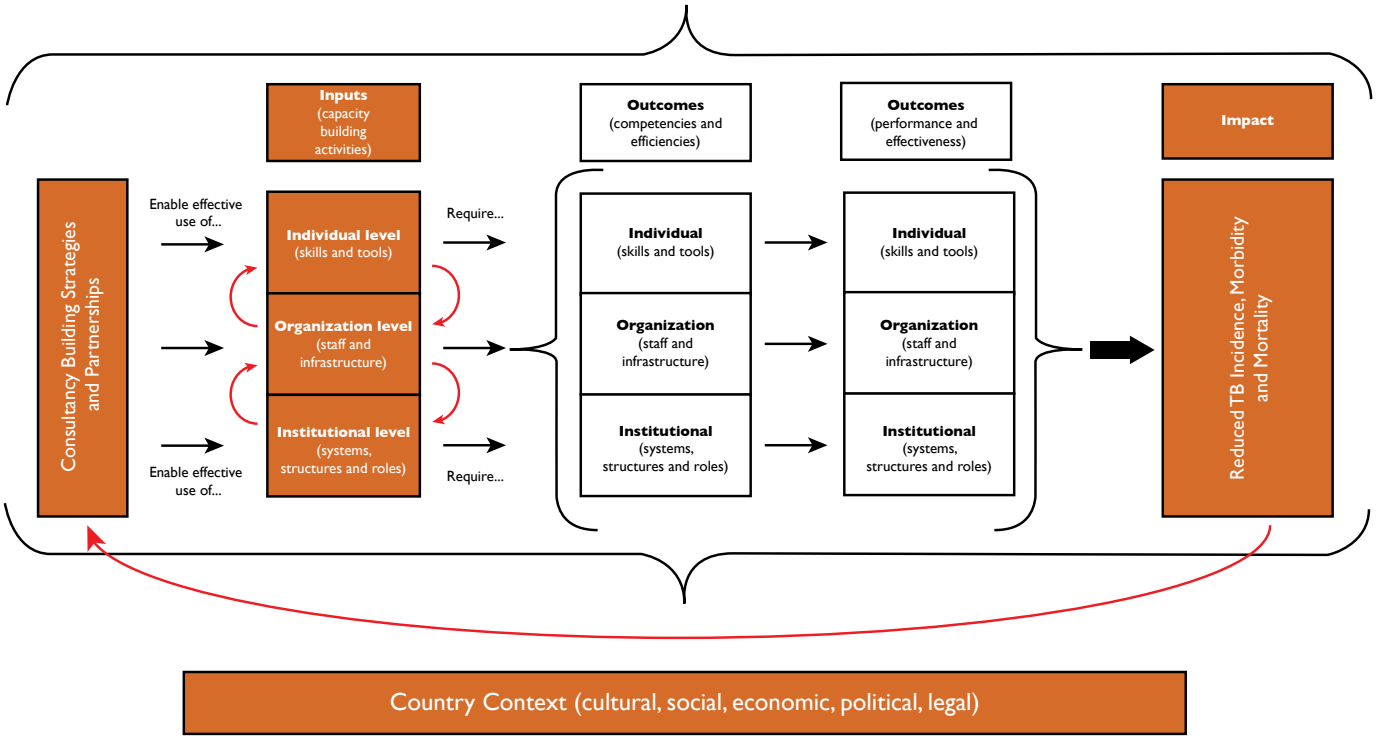
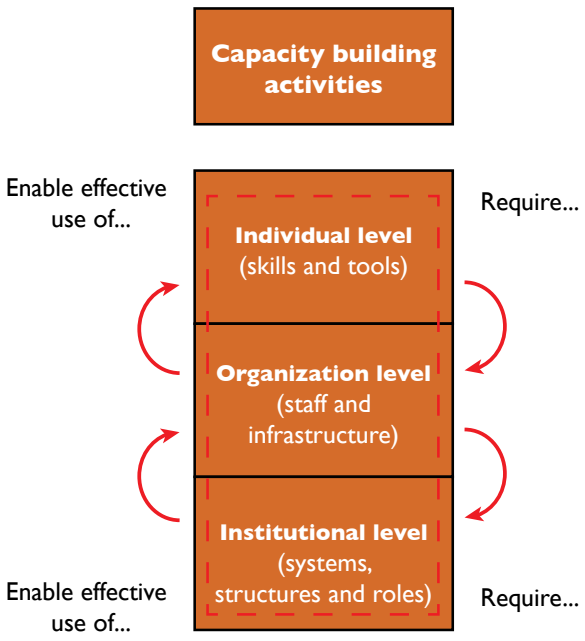


Figure 4: Balanced Capacity-Building Framework



6.2 Stories

The stories below are based on the interviews conducted during the field visits with stakeholders in Kyrgyzstan, Nigeria and Vietnam. These stories tell how health care workers perceive their work in TB control and how these perceptions are related to local ownership. The stories have been organized around the following success factors for local ownership:

1. Strategic Focus: Comprehensive and long-term approach addressing priorities.
2. People: Visionary leadership and personal commitment.
3. Relationships: Stakeholders' involvement and collaboration.

The stories contain more than the above success factors, and also feature other success factors, as mentioned in Chapter 3.

6.2.1 Strategic Alignment

1. Patients' Needs in the Treatment of Drug-Resistant TB in Nigeria

Summary

The need for a more programmatic approach to diagnosing and treating people with DR-TB has led to Nigeria making the shift from hospital-based DR-TB care to community-based outpatient (ambulatory) care. A pilot project demonstrated the feasibility of this approach and was accompanied by organizational capacity-building that involved embedding PMDT expertise at all levels.

Background

From 2010 the Nigerian National TB and Leprosy Control Programme (NTBLCP) started to organize the systematic diagnosis and care of patients with DR-TB in a limited number of facilities, with the support of the Damien Foundation.

USAID's TB Control Assistance Program (TB CAP) and later the TB CARE I project supported the further development and implementation of PMDT. TA was provided to redefine the PMDT approach, and to shift from a hospital-based system towards an ambulatory care system. Currently both models are being applied and have been evaluated. TB CARE I advocated for the ambulatory care approach and initiated a pilot project. At the beginning the NTBLCP was not in favor of this ambulatory model, but the evaluation of the pilot has shown the feasibility and advantages of ambulatory care in the Nigerian context and the NTBLCP has now embraced this approach. TB CARE I also helped strengthen the laboratory network, build the capacity of HCWs at state level and provide patient-support packages.

Different structures have now been put in place to embed PMDT at all levels: a PMDT focal person is in position at the NTP, there is a PMDT committee at National level, and there is now a board of DR-TB specialists in place in all states. The PMDT committee at national level, consists of 20-25 members from collaborating partners and key specialists in different areas, and includes a patient who was cured of MDR-TB in the first cohort. The cured patient is a forceful, well-spoken person and a very good ambassador for ambulatory care in TB control. All important decisions are taken by the committee such as the model of care, scaling-up and the choice of activities. The decisions are evaluated, and best practices are documented. Although the program is financially supported by donors, the NTP is in the driving seat of the project. However, the scaling up of PMDT to full national coverage is progressing slower than planned. At this point in time only 14 states have community enrolment and HCWs in only 25 states out of a total of 36 states have been trained.

Two MDT-TB patients who come to the clinic daily, and are visited by the nurse at the weekend, Kaduna, Nigeria: "The nurse is like a mother to us"

Ambulatory Care in Kaduna State

The project in Kaduna state started in 2014 and there are currently (mid-2015) 34 MDR-TB patients on ambulatory care (20 in the intensive phase treatment and 14 in the continuation phase). The greatest concern of Dr. Gajere, the State TB Manager of Kaduna, was that patients on the waiting list for PMDT would die before treatment started. He also realized that hospital admission during the intensive phase increased stigma, and as a result community members feared the patients. Listening to needs of the patients it became clear that patients wanted to be treated within their community from the intensive phase onwards. A great advantage of the latest technology is that patients can be now diagnosed and immediately put on treatment. The state has a limited hospital bed capacity for MDR-TB patients who are severely sick, have comorbidity, problems with treatment adherence or have severe drug side-effects. For ambulatory treatment, there is a panel of experts in place to advise on treatment in these cases. The focal person undertakes the routine supervision and the patients go to the nearest facility for monthly culture sampling and drug-sensitivity testing. On-the-job training on PMDT was done in the local government area.

Attending to the Needs of Patients

In Kaduna, we spoke to two patients on ambulatory care that come to the clinic every weekday and are visited by a nurse at the weekend. We also visited a family in the community; the father had just recovered from DR-TB, but three of his children had also developed DR-TB.

Both of the patients at the clinic were very enthusiastic about their ambulatory treatment. They have both been on treatment for three months, have gained weight and one works as a hairdresser. He can work for one hour a day and his sons are very supportive and have taken over much of the work. "The nurse is like

a mother", they both said, she always asks how they are doing, gives advice and support, and visits them at home at the weekend for their daily injections. The injections are still very painful, but otherwise the drugs are tolerated well. One patient said: "the most important things are good food and a caring nurse". They are very happy that they did not have to be admitted to hospital and are still living at home. They are both well informed about their treatment and are confident that they will recover.

We also visited a family home where the father and three of the children had also developed DR-TB. The youngest two children and the mother are not sick. The father was admitted to Zaria hospital for eight months and was very ill. Being in hospital for eight months was a very difficult for him and he was affected psychologically. He would have preferred to stay at home, but can also understand that some patients may be too sick to be at home and need to be admitted to hospital. His wife was very supportive.

When the father had been on treatment for 13 months, the children also started to develop symptoms. The father has now completed treatment and is fully recovered.

The whole family is well informed about DR-TB and well educated on treatment, infection control and all the measures required to remain as healthy as possible. The son has now been on treatment for three months and is feeling better. He is happy to be undergoing treatment at home and has started going to school again. He wears a surgical mask and according to him this is not a problem. The daughter also stayed home from school for the first month, and had some problems with her eyes, but now she is alright. They all feel adequately supported and are confident that they will recover.

2. Local Ownership to the Rescue of the GeneXpert Initiative in Kyrgyzstan

Summary

Kyrgyzstan was very interested in implementing the newest TB detection technology, but the country needed to be prepared before the new tools were procured. Bringing the tools into a country should be the final step and should only happen after thorough preparations at the institutional, organizational and individual levels. People need training on using new tools, even when they are very user-friendly. The National TB Reference Laboratory (NTRL) learned the hard way how important it is to have system in place that includes streamlined policies, the necessary algorithms, reporting formats and procedures, and service providers/users with sufficient capacity.

GeneXpert Introduced too Quickly

In order to provide better services to its people, Kyrgyzstan implemented the newest TB detection technology for the faster and safer detection of TB, and in particular to identify those at risk of becoming ill with DR-TB.

The NTRL/NTP and their partners introduced GeneXpert machines, despite the country not being prepared for the technology. It was assumed that GeneXpert was a simple to use, so many staff were not trained how to use the machines. GeneXpert machines perform well if medical doctors know when and how to request the diagnostic test, allowing laboratory technicians to process the sample and report back the results.

The rapid diagnostic tools were purchased and installed with support from TB REACH project, Médécins Sans Frontières (MSF), Quality Health Care Project (QHCP) and UNITAID/EXPAND. Eight GeneXpert machines were installed in Bishkek TB Center, Chui Oblast TB Center, SIZO detention center and Talas Oblast TB Center.

After the first month of implementation, the NTRL observed that the country lacked an overarching

GeneXpert implementation strategy. Without a harmonized process and selection algorithms for their use, it was also clear that the GeneXpert machines were not being optimally utilized. In addition, the people operating the machines lacked knowledge about the new methodology as well as the additional competencies needed to use the computers and skills in the relevant foreign languages.

Partner organization contributions (financial and human resources) were not being coordinated and streamlined; exit strategies were not clear; everyone was doing something different, and the NTRL was in confusion. For example, from the very start of the project there was an excess of cartridges but there were no funds for the proper calibration of the machines. Errors increased from 4.3 % to 9.4% in Bishkek City and from 3.2% to 8.6% in Chui Oblast, which made an effective tool ineffective.

Local Ownership

Halfway through the project term, the NTRL took charge. It decided to call in external TA to develop the national GeneXpert strategy, including the creation of diagnostic algorithms and clinical protocols, and to build the capacity of implementing organizational units and individuals in standard processes and technical operations. SOPs were also developed.

TB CARE I Technical Support

Under the TB CARE I Project, technical support was provided in 2012 and in 2014 an M&E plan was developed and submitted to the MoH for approval.

Lessons Learned

From this experience, the NTRL concluded that the most important priority was to prepare the country for such an innovation by putting a system in place to streamline policies, algorithms, electronic reporting formats, procedures and by building the capacity not only of laboratory staff, but also of doctors. Performance management systems for people working with innovations must also be in place. Bringing the tools into the country should be the final step and only after thorough preparations at the institutional and organizational levels. The maintenance costs of the tools and the mitigation of possible risks should not be overlooked.

3. Vitimes, Vietnam's Electronic TB Surveillance System

Summary

Vietnam's NTP is increasingly making use of the Vietnamese electronic surveillance system Vitimes. This electronic surveillance system is a huge step forward in recording and accessing information about TB patients and TB treatment results. The NTP developed Vitimes with technical support from Vietnamese IT companies and KNCV. The TB program is the only infectious disease control program in Vietnam with an electronic surveillance system and thus serves as an model.

Great Local Ambition and Commitment

To fight TB, a country needs to understand its epidemic; this requires systematically recording and processing of data on TB patients and TB treatment outcomes. For years the Vietnam NTP worked with a paper-based TB surveillance system, but in 2007 the NTP's Board of Directors decided to develop an electronic surveillance system, in order to be prepared for the future. An electronic system has the advantage of enabling quicker and easier input and access to patient and program information and therefore supports health workers in their work and improves patient care.

The national TB Data Management Unit staff was very committed to this project. Nam the IT officer said: "I'm excited about this project. It's very simple to use. I believe that excellent recording can improve patients' treatment". For the IT Company, this was a groundbreaking project as they were not familiar with TB control programs and surveillance systems and Vitimes was developed from scratch.

Long-term Process

Moving from a paper-based to an electronic surveillance system cannot be done overnight. The national Data Management Unit staff coordinated the development and implementation and worked closely with the IT company and the users at the national, provincial and district levels. They followed a step-by-step approach, developing one part of the electronic surveillance system at a time, fully including the users, testing it and using the lessons learned to improve it. Vitimes was rolled out bit by bit beginning at provincial level, and by 2014 all 63 provinces used Vitimes. In 2015 they started to roll it out at the district level: 300 districts in 17 provinces now use Vitimes. Feedback is presently being received from the district users and will be used to further improve the system.

Practice at Provincial and District Level

Ms. Dinh Thi Huy, data manager at the provincial TB program in Hanoi, has worked with Vitimes since 2012. She is happy using it, as the electronic surveillance system saves time and she can access information at any time. Ms. Huyen from the District Hospital Hoang Mai said, "I am proud to be the first person in this district to use this modern technology". She acknowledged that there are still some problems: she cannot always access Vitimes and doesn't yet know all the functionalities. She still has a lot to learn and counts on the support of the provincial data management staff.

Good Collaboration in a Multidisciplinary Team

The collaboration between the NTP, the IT Company and the international KNCV consultant was productive, there was trust and openness and information was shared on the job and in meetings, there was also good teamwork.

Local Ownership

The NTP has taken full responsibility for this project and is the final decision maker. The NTP set a clear project outline and selected a Vietnamese IT company and server provider. It assessed what international

TA was needed, requested KNCV for overall international TA, set criteria for scaling-up and made a scale-up plan. The NTP is also the owner of the data, if donors want to make use of the data they must have the permission of the NTP.

The Added Value of International Consultants

The international TA from KNCV was very much appreciated. Nam from the Data Management Unit said "International TA brings in ideas from other countries and oversees the whole process. This gives us the confidence that we are on the right track".

Future

The NTP staff are government funded. The NTP leadership wants to further develop the IT competencies within the NTP, in order to become less dependent on expensive IT companies, and on donor funding. Nam is most proud of the countrywide scale-up of Vitimes and he wants to expand Vitimes to commune level as well.

Success Factors

The success of Vitimes is due to the high-level of commitment from the NTP's leadership and the data management staff. The openness of provincial and district level staff has strongly contributed to the development of Vitimes. Financial and technical support by TB CARE I partners has facilitated the development and implementation of Vitimes. Vitimes met resistance from staff used to their old way of working and wary for the new system and the NTP has to make an effort to deal with this resistance. It is therefore essential that successes can be shown and people at district and provincial levels have access to all information needed.

Ms Dinh, Vietnam: "With Vitimes I can access information at any time"

4. Decentralized MDR-TB Management in Kyrgyzstan

Short Summary

The introduction of new rapid diagnostics has led to a much higher number of people being diagnosed with MDR-TB in Kyrgyzstan. Consequently, the workload of the Central MDR-TB Consilium team that decides on the treatment of these patients has skyrocketed. To deal with this, it was decided to decentralize the work of the Consilium to the regional level and include the development of regional capacity to work with new equipment.

New Diagnostics and Treatment Strategies Lead to Many More New Patients

Since 2005, interventions to control MDR-TB in Kyrgyzstan have been coordinated by the NTP. A central MDR-TB Consilium (the Consilium) was established in 2006 to ensure the timely and quality initiation of MDR-TB treatment.

Decisions on the treatment of patients with MDR-TB are discussed and decided upon collectively. The Consilium is an inter-disciplinary team of five to seven TB doctors as well other specialists who are involved in the patients' treatment, such as epidemiologists, X-ray specialists, laboratory personnel and others. The Consilium is based in Bishkek, the capital city of Kyrgyzstan and meetings take place every week.

Following the introduction of new diagnostic tools for MDR-TB diagnosis (GeneXpert), more people with presumptive MDR-TB (rifampicin resistance RR+) were detected, and consequently the workload of the Consilium skyrocketed. This restricted their capacity for decision-making on the timely initiation of treatment or for regimen changes for each individual MDR-TB patient. As a result, the number of MDR-TB patients they were able to successfully help was limited.

Local Ownership

The national TB manager and the deputy director, who is also the head of the Consilium, came to a common understanding on the urgent need to solve the delays in treatment initiation or for regimen changes. To avert the risk of staff burn out, it was decided that the only way to keep up with the workload was to decentralize the work of the Consilium to the regional level.

After the NTP approved the decentralization plan it was subsequently implemented using a step-wise approach. In 2011 two regional Consiliums became operational, in 2014 four more Consiliums were added and in 2015 there were two more. To date a total of nine MDR-TB Consiliums are active in Kyrgyzstan, both in civil society and in the penitentiary system.

The main idea of the Consilium is to provide the same quality of services across the country. The NTP ensures that all Consiliums perform at the same level and apply the same procedures.

TB CARE I Role

The deputy head of the NTP has worked closely with the TB CARE I technical team to develop the terms of reference for the decentralized Consiliums, including the scope of work, reporting and registration forms, and job descriptions for individual team members.

The process of decentralization was set in motion, and organizational capacity was built. On-the-job-training and supervision of new Consilium members became a part of the scope of work of the central MDR-TB Consilium team members, and in particular for the head, on whose shoulders much of the responsibility fell.

The NTP also decided that clinically difficult cases should still be presented to the central MDR- TB Consilium team members to make sure that human error is kept to a minimum.

Delegation of Responsibilities and Technology

To condense the decision-making and treatment initiation time, which was often delayed due to long distances, TB CARE I purchased equipment to enable distance communication and improve the clarity of medical images and the presentation of data collected during patient consultations. However, there was no agreement with the facility managers on issues such as the location and storage of the technology, the availability of internet, and the staff competencies needed to work with the technologies.

Decentralizing an existing system and services also requires the delegation of responsibilities and trust in people. With the support of TB CARE I, the NTP took charge of developing the necessary competencies at the regional level.

The head of central MDR-TB Consilium, Dr. Toktogonova Atyrkul Akmatbekovna is very proud that "the capacity of the MDR-TB team was built through on-the-job trainings and the delegation of certain tasks."

A performance management system has been put in place and is provided by the central MDR-TB Consilium, but not all the available resources were used at their full capacity. As the staff at the regional level did not have access to the telemedicine equipment and lacked the necessary competencies to use it, the equipment was not optimally utilized.

The routine work of the MDR-TB Consiliums is now performed on a regular basis at decentralized level, and TB doctors presenting the medical history of their presumptive MDR-TB patients are taking part in this dynamic decision-making process. As they have an active role presenting the medical history, and peer-reviewing decisions made by others, they learn to prioritize the information to be presented and communicated to the Consilium.

Lessons Learned

The MDR-TB Consilium members concluded that the same priority should be given to strengthening the staff's TB technical competencies as to building their ability to use new technologies and tools.

The ultimate impact of the new approach remains to be evaluated, and largely depends on factors such as how the tools and the skills of the people trained will be optimized and used.

6.2.2 People

5. GeneXpert Implementation in Vietnam

Short Summary

Vietnam takes pride in the advances the country has made in TB control in recent years. Wishing to further improve the diagnostic testing of MDR-TB, GeneXpert machines have been introduced in laboratories across the country. Vietnamese health workers value these highly user-friendly diagnostic machines because they are safe, easy to use and give patients quick and reliable testing results. The Vietnam NTP has created a 'troubleshooter' team of laboratory technicians to give technical support to colleagues across the country. The various participating donors have also worked together to ensure the long-term sustainability of this innovative technology.

GeneXpert Implementation in Vietnam

From the outset, the directors of the Vietnamese NTP and NTRL were highly committed to following the WHO's recommendation to use GeneXpert for the quick and reliable diagnosis of MDR-TB in Vietnam. With support from various donors, the NTP led the process of installing 50 GeneXpert machines in provincial, pediatric and district hospital laboratories and at the NTRL. TB CARE I funded and procured 17 GeneXpert machines and also gave TA for their installation and management, and for the monitoring of the test results.

GeneXpert at the Provincial and District Hospital

In December 2014, the Thai Bin Provincial Hospital began utilizing GeneXpert and all the laboratory technicians were trained in its use. Ms. Xcan is the responsible GeneXpert laboratory technician, she said: "We are proud of the GeneXpert machine, it is a 'high-tech' machine but simple to use and the results are reliable. It is very convenient for the patients to have the test results so quickly and to start treatment immediately". Ms. Xcan shares the GeneXpert test results with the whole team and if there are any technical problems, she can contact the NTRL, so far they have been able to solve all her problems. Ms. Hau from the District Hospital Hoang Mai feels privileged to work with the GeneXpert. "I am so happy that my supervisor allowed me to work with the GeneXpert machine. I have learned how to use this new technology, that's exciting", she said.

Continuous Learning

A group of national and provincial laboratory technicians have followed a Trainer of Trainers course and now teach their colleagues in the provincial and district laboratories. After the training, the laboratory technicians feel confident enough to start working with GeneXpert and they learn even more by doing, with the occasional support of a more experienced person from another laboratory. Ms. Hau is confident in using the machine, "I had good training from the National Lung Hospital trainers and if I have problems, I can always contact one of the supervisors at the National Lung Hospital", she said.

A Technical Team for Troubleshooting

Initially Cepheid's local engineering company gave technical training and did technical troubleshooting, but this local company increased its prices dramatically, making it unaffordable in the long-term. The NTP and the NTRL then formed a pool of 12 laboratory technicians from different regions and gave them advanced training on GeneXpert installation, maintenance and troubleshooting. The team has now taken over the role of the local engineers and gives technical support to colleagues across the country. As a result the NTP's independence has increased and maintenance costs have been substantially reduced.

Dr. Hoang, laboratory technician at Hanoi Lung Disease Hospital, has even suggested extending the services of the laboratory technicians to include maintenance and troubleshooting for private laboratories.

Long-term Sustainability

All GeneXpert machines, including the cartridges for the tests, are donor-funded. The costs of the cartridges are high and national and provincial level staff were very aware of this. They spoke of national level discussions on how to cover these costs in the long-term when donors ultimately leave. The NTP leadership is currently exploring the option of including GeneXpert tests in the insurance package, however, it is clear that this decision will not be taken in the short-term.

Fruitful Collaboration

The collaboration between the NTP and the various donors, including TB CARE I, WHO, the Canadian International Development Agency (CIDA) and the United Nations Children's Fund (UNICEF), has been fruitful and harmonious, with all partners feeling a shared responsibility for the successful implementation of GeneXpert. They exchange experiences and provide support where it is needed, e.g., when the TB REACH project ended, TB CARE I took over the provision of cartridges in the former TB REACH project sites.

Success Factors for Local Ownership

Laboratory technicians are enthusiastic about the GeneXpert machines and they are proud of the opportunity to work with this new technology. GeneXpert gives quick and reliable results for the patients, and is safe for laboratory technicians. The technicians feel supported by their managers and are adequately trained to do the tests. They are happy that there is a good system for cartridge supply and that a support group of laboratory technicians is on standby for maintenance and troubleshooting. The NTP and NTRL had the coordinating role and collaborated successfully with all partners, they are now exploring how to fund GeneXpert in the future.

Ms Hau, laboratory assistant, Vietnam: "I learned this new technology, that's exciting"

6. Addressing Childhood TB in Vietnam

Short Summary

The NTP in Vietnam wants to improve the prevention, diagnosis and care of children with TB. This includes the preventive treatment of latent TB among children who have not yet developed the disease. The NTP started an IPT program for children at risk and brought services closer to patients by improving the diagnosis and care at community and district levels. Building the capacity of health workers in childhood TB, and good collaboration with health facilities at all levels contributed to an increased focus on TB in children and to more parents accepting IPT for their young children.

The National TB Program in the Driving Seat

Dr. Tue worked for more than 10 years as a pediatrician, where he saw at first hand the suffering of children with TB. He is chair of the Childhood TB group that is responsible for Vietnam's childhood TB policy and activities. Dr. Tue feels strongly that the preventive treatment of latent TB, improved early diagnosis, and the treatment of TB in children are necessary to reduce suffering and to eventually eliminate TB in Vietnam.

Dr. Tue said: "Since 2012 we wanted to improve the prevention and early diagnosis of TB among children, in line with the WHO's guidelines. With the technical and financial support of TB CARE I and working in four provinces with a high HIV burden, we started to offer IPT for children who are at higher risk of TB and to improve TB diagnosis and treatment among children. There was a strong commitment from the NTP leadership to strengthen the diagnosis and treatment of childhood TB. Both parents and health workers must become more aware of TB in children. More and better health education is necessary and health workers at all levels need to be trained". The childhood TB program was subsequently expanded to nine more provinces and funded through the Global Fund.

Raising Awareness of TB Among Children

Dr. Dung works as medical doctor in the Hanoi Lung Hospital and is committed to participating in the pilot program. From her work with children with TB and their parents, she became convinced that paying more attention to prevention and early diagnosis can save children's lives. "The results of the childhood TB program are promising" said Dr. Dung, "Parents have become more aware of the risk of TB and take their children to the hospital for diagnosis more frequently". Dr. Dung explained that in the beginning, parents were reluctant to give IPT to their children who weren't ill, but now the number of children on IPT is increasing, specifically in the urban areas. She said: "Health education in the communes was important to show parents why IPT is necessary".

Training Trainers Who Train Trainers: Building the Capacity of Health Workers

Dr. Dung participated in the childhood TB training provided by the program. She learned a lot about new screening methods, new treatment regimens and IPT specifically for children. With more knowledge and increased motivation she was given the opportunity to train doctors at the District TB Unit (DTU), who in turn trained the communal level doctors. She said: "Many DTU doctors have extensive practical experience, so the training is an excellent opportunity for doctors and trainers to share experiences and learn from each other".

Dr. Dich of the Provincial Hospital in Thai Binh also participated in the training. After the training he started a TB doctors' consultation group with eight colleagues. The group meets twice a week to discuss the diagnosis and treatment of all patients. This is very important, as doctors learn a lot by participating in this group, and patient care improves as a consequence.

Dr. Dung and Dr. Dich suggested training all pediatricians and nurses on childhood TB and they asked for

more supportive supervision from the clinicians of the National Lung hospital in Hanoi to improve their clinical practice. Dr. Dich said, "District TB staff could also visit their colleagues in other districts and learn from each other". Dr. Dung wondered whether there will be sufficient qualified TB doctors in the near future. "Stable human resources are essential, at this moment I am the only doctor in my department with a childhood TB background and I will retire soon. Who will take over from me?", she said.

Dr. Ditch, Vietnam: "We learn about Childhood TB by sharing our experiences with others"

7. Improving Health and TB Control in Nigerian Prisons

Summary

TB in prisons is a serious public health concern and inmates and staff are at high risk of TB infection. The new head of the prison health services launched an initiative to systematically screen, diagnose, treat and control TB infection within the prison system from an integrated public healthcare approach.

Background

TB in a prison environment is a serious public health concern because overcrowding facilitates its transmission. At the start of TB CARE I there was no systematic screening of inmates for TB upon admission and many prison medical staff did not have the capacity to effectively diagnose and treat TB.

One Person Can Initiate a Significant Change

In 2012, when Dr. Udom was put in charge of health care services for the Nigerian prison service she immediately knew that this was the chance to make a change. For 26 years as the second in command she had observed a lack of coherence in the health programs in the penitentiary services. Her vision was to take the patient more into consideration and to adopt an integrated healthcare approach.

Dr. Udom invited 18 of her most senior medical staff to discuss the health situation in the prisons and she initiated a collaboration with the NTP to improve the quality of the health services in Nigerian prisons. She contacted KNCV Nigeria to discuss a holistic approach which would include prevention, diagnosis/ screening, and care for the most important public health threats: TB, HIV, diabetes and reproductive health.

Development of a Screening Tool

Together with KNCV, Dr. Udom developed a screening tool for TB and other health issues to be used in all prisons, and following that, SOPs for TB control and for other diseases were also developed. A stakeholders' meeting was held with the National TB and Leprosy Control Program (NTBLCP) and prison services personnel to review the newly designed health screening tool. TB CARE I provided funds for the creation of the screening tool and its distribution to all the prisons in the country.

Site Renovation

Prison health facilities were assessed for upgrading and renovation and TB CARE I provided funding for minor renovations and repairs and equipping ten prisons with microscopes for TB diagnosis. With additional funding from the European Union, Dr. Udom was also able to improve the infrastructure of the Prison Health Services and to train staff.

Building the Capacity of Prison Services Health Personnel

As part of TB CARE I support for the prison services, a medical officer and two general HCWs per facility were trained on basic TB control and TB-IC. Dr. Gajere, State TB Program Manager from Kaduna, reported that "training of all health staff in the prison was done in Kaduna in 2013 and integrated screening was started in 2014. All the staff were trained and one of the inmates is appointed as a TB-IC focal person [whose job it is to] report when somebody is [chronically] coughing and also to observe whether ventilation is done well".

Results

From October 2013 to June 2014 the 20 prisons supported by TB CARE I screened 6,341 inmates for TB. The screening process identified 756 presumptive cases, of which 138 were diagnosed with TB. Of those

diagnosed, 129 (93%) have been enrolled on treatment. Dr. Gajere from Kaduna State is very enthusiastic about the results, he said that the screening has helped to detect TB at an early stage and has prevented further infection within the prison. Supportive supervision is done by the state team and the local government TB supervisor. According to him, the main result is that there is no further spread of TB in the prison. At this moment only one inmate is on TB treatment, and all HCWs have been trained on the basics of TB diagnosis, treatment, TB-IC and other common health problems in prisons.

If inmates are discharged before their treatment is complete, the care is taken over by the former inmate's health facility of choice. Health education is also given to the patient. In the last three years only one lost to follow-up case was recorded. Training of prison HCWs is now part of the national training plan for TB control.

Success Factors for Local Ownership

The vision of a very energetic and holistically-minded doctor who wanted an integrated approach to healthcare and to look at the patient in context, was the start of a very successful collaboration among local partners to improve the quality of health services in the Nigerian prisons. Given the responsibility for the health services in the prisons, one person can initiate a significant improvement to the system that can save many lives, if they have the vision and are able to mobilize the right resources in terms of partners and funding.

6.2.3 Relationships

8. Missing the Faces of Children: Childhood TB in Nigeria

Summary

TB in children is of serious concern and a challenge for TB control in Nigeria. With the leadership of the Professional Association of Pediatricians in Nigeria, a comprehensive action plan has been developed, capacity-building has been initiated, and a practical desk guide has been developed.

Background

For many years the control of TB in children has presented a challenge for TB experts as it is difficult to diagnose. It is of serious concern that children have not participated in discussions on how to combat TB. The under-diagnosis of childhood TB is a global issue and also a serious problem in Nigeria. In 2010 a consensus-building meeting was held in Nigeria for all relevant professional bodies to push for the inclusion of childhood TB in the NTP's agenda. The Pediatric Association of Nigeria was requested to provide technical leadership and in the 2012 national TB control review it was observed that many children with TB are still being missed. One of the top three recommendations of the review, was more focus and action on TB among children.

Stakeholders Meeting

In 2013 a stakeholders meeting for pediatricians was held to draw a road map for the implementation of childhood TB control in Nigeria. The meeting was organized by the NTP together with the local partners and brought together all the critical stakeholders. The meeting and its outcomes were crucial in the making and implementation of a comprehensive action plan.

Pediatric Association

According to Dr. Omoniyi, the WHO Focal Person on Childhood TB, the Pediatric Association has been the main driving force behind the strengthening of diagnosis and the management of childhood TB. The Pediatric Association took the lead in revising the national TB guidelines for childhood TB. It also spearheaded the development of training curricula and modules and helped to build a critical mass of facilitators to build the capacity of pediatricians, medical doctors, nurses and program managers. The activities were all sponsored by TB CARE I.

During a visit to Amando Bello Teaching Hospital in Zaria, Dr. Umar, who is also a member of the Pediatric Association and its focal person on childhood TB, explained how important it is to make sure TB in children gets the attention it deserves in Nigeria. He uses every opportunity at meetings and conferences to keep the spotlight on children with TB. The establishment of the National Childhood TB Working Group has also helped to monitor activities and progress in a systematic manner.

Desk Guide for the Diagnosis and Management of TB in Children

The Pediatric Association also took the lead in developing a national desk guide for the management of childhood TB. The desk guide is a simple tool that serves as a hands-on national policy guide and reference document for all health care providers on the provision of quality care for children with TB.

Building Capacity

To allow the effective use of the guidelines for the diagnosis and treatment of children with TB, capacity-building was offered at the zonal level. A step-down approach was used to train medical officers and general HCWs and was facilitated by pediatricians. Not all local government areas have resident pediatricians, so task-shifting was adopted as a policy for childhood TB and is now part of the new National Strategic Plan 2014-2018. As the diagnostic confirmation of childhood TB is a challenge, Dr. Umar said that he is happy that his hospital will soon have a GeneXpert machine, which will simplify and speed up the diagnosis of TB in children. Independently from each other both Dr. Umar and Dr. Omoniyi emphasize the need for further training and training follow-up. Dr. Omoniyi also called for more on-the-spot training to be done and follow-up through mentoring and supervision.

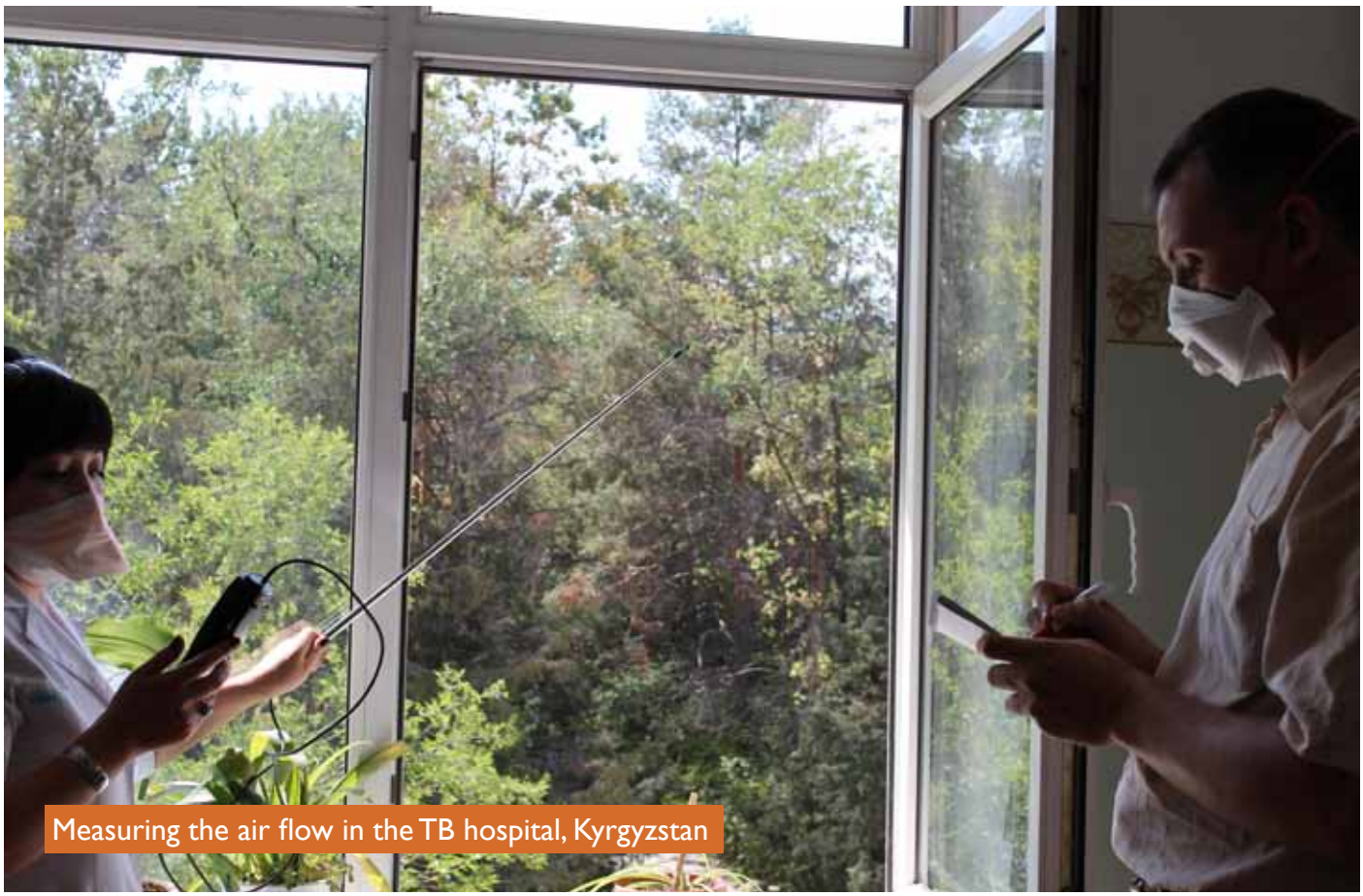
The NTP of Nigeria has a focal person for childhood TB who promotes and coordinates the childhood TB activities and works together with the professional associations, technical and financial partners.

Health Systems Approach

To be able to diagnose and treat children with TB it is important to collaborate with other healthcare programs e.g., maternal health and child health activities. The scaling-up of childhood TB interventions is planned to be implemented in public hospitals and private health facilities across the country.

Success Factors for Local Ownership

The involvement of the Professional Association of Pediatricians has been a driving force in taking ownership and responsibility for the problem of childhood TB. The Pediatric Association is now a member of the Stop TB Partnership in Nigeria. The recent arrival of the GeneXpert rapid diagnostic tool has made the diagnosis of TB in children much easier and has enhanced the collaboration between the technical partners. The strong commitment of professionals devoted to childhood TB at all levels of the health system should keep childhood TB on the NTP agenda.



Measuring the air flow in the TB hospital, Kyrgyzstan

9. The Secret of Sustainable Infection Control in Kyrgyzstan

Summary

For successful implementation it is important to not only to have the NTP on board, but also the key stakeholders at the highest level.

Monitoring and evaluating the implementation of TB-IC measures in Kyrgyzstan falls under the responsibility of the Sanitary Epidemiological Service (SES) which is responsible for all infectious diseases including TB. The decision to closely involve the SES was pivotal to improving the countrywide approach to TB-IC and brought a completely different way of working. It is also crucial to consider who to target: in this case, building the capacity of the top managers in the organization proved to be the key to effecting change.

Background

Kyrgyzstan is a country with many partners and stakeholders working in TB control. As TB is an airborne infection, is difficult to fight. Preventive IC measures are important to protect people, especially in health care settings, from getting infected with TB disease.

Changing the Approach to TB Infection Control

In 2012 the country started to implement TB-IC measures based on the latest international guidance, taking into account that managerial and administrative measures are of the same importance as environmental tools and personal protection. In the past the focus was often on the environmental measures, with sanctions for non-compliance, now the focus has shifted towards more managerial and administrative interventions.

Increasing Local Ownership

The NTP is the leading TB-IC implementer, but the role of the SES is to institutionalize all innovations through laws and regulations, as well to monitor and evaluate the implementation of activities at facility level. Both organizations operate under the MoH. Clearly, the SES needed to come on board.

TB CARE I technical advisors took the initiative, deciding to step out of their comfort zone and extend the approach from the single disease perspective to the wider public health perspective. As SES is responsible for infection control countrywide, they are also responsible for TB infection control and are therefore able to make significant progress in the implementation of latest infection guidelines and in the monitoring of external quality assurance.

As a first step, a plan was created for how to approach TB-IC in the country.

Then TB-IC guidelines were developed and endorsed by the MoH to create common ground across the country.

Next it was decided to harmonize the operational procedure algorithms and other instructions regarding TB-IC measures in health facilities and communities.

The following step was to build the capacity of people working for the NTP, the SES and other partners, to make sure that they were all on the same page.

The final step was to identify pilot study areas, and the facilities that needed to be redesigned and equipped with tools. For example, Kara Balta hospital initiated and introduced visible TB-IC practice improvements, such as the separation of smear negative and smear positive patients, and patients are also separated

depending on their status (retreatment and new cases). Sputum collection rooms were set up, with sufficient mechanic ventilation and ultra-violet lamps. The rooms were adjacent to nurses' rooms where sputum samples are further processed, thus reducing the risk of infection transmission. Medical staff rooms were moved to the "clean zone". Finally, to reduce interaction between smear positive and smear negative patients, medicines and food were delivered separately to each ward.

Involving Stakeholders

SES epidemiologists were fully involved, and participated in all the relevant workshops and round table discussions to develop a regulatory framework and guiding principles. They were also important players during monitoring visits, and over the course of three years they changed their approach from looking for faults (non-compliance) to seeking out the successes and examples of good practice and providing on-the-job training.

To reinforce the initiative that was already underway, the SES initiated a cooperation platform for all stakeholders involved in TB-IC in Kyrgyzstan. The SES took a leading position in the harmonization initiatives and built on existing good practices.

The cooperation platform will ultimately lead to the greater sustainability of TB-IC measures, as innovations become embedded into the regulatory framework and are monitored by the SES (the country's regulatory body). If anything goes in the wrong direction, immediate actions will be taken and stakeholders will be informed. Therefore the cooperation platform also serves as an exit strategy for TB CARE I support.

Lessons Learned

A major success of the initiative was the involvement of higher management in decision-making, and not wasting the limited resources available for capacity-building by involving people or organizations which were not in a position to make decisions for change.

Based upon the experience of the last three years, the SES indicated that creating the plan and guidelines was the easiest part, and the main challenge lay in their execution. The facility TB-IC plans have to a large extent been implemented, but not completely. Currently not all of the country has been covered, but the situation can change quickly and what was planned at one point can look entirely different a year later. In the long-term structural changes were needed, this was acknowledged by the NTP and the SES from the very beginning of the initiative, their collaboration has made this project a success.

10. Collaboration to Reinforce Medical Education in Kyrgyzstan

Summary

Engagement of local partners leads to stronger ownership, which is an essential step towards sustainability. In Kyrgyzstan, there is a shift underway in the approach to TB control, away from hospital-oriented to holistic, more patient-centered care. This shift includes the need to build capacity among TB service providers. Capacity-building is not only about delivering knowledge, developing skills and providing tools, but also about monitoring implementation and providing on-the-job training during supervisory visits. Under TB CARE I the NTP and the Post Graduate Institute (PGI) were brought on board for to provide continuous medical education.

Rationale

When it comes to the capacity-building of staff involved in TB service provision, continuous medical education (CME) activities are an important way for busy medical staff to keep up-to-date, expand their professional network and improve their quality of service.

When selecting capacity-building activities, healthcare cadres are increasingly choosing activities where they can be certain that credit will be awarded by an accredited CME provider. The PGI is a well-established training center for CME, with a good track record in other medical fields as well.

Process and Results

In 2011 a number of USAID-supported TB control organizations implementing TB CARE I including KNCV, approached the PGI and signed a memorandum of understanding with the institute for capacity-building in implementation-oriented technical areas. The areas included laboratory strengthening, MDR-TB, TB-IC, and outpatient care.

The MoH of Kyrgyzstan endorsed this initiative and implementation began through the existing capacity-building system in the country.

All capacity-building activities were coordinated with or by the PGI. During the development of guidelines, curricula and implementation of capacity-building activities, the PGI had an active implementing role and dedicated facilitators involved in the process. The routine human resource development system in Kyrgyzstan specifies that every five years, medical cadres need to follow postgraduate courses, which are awarded for 156 medical-education hours. Depending on the results of their exams, cadres may be moved to a higher professional category that can mean a slight increase in salary.

While implementing this approach, it was decided to consider all future decisions through the lens of healthcare cadres' interests, and their need for knowledge and skills.

An important part of capacity-building is to not only to deliver knowledge, develop skills and provide tools, but also to monitor implementation and provide on-the-job training during supervisory visits.

In terms of the development of outpatient care guidelines and training curricula for primary health care (PHC) professionals, KNCV and other USAID-funded organizations worked closely together with PGI, and the Professional Association of PHC doctors and nurses (PA-PHC). The PA-PHC was also actively involved in the development of indicators and participated in the monitoring process of outpatient care activities, providing on-the-job support to staff if it was necessary.

Lessons Learned

At present electronic data collection on capacity-building activities are only available as aggregated data. The NTP does not oversee the country's initiatives and total investments.

An important step in terms of country ownership is the development and implementation of a management information system that includes information about capacity-building initiatives, and human and financial resources.

CME needs to officially recognized by professional associations and the MoH.

6.3 Countries Included in the Desk Review

Africa

1. Botswana
2. Ethiopia
3. Ghana
4. Kenya
5. Mozambique
6. Namibia
7. Nigeria
8. South Sudan
9. Uganda
10. Zambia
11. Zimbabwe

Asia

1. Afghanistan
2. Cambodia
3. Indonesia
4. Pakistan
5. Vietnam

Central Asia

1. Kazakhstan
2. Kyrgyzstan
3. Tajikistan
4. Uzbekistan

6.4 Tools

6.4.1 Tool 1: Eligibility criteria LOI

Name of the Country			
Name of the project	A	B	C
Local partner involved in all phases: design, implementation and evaluation*			
Activity within existing system**			
Leading external partner/TA in one or more of the phases***			

Inclusion criteria

- *Use (+++) for all phases, (++) for 2 phases, (+) for 1 phase, (-) if it is not existing and (+/-) if difficult to say from the description and (?) if it is not mentioned
- **Use yes/no, (+/-) if it is difficult to say from the description and (?) If it is not mentioned

Exclusion criterion

- ***Use yes/no, (+/-) if it is difficult to say from the description and (?) if it is not mentioned

6.4.2 Tool 2: Interview questions Desk Review

Indicators
Desk review
LOI

	Topic	Questions	Findings
1.	Background		
		Type of local partner: (ministries, CSO, NGO, academia/universities, affected community, others)	
2.	History		
		Did they work together before? Yes/No For how long? Which phase (needs assessment/ development/ implementation/ evaluation)	

3.	Development		
		How are country priorities addressed in the project design? Is there accountability to local stakeholders?	
4.	Resources		
		How are local budgets utilized? How are local people involved?	
5.	Relationship	Relationship	
		Was the activity embedded in a broader context? Was the activity implemented by a team or an individual? What kind of funding was provided? How was the information shared: at which stage and with whom?	
6.	Output		
		What were the expected deliverables?	
7.	Success		
		How was the timetable followed? Was the activity delivered as agreed?	
8.	Future		
		What kind of collaboration is expected or planned in the future? What kind of role will have existing partners and/or new partners?	

6.4.3 Tool 3: Interview questions local stakeholders

Introduction

The interviewer introduces themselves, explains the purpose of the interview and how the results will be used. The interviewee is informed that the final document will be shared with them.

Name of the project:…… (This will be the same name as used in the desk review)

Questions

Number	Main questions	Additional questions
1.	**Current Practice** What did this project entail?	1.1 Which activities took place? 1.2 Who was involved? 1.3 What were the main results?
2.	**How were the ideas for the project generated?**	2.1 How did you (your organization) get involved in this project? 2.2 Why was it important for you (your organization) to start this project?
3.	**Who sparked the idea?**	3.1 Did you work together for the first time or were you already part of a social network or professional circle?
4.	**How did this project feel different than other projects?**	4.1 Was it a major project for you? Why? 4.2 Did you feel supported? - What kind of support did you receive from higher levels? - What kind of support did you receive from staff and patients? 4.3 Why were you excited about this project? What was new?
5.	**Strengths and Weaknesses** What were the strengths and weaknesses of this project?	5.1 What has been the most difficult case (or phase) you faced in this project? - Why was it difficult? - How did you address difficulties?
6.	**Roles, Tasks and Responsibilities** What were your organization's tasks and responsibilities in this project?	6.1 Specify the tasks/responsibilities for the different stages of the project: - Development - Implementation - Monitoring and evaluation 6.2 Who was responsible for this project/ activity, within and outside your organization? - What was your (personal) role in this project?

7.	**Financial and Human Resources** How was this project/activity funded?	7.1 Was it funded from a local or donor budget? - What was the annual budget (or what was the % of your total budget) 7.2 How were human resources funded? - How many staff were involved? - Was the staff on the Government Pay Roll? 7.3 What would happen if donor funding stopped? - Why would it be like that? 7.4 How would you address this? 7.5 Did you already discuss the takeover of the activity? Why?
8.	**Collaboration/Communication** How did the different stakeholders (involved in this project) work together with each other?	8.1 How and by whom were decisions taken? - What decisions could you take at your level? 8.2 With whom did you share information inside and outside your organization? - What kind of information (project results/ approach/technical information). 8.3 Were you reluctant to share information with specific stakeholders? Why? 8.4 How did it change during the project lifespan? Why?
9.	**Capacity-building and Learning** How did you build capacity for this project in your organization?	9.1 How did your staff use the new information (or skills) in day-to-day performance? - Why or Why not? 9.2. How did this affect the project results?
10.	**Technical Assistance (TA)** Did/do you get any TA? **If yes:** How important was this TA? **If no:** Why didn't you get any TA?	10.1 What kind of TA was received? 10.2 What type of assistance would you need, to perform more sustainably or to expand?
11.	**Monitoring and Evaluation (M&E)** How was/is the project monitored/evaluated?	11.1 How did you use the M&E results?
12.	**Successes** What are the successes of this project?	12.1 What made this project successful? 12.2 What are you most proud of?
13.	**Problems** How were problems tackled? Problems of different nature: Technical/ Financial/Planning/Collaboration with different stakeholders	13.1 At which stages of the project did these problems occur? - - Why did/do they occur? 13.2 How did you address these problems? 13.3 What hurdles remained?

14.	**Future** Is follow up of this project expected, planned or already in place?	14.1 What is/will be different from the initial project? 14.2 What will be (according to you) the necessary conditions for a successful project implementation?
15.	**Conclusions and Suggestions** How sustainable is the project? Please explain, why do you think so?	15.1 What is needed to improve project results? 15.2 What is needed to strengthen local ownership? 15.3 How would other countries benefit from this kind of project approach?

Clarifying questions

Here are some questions to help the interviewee to clarify their answer:

1. Can you tell me more? (Probe further on how and why)
2. Can you expand a little bit on this?
3. Can you give some examples?
4. Could you clarify what you are saying?

6.5 References

1. Challenge TB Request for Application (RFA) Summary of technical application, KNCV Tuberculosis Foundation, June 2014
2. Systemic capacity-building: a hierarchy of needs, Christopher Potter and Richard Brough, Health Policy and Planning; 19 (5): 336-345 Oxford University Press, 2004
3. Local Systems, a framework for supporting sustained development, United States Agency for International Development, 2014, www.usaid.gov
4. Tracking USAID's, Efforts on the Local Solutions Initiative, Save the Children, 2014,
5. www.savethechildren.org
6. TB CARE I mission reports

E-mail pmu@tbcare1.org
Website www.tbcare1.org