MIDTERM EVALUATION OF USAID DEFEAT TB (DTB) PROJECT IN KYRGYZSTAN

December 2017

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Cover photo: Lab technician Asimgul Alieva reads a first-line drug susceptibility test at the National Reference Laboratory in Bishkek, Kyrgyzstan. Photo credit: Olivier LeBlanc/USAID Defeat TB Project.
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December 2017

USAID Contract No. AID-OAA-C-14-00067; Evaluation Assignment Number: 360

DISCLAIMER

The authors’ views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.
ABSTRACT

This report summarizes a midterm evaluation of the Kyrgyzstan Defeat TB (DTB) Project, implemented by Abt Associates and partners since August 2014. The evaluation reflects field work conducted in June and October 2017, including interviews and focus groups, as well as review of numerous background documents. The project is meeting its interim targets and contributes significantly to tuberculosis (TB) prevention and management in Kyrgyzstan.

DTB had three objectives:

- Improved access to TB services
- Strengthened capacity to provide high-quality TB services
- Improved quality and use of TB data

Evaluators assessed:

- To what extent has the project achieved its intended outputs and outcomes per the agreed monitoring and evaluation (M&E) plan?
- To what extent would the current M&E indicators, if achieved, lead to intended impact?

The evaluation found that substantial progress had been made in at least three areas:

- Development of a “Road Map” for restructuring TB services, including commitment of Kyrgyz government funds
- More accurate and timely diagnosis and treatment of TB
- Further development and support for ambulatory care, and reducing non-essential hospitalization and opportunities for cross-infection

While daily observed therapy remains difficult for many — for reasons ranging from side effects to difficulties reaching a clinic — patients and community members reported supportive relationships with clinic staff. Beyond individual case management, DTB should liaise with non-health community development groups. It should also support decentralized data-based decision-making using non-electronic records until larger data systems can be finalized.
ACKNOWLEDGMENTS

This was a fascinating and challenging evaluation, and the GH Pro team is grateful for the many helping hands and voices that lightened and enlightened our work. We would especially like to thank the staff of Defeat TB, who spent many hours with the team explaining activities and clarifying data in a genuine effort to learn from the different perspectives that an external review might bring. National Program Leadership for Tuberculosis, the Mandatory Health Insurance Fund for Health Promotion, and others answered our many questions and provided documents. At both national and field levels, we are grateful for the many hours doctors, nurses, patients, and lab technicians spent with us, always eager to share their work.

The Kyrgyz people are friendly and generous with strangers. Their hospitality is greatly appreciated.
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<tr>
<td>ACSM</td>
<td>advocacy, communications, social mobilization</td>
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<tr>
<td>AMEP</td>
<td>Annual Monitoring and Evaluation Plan</td>
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<td>CBTS</td>
<td>community-based treatment supporters</td>
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<td>CSO</td>
<td>civil society organization</td>
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<tr>
<td>DOTS</td>
<td>directly observed therapy, short course</td>
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<td>DR</td>
<td>drug-resistant</td>
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<td>DST</td>
<td>drug susceptibility testing</td>
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<td>DSTB</td>
<td>drug-sensitive tuberculosis</td>
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<td>DTB</td>
<td>Defeat TB Project</td>
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<tr>
<td>EQA</td>
<td>external quality assurance</td>
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<td>FAP</td>
<td>Feldsher obstetrician point</td>
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<td>FMC</td>
<td>Family Medical Center</td>
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<tr>
<td>FY</td>
<td>fiscal year</td>
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<td>GH Pro</td>
<td>Global Health Program Cycle Improvement Project</td>
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<td>HAKR</td>
<td>Hospital Association of Kyrgyz Republic</td>
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<td>IC</td>
<td>infection control</td>
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<tr>
<td>M&amp;E</td>
<td>monitoring and evaluation</td>
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<td>MDR-TB</td>
<td>multidrug-resistant tuberculosis</td>
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<tr>
<td>MHIF</td>
<td>Mandatory Health Insurance Fund</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>MTB</td>
<td>mycobacterium tuberculosis</td>
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<td>National Tuberculosis Center</td>
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<td>National Tuberculosis Program</td>
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<td>PHC</td>
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<td>tuberculosis</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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EXECUTIVE SUMMARY

This report summarizes findings from a midterm evaluation of the Defeat TB (DTB) Project, implemented by Abt Associates and others in Kyrgyzstan since August 2014. The project had the following objectives:

- Improved access to tuberculosis (TB) services
- Strengthened capacity to provide high-quality TB services
- Improved quality and use of TB data

The evaluation had three objectives:

1. To assess the progress in achieving the project goals for more effective and accessible TB and multidrug-resistant TB diagnosis and treatment services at the national level and pilot sites
2. To identify implementation gaps/challenges and determine performance and levels of attainment for identified targets and indicators
3. To document lessons learned and provide recommendations that will inform future programming directions

GH Pro selected a four-person team for this evaluation: an international evaluation specialist, a Kyrgyz TB specialist, a research assistant/logistics specialist, and a translator. Two Kyrgyz researchers with extensive community experience joined the team later in the evaluation process.

USAID/Bishkek asked GH Pro to address two specific questions:

1. To what extent has the project achieved its intended outputs and outcomes per the agreed monitoring and evaluation (M&E) plan?
2. To what extent would the current M&E indicators, if achieved, lead to intended impact?

The evaluation team collected qualitative and quantitative information through key informant interviews with managerial staff, clinicians, patients, and others; community focus groups and patient interviews; clinic and laboratory observations; document reviews; and analysis of limited quantitative data from DTB, the Mandatory Health Insurance Fund (MHIF), and the National Tuberculosis Program (NTP).

Throughout its many interviews and observations, the evaluation team found that DTB was contributing significantly to program improvement, with all reporting indicators on target, and respondents were generally satisfied that emphases on policy modernization, hospital restructuring, and laboratory quality were very appropriate. The NTP, the Republican Health Promotion Center, and the MHIF — all key national players — credited DTB and its chief of party, Ainura Ibraimova, with significant contributions.

Three outstanding effects may be highlighted:

1. DTB has secured national commitment, including funds, for a significant restructuring of the Kyrgyz TB treatment system, as codified in the recently approved “Road Map for further development of TB care in the Kyrgyz Republic.” In addition to facilitating the Road Map, the project has tackled the practical issues of hospital restructuring and ambulatory care, and demonstrated that reform ideas are practical and effective.
2. Through frequent innovation and equipment inputs, DTB has significantly reduced delays between identification of suspected TB cases, full and accurate diagnosis (including sputum transportation and drug sensitivity testing), and appropriate treatment. This has had significance
beyond individual treatment: It also potentially reduces exposure from infected to uninfected individuals.

3. The third outstanding contribution has been to further develop a previously designed model of outpatient treatment and expanded it to primary care centers in Chui, Bishkek, and Jalal-Abad. Although some problems remain, these pilots have shown the way toward effective ambulatory care. The project has also supported the Republican Center for Health Promotion in its effort to reassure anxious communities and reduce TB stigma, but unfortunately no data exist to assess any changes that may have occurred.

TO WHAT EXTENT HAS THE PROJECT ACHIEVED ITS INTENDED OUTPUTS AND OUTCOMES PER THE AGREED M&E PLAN?

DTB states explicitly in its Year 3 Annual Monitoring and Evaluation Plan (AMEP) that all indicators are on track to achieve their Year 5 targets, and the GH Pro team found no reason to challenge this. In gathering additional information, however, the team did find that the actions and achievements contributing to the indicators were often more revealing of project complexity and accomplishments than the indicators themselves or their targets.

Improved access to TB services

DTB and NTP have worked hard to restructure the hospital-based treatment system, to reduce non-essential hospitalization, improve outpatient treatment, and increase access and use of diagnostic and treatment services for vulnerable populations. Government approval of the Road Map was a major achievement, setting the framework for continuing reform. When fully implemented, activities based on the Road Map will reduce the number of TB beds by 40 percent in 2020 and 60 percent in 2025, freeing approximately $2 million for strengthening primary health care (PHC) and improving laboratories. The MHIF has already shifted from historical financing approaches to funding by diagnostic-related groups, and non-essential hospitalization (and opportunities for new infections) have also decreased. However, reallocation of budgetary savings toward PHC and laboratories will not begin until 2018. The proportion of fully ambulatory cases (i.e., those treated without hospitalization) has increased in line with DTB targets.

As planned, DTB has reached out to marginalized and especially vulnerable population groups, although gaps remain. Two civil society partners, Alternatives in Narcology and the Red Crescent Society, serve former prisoners, the homeless, injectable drug users, and people with compromised immune systems; however, the diverse needs of these groups — and especially those of mobile individuals — makes full coverage difficult. Completion of directly observed treatment, short course (DOTS) may be especially challenging for people who work in cities but register for treatment in peri-urban areas.

Strengthened capacity to provide high-quality services

DTB has endeavored to improve both “structural” quality (i.e., human resources, equipment, physical structures) and process quality (i.e., the effectiveness and efficiency with which resources are used). Outputs have been on track to targets, but sustainability concerns remain, especially for human resources. Major achievements include:

- Trained 3,039 individuals in components of the World Health Organization’s (WHO) Stop TB strategy (through December 2016)
- Trained lab technicians, clarified quality standards, and significantly increased adherence to the Quality Management System
- Developed and successfully piloted new methods for rapid transport and testing of sputum samples, significantly reducing the interval between testing and diagnosis
• Strengthened regional Consiliums¹ for individual case management
• Improved clinical adherence to recommended treatment algorithms
• Achieved positive clinic-community relationships for DOTS (although full treatment compliance remains problematic for some)
• Reduced opportunities for TB infection in hospitals and PHC clinics.

Program quality has clearly increased, especially for diagnostics, therapeutically appropriate treatment, and infection control; however, we cannot yet determine quantitatively if adherence to treatment requirements (daily direct observation) has been affected by the move to outpatient care. Gains in process quality appear likely to be sustained, though maintenance of staffing levels remains challenging.

**Improved quality and use of data**

Though reporting systems and databases are clearly improving in Kyrgyzstan, with DTB providing important technical assistance, longitudinal analyses are constrained by lack of reliable time series data. DTB’s support to MHIF enabled it to implement health care financing schemes based on diagnostic related groups, a system that has now been rolled out to all national hospitals. We saw very little use of data for decision-making in oblast and rayon offices, however, and many appear to be waiting for Project Hope to complete a new electronic database. (This database is not being financed with DTB funds.)

**TO WHAT EXTENT WOULD THE CURRENT M&E INDICATORS, IF ACHIEVED, LEAD TO THE INTENDED IMPACT?**

The 19 indicators in DTB’s AMEP are proxies for a broader range of measurements and achievements. DTB serves as a catalyst, rather than the sole implementer, with other international partners and the NTP. Its activities, as measured through the AMEP, will help “reduce the burden of tuberculosis and the development of drug-resistant TB.” However, DTB contributes a lot more that is better expressed in quarterly and annual reports than in the AMEP.

Indicators and targets motivate as well as measure performance, and have the potential for distorting programs if they point in the wrong direction. DTB’s AMEP appears to lead activities in appropriate directions without obvious distraction from priorities, but it may be insufficiently challenging as interim targets are fully achieved. DTB and the NTP face many challenges moving forward, and even full achievement of current AMEP targets will contribute only partially to intended impact.

The AMEP commendably includes numerous indicators of diagnostic and treatment quality. Neglect of qualitative targets might have led to over-emphasis of quantitative outputs, but this is not apparent in DTB. However, patient compliance with DOTS implementation, especially the problem of unobserved (or perhaps missed) therapy, may need stronger measurement, along with the strength of community support.

**CONCLUSIONS AND RECOMMENDATIONS**

DTB is meeting its programmatic targets and is widely credited with making significant improvements in diagnostics and outpatient treatment. It appears to have played a leading role in reducing unnecessary hospitalization as well as the risk of nosocomial infections in hospitals. The proportion of fully ambulatory TB has increased, allowing for more efficient use of scarce resources and, we hope, greater community acceptance of TB as a “normal” disease, if still a long-term one. The recently approved Road Map sets a course for health system restructuring through 2026 and outlines goals for improved

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¹ Consiliums are groups of TB specialists (physicians, lab specialists, surgeons, and others) who meet periodically to discuss and make decisions regarding the management of individual multidrug-resistant TB cases, including drug selection, management of side effects, and length of hospitalization.
technical standards in line with WHO recommendations. DTB’s chief of party and staff are influential and widely respected. The inertia of old treatment modalities nevertheless remains, and it is not yet clear that ambulatory DOTS will cure cases at a higher rate, or even the same rate, as hospital treatment, or that it will reduce the evolving threat of drug resistance.

**Recommendation:** Working with other community development groups, DTB should move beyond stigma reduction to broaden community engagement for proactive prevention, case detection, and treatment support. Indicators (but perhaps not targets) should be created in line with recommendations of the WHO’s ENGAGE-TB Approach.

**Recommendation:** USAID should work with national and oblast governments to integrate community-level TB activities into multi-sectoral development activities.

**Recommendation:** Given high turnover among case management staff, DTB should extend internal quality management support from laboratories, where it is already strong, to ambulatory treatment and community outreach. Indicators should measure actual capacity, not just capacity-development (i.e., more than the number of people trained).

**Recommendation:** DTB should support oblast and rayon managers to use existing data, including paper-based systems, and not delay efforts until the Project Hope database has been implemented.
I. INTRODUCTION

EVALUATION PURPOSE

This is a midterm evaluation of the five-year USAID Defeat TB (DTB) Project (August 2014 – August 2019), which had the following objectives:

1. To assess the progress in achieving the project goals for more effective and accessible tuberculosis (TB) and multidrug-resistant TB (MDR-TB) diagnosis and treatment services at the national level and pilot sites
2. To identify implementation gaps/challenges and determine performance and levels of attainment for identified targets and indicators
3. To document lessons learned and provide recommendations that will inform future programming directions

EVALUATION QUESTIONS

1. To what extent has the project achieved its intended outputs and outcomes per the agreed monitoring and evaluation (M&E) plan?
2. To what extent would the current M&E indicators, if achieved, lead to achieving of intended impact?
II. PROJECT BACKGROUND

TB remains one of the world’s greatest killers, and late 20th century and early 21st century gains against it — in Kyrgyzstan as well as globally — can no longer be taken for granted because the antibiotics once seen as miracle drugs are losing their effectiveness. Population mobility and globalization have increased individual opportunity and national economic growth, but also opened new channels for transmission and made the long-term therapy that TB requires more difficult. Developed countries spent many decades reducing TB transmission, mostly through non-medical means, but newly developing countries have opportunities to expedite declines through both improved medicine and stronger public health.

Kyrgyzstan is among 30 countries with the highest burdens of MDR-TB and, partly for this reason, has had significant USAID health systems support for several years, most recently through the five-country Quality Health Care Project. DTB is the first USAID effort focused specifically on TB in Kyrgyzstan. Awarded to Abt Associates for $12.7 million in August 2014, DTB has three intended outputs:

1. Improved access to TB services
2. Strengthened capacity to provide high-quality TB services
3. Improved quality of TB data and use of data
III. EVALUATION METHODS & LIMITATIONS

This evaluation was conducted in two phases, in June and in October 2017. Phase I gathered a broad range of data from the program perspective at national, oblast, and rayon levels. Phase II assessed community and patient responses within pilot zones. The two phases provided differing but complementary information and are reported together in this evaluation.

The Phase I team was led by an international evaluation specialist and included a Kyrgyz TB specialist, a logistics coordinator, and a translator. Phase II added two Kyrgyz researchers with extensive community experience. The team leader participated on the ground for Phase I but remotely during Phase II.

As requested in the evaluation team’s scope of work, this was primarily a qualitative evaluation based on site visits, interviews, focus groups, and document reviews. Before visiting clinics, the team drafted data collection tools for key informants, patients, and community support groups (see Annex V). The patient questionnaire was standardized for each interview, but other tools were used as open-ended discussion guides to accommodate anticipated diversity in participants’ roles and functions. Key informants included the directors of the National TB Center (NTBC), the Mandatory Health Insurance Fund (MHIF), the Hospital Association of the Kyrgyz Republic, and the Republican Health Promotion Center, the country representative for the World Health Organization (WHO), and senior representatives of the National Red Crescent Society, Alternatives in Narcology, and Resource Policy Exchange. The team spent almost two full days in the DTB Project office, asking questions and hearing useful suggestions about documentation and interviews, then interviewed directors and deputies at five Family Medical Centers (FMCs), including #4 in Bishkek, one oblast and two rayon FMCs in Jalal-Abad, and one rayon FMC in Chui. The team also visited laboratories, including the impressive National Reference Laboratory in Bishkek, as well as facilities in Jalal-Abad, Suzak, and Kara-Balta.

Phase I worked primarily through program offices and primary health care (PHC) facilities, and achieved only limited contact with TB patients and community support groups. The team expected to meet DTB clients as they came for treatment; however, it quickly became apparent that additional steps would be needed to reach clients who did not seek treatment regularly and to fully understand the practical difficulties they faced in coming for daily directly observed therapy, short course (DOTS). The Phase I schedule provided insufficient time for community-level interviews; therefore, at USAID’s request, the Phase II team conducted additional data collection. Annex III lists interviews, visits, and focus groups.

In total, the teams interviewed six TB coordinators, eight nurses, and 29 patients, as well as numerous doctors, coordinators, and others. They visited five hospitals, five PHC centers, and three labs. The Phase II team organized and reported on eight focus groups with a total of 70 participants, as well as 26 individual patient interviews. The evaluation did not attempt statistical analyses of interviews and observations because they were too few and diverse for valid aggregation.

The evaluation team also conducted extensive document reviews, partly for background information but more specifically to understand DTB’s constraints and ways of working. The data annex to DTB’s Year 2 Annual Report provided significant quantitative data, but did not include age, gender, and oblast details. (DTB has noted gender data within clinic records but has not yet aggregated it.)

The scope and methodology employed for this evaluation permitted assessment only of performance, not impact. DTB acted throughout as a catalyst, not an implementer, and much credit is due to the National Tuberculosis Program (NTP), The Global Fund, and predecessor USAID projects. No counterfactual control group was available; in fact, by working at the national level, DTB induced change on a countrywide basis, not only in pilot sites. The evaluation uses time series data wherever available, but even interpretations based on these analyses may be affected by improving reporting methods and coverage.
IV. FINDINGS

EVALUATION QUESTION 1

To what extent has the project achieved its intended outputs and outcomes per the agreed M&E plan?

DTB states explicitly in its Year 3 Annual Monitoring and Evaluation Plan (AMEP) that all indicators are on track to achieve their Year 5 targets, and the GH Pro team found no reason to question this. In gathering additional information, however, the team did find that the details behind the indicators were often more revealing of project complexity and accomplishments than the indicators themselves or their targets. As noted above, some of the additional information came from project narratives, particularly annual reports, and some from key informants, including senior DTB staff. Therefore, the following sections are organized thematically, rather than by individual indicators, and describe both practical applications and challenges likely to arise in the in the next two years.

Findings are organized around three major components, as presented in the DTB project description:

- Improved access to TB services
- Strengthened capacity to provide high-quality TB services
- Improved quality and use of TB data

Improved access to TB services

A strengthened and more sustainable health system in Kyrgyzstan requires that TB be managed in a more effective and efficient manner, moving toward optimal WHO standards (WHO: Implementing the End TB Strategy: the Essentials). Among other things, these standards call for prompt case detection and accurate diagnosis, DOTS with effective drugs, infection control (IC) at all levels, and strong community support for detection and treatment. Treatment of non-infectious cases should normally occur in ambulatory care settings and continue until infection has been eliminated. USAID and the National Tuberculosis Control Program have collaborated with each other and with other donors and advisors, notably The Global Fund and WHO, to move toward these standards, and measurement of progress has been a major purpose for DTB’s AMEP.

National regulations, policies, and guidelines

Objective: Develop national regulations, policies, and guidelines and secure high-level commitment.

Achievement: Significant DTB contributions, especially the TB Road Map.

In Kyrgyzstan and elsewhere, major structural and organizational changes start at the top and may not occur at all without senior commitment. DTB has contributed substantially to this process, developing and receiving approval for nine of 10 targeted regulations, policies, and guidelines to promote adherence to international standards for outpatient treatment and management of drug-sensitive TB (DSTB), MDR-TB, and TB-HIV. The crowning achievement was the drafting and eventual approval of the “Road Map for further development of TB care in the Kyrgyz Republic.” The Road Map has three objectives:

- Restructure the TB hospital network
- Scale up outpatient TB treatment
- Improve laboratory diagnostic services

The Director of the Hospital Association of the Kyrgyz Republic (HAKR) told a GH Pro interviewer:
“I think it is a very important achievement that this document was approved at a high political level. It will ensure the implementation of the developed TB Road Map regardless of changes in leadership at the level of the Ministry of Health (MOH). From the administrative point of view, it is the Government’s document, not the MOH’s. Since it is the Government’s decision, all local authorities will have to execute/implement this decision. And third, it is important from a technical point of view to know which hospital should be closed or reduced so we can plan the required activities and resources: redistribution of personnel, using existing budgets, planning ambulatory care, etc. For example, we know that certain TB hospitals will be closed three years later, but until then that it still will receive state budget.”

When fully implemented, activities based on the Road Map will reduce the number of TB beds by 40 percent in 2020 and 60 percent in 2025, and free approximately $2 million for strengthening PHC and improving laboratories.

The DTB Project also played a leading role in the following:

1. MOH Prikaz #670 on the organization of TB services revised and updated in Year 1
2. TB messages, approved by the MOH’s Experts’ Council in July 2016
3. Curriculum and plan for a three-day training program of PHC workers entitled “TB detection and management on PHC level,” agreed with the MOH/Human Resources Department and approved in April 2016
6. Revision of Regulation on Health Care Quality Improvement, together with the list of TB indicators developed and approved by the MHIF Prikaz, dated February 2016
7. User’s Guide and package of technical documentation on software for the new payment system in TB hospitals, accepted by the MHIF, dated September 27, 2016

Reduced hospitalization

**Objective:** Reduction of non-essential hospitalization; fewer TB hospitals and beds.

**Achievement:** Policies in place; one hospital closed, small reduction in beds (#8).

There are at least three reasons for moving rapidly to outpatient care:

- To reduce the cost of TB treatment, freeing resources for first-line drugs, outpatient care, and other requirements
- To reduce the risk of TB transmission from infectious to healthy people, or from MDR-TB cases to DSTB cases
- To reduce family and livelihood burdens from TB due to the absence of parents, breadwinners, etc.

A fourth potential benefit is to reduce TB stigma, by demonstrating that those affected are like others with chronic conditions and not dangerous once they become smear-negative. Children and smear-
negative adults may not need to be hospitalized at all, unless affected by other conditions, because they are not contagious.

Smear-positive DSTB cases normally become negative about two weeks after the start of treatment, although national policy requires that they be hospitalized for four months (temporarily increased from two months) or until outpatient arrangements and registration status can be confirmed. Drug-resistant (DR) cases take much longer, however, usually six to eight months. (Clinical protocol “Management of DR TB,” 2013) The national program and DTB encourage rapid movement to ambulatory care; however, DSTB cases may not be transferred to ambulatory care until approved by a Central Medical Council, while resistant cases require discussion by a Consilium, groups of TB specialists (physicians, lab specialists, surgeons, and others) who meet periodically to discuss and make decisions regarding the management of individual multidrug-resistant TB cases, including drug selection, management of side effects, and length of hospitalization.

In 2012, prior to DTB, TB service in the Kyrgyz Republic was integrated into the MHIF’s Single Payer System, leading to changes in financing mechanisms. The previous mechanism, based on a health facility’s capacity (i.e., the number of beds/staff), was replaced by case-based payment. The Single Payer System has accelerated the process of optimization, reducing the number of TB beds and hospitals. The number of beds decreased from 3,467 in 2012 to 3,087 in 2014; the number of hospitalizations from dropped from 12,642 to 12,212 during the same period (MHIF). Note that these efforts occurred before DTB startup.

In Year 1, HAKR, with project support, assessed strengths and weaknesses in TB hospitals and identified issues of over-capacity, inappropriate utilization, poor performance, and non-compliance with international standards. The Road Map reinforces restructuring needs, as well as requirements for higher-quality laboratories, and a continuing shift to ambulatory treatment. The number of hospital beds is to fall from 2,505 in 2016 to 2,405 in 2017, including reductions of 60 in Bishkek and 40 in Chui, and to 1,165 beds in 2026. The activities under the Road Map have begun; the next step is to develop Master Plans for each oblast, starting in Naryn. (key informant interview, HAKR director).

**Ambulatory care**

| Objective: Increase the accessibility and quality of outpatient treatment. |
| **Achievement: Fully ambulatory treatment increased.** |

It would not, of course, be appropriate to reduce hospitalization without strengthening PHC facilities and increasing support for patients reintegrated into families and communities. DOTS supervision is relatively easy in hospitals, but less so outside, and drug resistance may grow if the long-term regimens of TB treatment are not fully implemented.

DTB reports its progress in terms of “fully ambulatory” treatment, defined as care that begins outside hospitals from the point of diagnosis. (Cases that begin in hospitals but are then transferred are not considered fully ambulatory.) DTB has made uneven progress toward its stated goal of roughly doubling the proportion fully ambulatory cases, from 18.8 percent in the first quarter of Year 1 to 48 percent in Year 5. Figure 1 shows these results for project sites.
In Years 1 and 2, the proportion of patients considered fully ambulatory increased compared to baseline; however, progress in Year 3 was uneven. Because only smear-negative cases can be treated outside hospitals, part of the variation may be due to varying diagnostic results. Moreover, the NTBC recently issued temporary regulations to extend the intensive phase of TB treatment for DSTB and MDR-TB to four and nine months, respectively, and to hospitalize TB patients until they receive their registration numbers. While these temporary changes mainly affect people who have already been hospitalized, they may also reflect greater conservatism about ambulatory care. As Table 1 shows, quarter-by-quarter results are similarly uneven.

Table 1. Fully Ambulatory Treatment in Project Sites, by Quarters (%)

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<th>Location</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>Chui</td>
<td>25.4</td>
<td>26.3</td>
<td>34.4</td>
</tr>
<tr>
<td>Bishkek</td>
<td>10.1</td>
<td>7.6</td>
<td>13.7</td>
</tr>
<tr>
<td>Jalal-Abad</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>18.8</td>
<td>18.0</td>
<td>26.4</td>
</tr>
</tbody>
</table>

DTB aims to approximately double the proportion of fully ambulatory patients and is considered “on track,” but progress appears to be slower than projected.

Not surprisingly, the great majority of ambulatory patients are drug-sensitive (Figure 2, next page), because they are easier to treat.

Figure 3 depicts gender distributions for fiscal year (FY) 3; however, the evaluation team does not have data on the relative likelihood of outpatient treatment for men and women.
Objective: Increase case detection, especially for high-risk individuals and vulnerable populations.

Achievement: Project-supported civil society organizations (CSOs) reported increased case detection.

Prompt case detection is essential for both individual treatment and prevention of further infection, so DTB focuses on those with obvious symptoms as well as high-risk population groups. Symptoms include persistent (i.e., more than two weeks) coughing and fever. Population groups most at risk include the following:

- Individuals with compromised immune systems (HIV, diabetes, elderly)
- Socially marginalized populations (homeless, migrants, former prisoners, injectable drug users)
- Individuals with recent exposure to active (smear-positive) cases (family members, former prisoners)

International migrants are a vulnerable population needing innovative strategies. There is anecdotal indication, apparently not quantified, that international migrants, especially Kyrgyz returning from Russia, are more likely than the general population to carry TB. However, mechanisms have not been
established to routinely screen this group, primarily because they rejoin the general population and do not congregate in groups.

While testing is generally “passive,” WHO recommends active screening for vulnerable populations. To reach former prisoners and the homeless, DTB has engaged the Red Crescent Society and Alternatives in Narcology. Though the needs are greater than these two organizations can meet, their efforts provide models.

The project reports the “Number of individuals from vulnerable populations accessing DSTB and MDR-TB screening/diagnostic testing through project-supported Civil Society Organizations (CSOs).” By the end of Quarter 2 of Year 3 (March 2017), project CSOs had screened a cumulative total of 2,609 people, almost four times as many as targeted. In Year 1, 37.4 percent of those screened were female, rising to 47.9 percent in Year 2. Table 2 provides additional details.

Table 2. TB Testing by Sub-Grantees

<table>
<thead>
<tr>
<th></th>
<th>Red Crescent Society Outreach Activities</th>
<th>Alternatives in Narcology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent Tested among People with Suspected TB Symptoms</td>
<td>Percent Testing Positive</td>
</tr>
<tr>
<td>Year 1</td>
<td>100.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Year 2</td>
<td>79.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Year 3, Q1</td>
<td>70.5</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Source: The DTB Project, FY2 and FY3 Annual Reports.

The GH Pro team confirmed active referral of symptomatic cases within community groups and clinics. For example, members of a rural health committee in Kemin told a focus group that they:

- Provide information
- Advise patients with persistent coughs (more than two weeks) to see a doctor
- Suggest diagnostics and sputum tests
- Help with transportation expenses, if necessary
- Inform Feldsher obstetrician point (FAP) workers about patients with coughs (patients do not usually go to the FAP by themselves)

In one small village, community members organized transportation for all inhabitants to go for mobile fluorography testing in a nearby location.

Receptionists in visited FMCs had been trained to ask patients about coughs, to record fevers, and, if necessary, to give patients masks for individual protection while directing them to a special room to see a TB specialist.

DTB pilots have not attempted to screen family members and contacts of smear-positive cases, although global guidance in the WHO’s Stop TB Strategy recommends that they should do so.

DTB treatment strategies similarly target vulnerable populations, working through the Red Crescent Society and Alternatives in Narcology. By the end of the second quarter of Year 3, a cumulative total of 1,238 people had registered for TB treatment through the Red Crescent Society and 90 through Alternatives in Narcology. The proportion with MDR-TB was quite high (42 percent), largely because
the Red Crescent Society primarily serves ex-prisoners, a group with a high MDR-TB burden. Interestingly, 584 (44 percent) of CSO patients were women.

**Strengthened capacity to provide high-quality services**

DTB has endeavored to improve both “structural” quality (i.e., human resources, equipment, physical structures) and process quality (i.e., the effectiveness and efficiency with which resources are used). Outputs have been on track to targets, but sustainability concerns remain, especially for human resources.

**Human resources**

**Objective:** Create a stable base of trained TB specialists at all program levels.

**Achievement:** Program staff are competent and motivated. However, high turnover requires constant replacement training and other technical support systems.

Rapid changes in TB epidemiology and treatment protocols — and especially the emergence of drug resistance — require trained and well-motivated doctors, nurses, and lab personnel. DTB has given high priority to training and, less visibly, to supervision and other ongoing technical support at national and local levels. However, the project, and even the NTP, are less able to ameliorate staff work conditions that affect both current operations and sustainability. Salaries are low, and opportunities for advancement limited. Newly trained health professionals may be reluctant to work in TB programs because of perceived risks, and those who do may quickly find more lucrative opportunities in Russia or Kazakhstan. Once on the job, even trained staff need clear operational guidelines, job aids, and supportive supervision.

During site visits, the evaluation team noted that most senior staff were of retirement age. (One had served in the same institution for 35 years.) This may have increased conservative approaches in what should be a rapidly changing field. The six nurses the team interviewed were younger than managers and had less job experience, and some were either untrained for TB responsibilities or had learned from previous employees rather than through a formal course.

When asked about morale, clinical staff had few overt complaints, despite long hours and low salaries. Community focus groups confirmed generally positive and supportive relationships with patients. Lab technicians appeared to be the happiest personnel, and were excited about newly donated equipment. Nurses were the least happy — but again did not overtly complain. They are required to work long hours, sometimes on weekends, and with sometimes ambiguous guidance on what to do when patients missed pills or requested more than a one- or two-day supply for unobserved self-treatment. Guidelines seemed to require supervisory interpretation for many unique circumstances.

DTB does a lot of training: By the middle of Year 3, it had trained 3,372 people. However, some described training as a treadmill, with new staff merely replacing those who have left for other countries.

**Lab capacity and quality**

**Objective:** Increase diagnostic capacity and quality.

**Achievement:** Equipment supplied, technicians trained, quality increased.

TB testing must occur as soon as an active case is suspected, and it must be accurate to be effective. At the first level, the standard technique is sputum analysis by microscopy. This determines whether *Mycobacterium TB* (MTB) is present and if the case might be infectious (smear-positive), but it usually does not determine if a case is sensitive to first-line drugs. Further analysis of drug sensitivity is essential.
before treatment begins, possibly leading to second-line drugs. This may occur at a more specialized lab. The sputum sample may need to be transported to the higher-level site, and then results must be quickly — and confidentially — reported back to the originating clinic.

DTB has invested heavily in diagnostic capacity by providing equipment, training lab technicians, and establishing routine quality assurance. The evaluation team observed these improvements and recorded positive feedback from lab staff and directors.

DTB, supported by partners Family Group Practice and Nursing Association and HAKR, supervised and monitored pilot PHC facilities. It also trained lab specialists at oblast and rayon levels, as shown in Table 3. Note that virtually all trainees were female, possibly suggesting that lab work is considered a low-status occupation. Lab technicians seemed especially pleased by attention from DTB.

Table 3. Number of Specialists Trained on Lab Issues, Years 1-2

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>108</td>
<td>0</td>
<td>108</td>
</tr>
<tr>
<td>2</td>
<td>109</td>
<td>3</td>
<td>106</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>3</td>
<td>214</td>
</tr>
</tbody>
</table>

Source: The DTB Project, FY1 and FY2 Annual Reports.

In Year 1, only 91 of 131 TB microscopy labs (69.5 percent) achieved acceptable results on EQA. By Year 2, 10 additional labs (total 77.1 percent) had achieved acceptable status. This indicator is on track to achieve targets, with considerable benefit to patients.

Drug sensitivity testing and timeliness

Objective: Increase accuracy and reduce response time for drug sensitivity testing.

Achievement: Equipment provided, sputum transport system developed, errors reduced.

Sputum that tests positive for TB must be further tested to determine if first-line drugs will be effective. Often, sensitivity testing requires sputum transport to rayon or oblast labs with GeneXpert machines (there are 24 machines in the country), and then to the National Reference Laboratory or Osh Oblast Regional Lab, where the Hain tests and Mycobacteria growth indicator tube tests are conducted. The introduction of the OmniGene sputum reagent, which extends the longevity of sputum samples, eliminates the need for cold chain for sputum transport.

To address the issue of poor sputum transport — long identified as a key roadblock for TB diagnosis — DTB worked with national partners to develop a new system based on the State Courier Service. Results from four pilot sites in Chui Oblast show significant increases in the proportion of cases tested with GeneXpert machines (from 55 to 79 percent) and the proportion with results in patient charts within three days (25 to 33 percent). Figure 4 on the next page shows the effects of this system in Western Chui.

The project installed GxAlert system, an electronic system that connects to the originating sites and allows for sensitivity test results to be rapidly collected and returned to them. Bringing together the GxAlert technology and ongoing testing, DTB is helping Kyrgyzstan to significantly improve its TB diagnostics and treatment. As noted, lab specialists at all levels (rayon, oblast, and central) are more motivated and excited due to innovative technologies and improved working conditions introduced by the project.
Figure 4. Effects of Organized Sputum Transport System on TB/MTB Diagnosis, Western Chui Region

![Graph showing effects of organized sputum transport system on TB/MTB diagnosis.]

Source: PowerPoint presentation, September 2017.

There is an indicator for “Percentage of oblast TB labs with acceptable QMS [Quality Management System] performance,” now at 40 percent (two of five). This indicator is specific for TB culture labs working at the oblast level (in Issyk-Kul, Kara-Balta, Talas, Naryn, and Jalal-Abad). Of these five laboratories, those in Talas and Kara-Balta have already implemented QMS. After monitoring the results of QMS implementation in Kara-Balta, mentoring increased from 65.1 to 98.0 percent. The new pilot TB culture laboratory in Jalal-Abad was selected and monitored in Year 2, with results to become available after one year of implementation.

DTB will continue to support improvement in the quality and safety of TB lab testing through the expansion of QMS, testing of a sputum stabilizing reagent, improvements in sputum transportation systems, support for GeneXpert machines in project sites, and scale-up of GxAlert to all GeneXpert machines in the country.

Treatment decisions (Consiliums)

**Objective:** Strengthen individual case management.

**Achievement:** Regional Consiliums developed and supported, second-line treatment initiated when recommended.

Consilium meetings may occur almost daily, as in Bishkek (284 meetings in 2016) or as infrequently as once every 10 days (36 last year in Batken). For MDR-TB cases, all decentralized decisions regarding drug choice and hospitalization must be referred to the central Consilium for final approval.

The NTBC created the central Consilium almost 10 years ago, followed by nine decentralized Consiliums (Chui, Kara-Balta, Issyk-Kul, Naryn, Talas, Jalal-Abad, Osh, Batken, and the penitentiary system), also before DTB startup. Though these have been implemented for some time, key informants and the DTB Year 2 Annual Report assess them as less than fully effective, reportedly due to the low technical capacity of regional specialists, centralized decision-making, and the high workload of central-level specialists. Inefficiencies identified before DTB (DTB Annual Report Year 2, key informants) resulted in delayed treatment, inappropriate monitoring, and poor quality of care. Informants continue to describe these problems, but note reductions in treatment delays.
During its first years, the DTB team:

- Assessed capacity building needs (DTB Annual Report Year 2)
- Played a leading role in revising the “Regulation on the central and oblast-level MDR-TB Consiliums”
- Provided regular supervision and mentoring during Consilium meetings at central and regional levels
- Trained medical staff on the WHO Stop TB Strategy

The regulation cited above provided an overall framework for Consiliums, defining membership, structures, roles and objectives, the order of work (e.g., weekly meetings and registration requirements for adverse reactions), necessary patient documentation, and a reporting form.

One of the more significant DTB contributions for Consiliums was to provide technical support and financing to set up teleconferences, starting in May 2016, between the central Consilium and regional ones in Jalal-Abad, Kara-Balta, and Naryn. (Computers for this activity were procured under the USAID TB CARE project, implemented by the KNCV Tuberculosis Foundation.) Table 4 provides preliminary data on decision and treatment delays, but trends cannot be determined because data were not collected prior to 2016. Key informants told GH Pro that teleconferences have reduced decision delays from up to two months prior to implementation to less than two weeks now; they have also improved quality of care, especially for complicated cases.

**Table 4. Indicators on Speed of Diagnostics, Presentation to MDR-TB Consilium, and Start of TB Treatment in Chui Oblast and Jalal-Abad, 2016**

<table>
<thead>
<tr>
<th>Oblast</th>
<th>Time from MDR Diagnosis to Presentation to MDR-TB Consilium</th>
<th>Time from Presentation to MDR-TB Consilium to Treatment Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chui</td>
<td>14.0 days</td>
<td>3.4 days</td>
</tr>
<tr>
<td>Jalal-Abad</td>
<td>8.1 days</td>
<td>3.2 days</td>
</tr>
</tbody>
</table>

Source: DTB FY2 Annual Report.

Much of the time between MDR diagnosis and Consilium presentation is spent on documentation requirements, a process that typically takes longer in PHC facilities than hospitals. Table 4 shows significant differences in preparation-time in Chui and Jalal-Abad, largely due to PHC reporting in the former and hospitals reporting in the latter.

In both 2016 and the first quarter of 2017, DTB pilot sites typically held more meetings than other locations, with Bishkek particularly active (apparently more than five days a week in 2016). The number of patient cases reviewed each quarter increased greatly from 2016 to 2017 in all sites but especially in those supported by DTB. Table 5 further shows the distribution of cases by reasons for Consilium referral. Note that Consiliums did not report on official forms until 2017, and that 2016 data resulted from a supplemental request from the National MDR-TB coordinator. DTB has now developed reporting forms for 2017 and beyond.

DTB monitoring before and after teleconferencing began in Quarter 3 of Year 2 showed improvements in treatment compliance, as shown in Table 6 (next page). However, both national and regional informants said Consiliums still operated inefficiently, partly because the central Consilium has to agree with treatment decisions, regardless of severity. Central staff complained that they lacked resources to build regional capacity, and regional groups affirmed that they needed such support.
Table 5. Meetings and Activities of Central and Regional Consiliums, 2016 and First Quarter of 2017

<table>
<thead>
<tr>
<th>Consilium</th>
<th>Year / Qtr.</th>
<th>Central</th>
<th>Chui</th>
<th>Kara-Balta</th>
<th>Jalal-Abad</th>
<th>Others (Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of meetings per quarter</strong></td>
<td>2016</td>
<td>16</td>
<td>71</td>
<td>13</td>
<td>28</td>
<td>23</td>
</tr>
<tr>
<td>2017 Q1</td>
<td>12</td>
<td>45</td>
<td>14</td>
<td>21</td>
<td>40</td>
<td>14</td>
</tr>
<tr>
<td><strong>No. of cases per quarter</strong></td>
<td>2016</td>
<td>200</td>
<td>97</td>
<td>188</td>
<td>46</td>
<td>60</td>
</tr>
<tr>
<td>2017 Q1</td>
<td>233</td>
<td>215</td>
<td>270</td>
<td>168</td>
<td>331</td>
<td>103</td>
</tr>
<tr>
<td><strong>Average no. of cases per meeting</strong></td>
<td>2016</td>
<td>17</td>
<td>8</td>
<td>16</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2017 Q1</td>
<td>19</td>
<td>18</td>
<td>23</td>
<td>14</td>
<td>28</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reasons for Consilium Submission (2017)</th>
<th>16%</th>
<th>4%</th>
<th>13%</th>
<th>0%</th>
<th>44%</th>
<th>23%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarterly monitoring</td>
<td>26%</td>
<td>0%</td>
<td>5%</td>
<td>23%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Adverse reactions</td>
<td>20%</td>
<td>27%</td>
<td>11%</td>
<td>18%</td>
<td>20%</td>
<td>11%</td>
</tr>
<tr>
<td>Correction of treatment</td>
<td>9%</td>
<td>18%</td>
<td>21%</td>
<td>0%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Cancellation of injecting drug</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>Surgical treatment</td>
<td>21%</td>
<td>51%</td>
<td>33%</td>
<td>59%</td>
<td>14%</td>
<td>31%</td>
</tr>
<tr>
<td>Determination of treatment outcomes</td>
<td>8%</td>
<td>1%</td>
<td>16%</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: NTBC/National MDR-TB Coordinator; DTB Project.

Table 6. Adherence to Correct Treatment Schemes in Project Sites by Quarter, Year 2
(Monitoring data of Year 2)

<table>
<thead>
<tr>
<th>Quarter</th>
<th># Ambulatory Charts Checked</th>
<th>Charts with Correct Schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Absolute #</td>
<td>%</td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td>28</td>
<td>23</td>
</tr>
<tr>
<td>Q2</td>
<td>127</td>
<td>114</td>
</tr>
<tr>
<td>Q3</td>
<td>183</td>
<td>173</td>
</tr>
<tr>
<td>Q4</td>
<td>213</td>
<td>202</td>
</tr>
<tr>
<td>Total</td>
<td>551</td>
<td>512</td>
</tr>
<tr>
<td>Year 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 (1 Oct-31 Dec 2016)</td>
<td>65</td>
<td>60</td>
</tr>
<tr>
<td>Q2 (1 Jan-31 March 2017)</td>
<td>50</td>
<td>45</td>
</tr>
<tr>
<td>Q3 (1 April-30 June 2017)</td>
<td>530*</td>
<td>515</td>
</tr>
</tbody>
</table>

Source: DTB FY2 and FY3 Annual Reports.
* The large sample size in this quarter is because data was extracted from the Family Group Practice and Nursing Association's monitoring visits, which usually allow expanded coverage of PHC points.

Medical Commissions also work in each region and make many decisions on DSTB cases. The types of specialists in the Commissions are essentially identical to those in the Consiliums; they have the same functions and objectives, except they are focused on DSTB. During interviews, some respondents expressed concerns about low representation from PHC centers, possibly affecting decisions about hospitalization and ambulatory care.
Strengthen DOTS implementation at both clinic and community levels

**Objectives:** Prepare clinics and communities for outpatient DOTS; reduce stigma and mobilize communities.

**Achievement:** Clinics implementing ambulatory DOTS with good patient support; stigma reduction through advocacy, communications, and social mobilization (ACSM) may be effective but has not been evaluated; community-based treatment support delayed but now moving.

Reducing unnecessary hospitalization falls far short if it leads to inadequate treatment at other levels. The recovery of individual patients, as well as protecting drug efficacy, requires full implementation and completion of recommended therapies, which in turn requires a three-way partnership among clinics, clients, and communities. The evaluation team explored this partnership through staff and patient interviews and focus group discussions at community levels.

The evaluation team identified several issues and challenges in implementing ambulatory DOTS, some of which may have contributed to the recent decision to lengthen recommended hospitalization periods. One is that some PHC centers do not appear ready in terms of infection prevention and staff availability and capacity. Although the team did not visit centers without ambulatory care, several informants mentioned concerns about IC and staff reluctance to take on potentially contagious patients. (In fact, only smear-negative cases are being treated outside hospitals.) There does not appear to be an assessment process or objective indicator for determining readiness for ambulatory care.

Individual clinics faced numerous problems in implementing DOTS and responded in different ways. Although the number of patients managed by individual clinics did not seem to be a burden, each patient required individual attention and follow-up, with nurses bearing responsibility and additional costs. Patients “frequently” missed daily pills (no statistics available), requiring decisions and possible actions for follow-up (e.g., should they be contacted immediately, possibly necessitating a home visit, or should the clinic wait a day or two or even longer?) Although everyone interviewed insisted that pill-taking had to occur daily, no one seemed to know how frequent and long the gaps could be before drugs failed. (The project MDR-TB specialist said it was five days.) Further issues arose regarding weekends and holidays, when clinics are usually closed, as well as requests for multiple pills for people who work in the city, especially in Chui Oblast. Again, it appears that nurses and clinics made their own decisions — decisions not based on technical guidance.

DTB has reached out to communities to play constructive roles in both case identification and treatment. To reduce stigma, the project has supported the Republican Health Promotion Center in ACSM. This effort has not been formally evaluated, in part because “stigma” has not been defined in a way that can be easily measured. Focus groups revealed that community groups with which DTB has worked mainly welcomed and supported patients, even though some patients feared community reactions or were actually rejected. Anecdotes abound but may not be representative. According to one community respondent:

“Nowadays too [people stigmatize those with TB and their family members]. My relative’s wife got sick. Her daughter got married, but in-laws forced her husband to divorce her. Although they had information on curability of TB, they just refused to have her as an in-law. This was four [or] five years ago.”

Another respondent said, “The landlady threw me out of the house. [I] had to find a new one in the village.”

Despite these problems, there is a strong tradition of family support in the Kyrgyz population. Close relatives usually help as much as they can, but there is some stigma from other relatives and patients. The woman mentioned above remarried and is now a happy mother of two children.
TB patients, who have been known to self-stigmatize, in fact need considerable support, not just acceptance. Side effects of medication are often severe, making community and employment interactions difficult and daily trips to clinics almost impossible. For example, one patient reported the following about having TB:

“Feeling bad. Depression. No job/lost because of the disease or disease + treatment. Cannot do regular things. Heart is not working properly. Strong aches all over the body, primarily joints (if I sit down, it is very painful to stand up – strong pain in knees, elbows). I can’t see well … it is like there is something in front of your eyes.”

Constraints on daily trips to a clinic were common but, according to respondents, did not lead to missed pills:

“DOTS works till 16.00 … this is not always convenient. Because of work I could not attend. Sometimes I wait for about 30 minutes to get medication.”

“Weakness at the beginning of treatment, too weak to walk to [family group practice]. The round trip takes an hour to an hour and a half.”

“It is very inconvenient for a studying and working person. I have to lose time and visit [family group practice].”

We asked community respondents whether they had missed daily pills or failed to go to the clinic. While most said that they usually tried to get pills, almost everyone mentioned missed dosages:

“Missed 1-2 days a month, altogether about 15 days. I was working at a wholesale market and from time to time had work duties to visit remote areas or to do some work. I had to miss a day or two of treatment, because they do not always discharge pills for several days.”

“20+ pills per day for 36 months not able to work. … Sometimes I can’t even look at them, can’t stand the smell — already feel like throwing up, it reminds me of a hospital — and simply can’t put them in my mouth. Organism can’t absorb them anymore. And yes, sometimes I miss a day or two because of that. … The body cannot work (all organs ache, joints, nausea, severe weakness, see medication). A lot of side effects, liver, kidneys, stomach.”

We asked about clinic responsiveness to individual constraints. Most patients described supportive relationships, with efforts to accommodate individual issues.

“Medical facilities have ‘attentive medical staff and well-organized schedule.’”

“Doctors and nurses are friendly, with good attitude to patients. They build good relations with patients.”

On the other hand:

“It seems sometimes that health workers treat everyone the same, even though people are different; some are stronger and some are weaker. But attitude could be the same to all. Sometimes they treat us like we are finished people!”

Question: Are all [staff] so bad?

Answer: “No, there is a doctor, Jalil. He is great! Unlike the other ones.”
Focus group respondents, most from groups that DTB has supported, told researchers that there were many ways in which communities, relatives, and neighbors could ease the unavoidable burdens. For example:

- Refer a person to a doctor if it is clear they need to be examined (i.e., they have TB symptoms, such as loss of weight and cough).

- TB prevention activities
  - Inform people (i.e., awareness-raising activities).
  - Personal advice.
  - Maintain close contact with schools. Schools are very important; everything begins with schools in every village. Therefore, it is necessary to conduct awareness-raising activities in schools, such as “Class Hours.”

- Work with patients; make sure they do not interrupt treatment.

- Work with society.
  - Inform the public that TB can be cured.
  - Address fears, misperceptions, and lack of knowledge; myths and fear cause stigma.

- Work with families in a systematic manner.
  - Recommend a family approach.
  - All family members need to be checked regularly.

In conjunction with the Republican Health Promotion Center, DTB has reached out to the public through respected religious leaders. For World TB Day in 2017 (March 24), the Muslim Spiritual Administration devoted Friday sermons to “Health and Islam,” focusing on prevention, treatment, and patient support for TB.

While working with community groups, primarily through annual communication campaigns around World TB Day in March, DTB has also promoted community-based treatment supporters (CBTS) for individual clients. These were to be the mainstay of DTB’s ambulatory care strategy, but efforts were initially delayed by lack of legal authority. Only 55 of 666 outpatients (8.3 percent) had benefited from CBTS at the end of Year 2; however, achievement increased dramatically in the first half of Year 3, when 42 of 283 new outpatients (14.8 percent) were supported by CBTS. CBTS are being piloted now in Bishkek and selected rayons of Chui and Jalal-Abad. CBTS are counted cumulatively, so the number at any given time cannot be determined with certainty.

**Infection control**

**Objective:** Strengthen IC at all levels.

**Achievement:** Opportunities for cross infection reduced, some clinics reconfigured, ultraviolet protections provided (#9, 10, 11, 12).

The most immediate action DTB can take to reduce TB incidence is to strengthen IC in hospitals, PHC centers, and, by encouraging prompt testing, in families and communities. (Hospitals, PHCs centers, and families are key danger points for infections.) Infectious cases must be isolated from vulnerable people who are not infected, and DR cases should be isolated from drug-sensitive patients. Fears about the alleged inadequacy of IC have discouraged ambulatory care, but DTB has done much to allay concerns. The project’s IC activities have included:
• Providing technical assistance to the national Thematic Working Group on TB IC under the MOH Coordination Council; supporting revision of outdated MOH orders to comply with its methodical manual on IC in health facilities; and developing checklists to monitor IC
• Training medical specialists (e.g., doctors and nurses) on IC issues (Figure 5)
• Providing bacteria-killing ultraviolet lights for potentially infectious TB rooms
• Stimulating construction of outdoor sputum-testing stations

Figure 5. Number of Medical Specialists Trained on TB IC

<table>
<thead>
<tr>
<th>Year</th>
<th># Medical specialists trained on TB IC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1</td>
<td>59</td>
</tr>
<tr>
<td>Y2</td>
<td>241</td>
</tr>
<tr>
<td>Y3 (Oct-Dec 2016)</td>
<td>49</td>
</tr>
</tbody>
</table>

Source: the DTB Project, “Annex 5_DTB_Q1_Year3_Performance Data final.”

Infection control in hospitals

To improve IC in hospitals, DTB has assisted the NTP to:
• Rapidly identify DR cases through sputum transport and high-quality diagnostics
• Designate hospitals for specific types of cases and redistribute patients accordingly (Kara-Balta TB hospital for MDR-TB; Kemin TB hospital for palliative care; Archala TB hospital for children with TB; other TB hospitals for DSTB cases)
• With other donors, strengthen the Kara-Balta TB hospital as an MDR-TB case management Center of Excellence
• Improve patient flows and IC in individual hospitals
• Establish separate wards for patients with unclear or incomplete diagnosis

DTB’s first action to reduce nosocomial infections was to cut the number of non-TB patients in TB hospitals. Table 7 shows progress on the “Percentage of non-TB cases treated in TB hospitals” indicator. Note that the proportion decreased from 11.6 in 2014 to 8.3 percent in 2016, but has since increased to 14.2 percent. (This indicator may not, in fact, be on target, although Year 3 has not yet ended.)

Table 8 shows overall IC results for both hospitals and PHC facilities.
Table 7. Percentage of Patients in TB Hospitals Who Do Not Have TB, 2014-2017 (5 Months), National Data

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017 (for 5 months)</th>
<th>Target FY3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-TB cases</td>
<td>11.6</td>
<td>10.5</td>
<td>8.3</td>
<td>14.2</td>
<td>&lt;5%</td>
</tr>
</tbody>
</table>

Source: DTB Project, “Annex 5_DTB_Q1_Year3_Performance Data final.”

Table 8. IC in TB Hospitals and PHC Centers

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline 2014</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of TB hospitals implementing priority TB IC measures</td>
<td>53%</td>
<td>60%</td>
<td>66.7%</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>(8/12)</td>
<td></td>
<td>(4/6)</td>
<td></td>
</tr>
<tr>
<td>Percentage of PHC facilities implementing priority IC measures</td>
<td>46%</td>
<td>62%</td>
<td>62.5%</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>(65/104)</td>
<td></td>
<td>(105/131)</td>
<td>80%</td>
</tr>
</tbody>
</table>

Source: DTB Project, “Annex 5_DTB_Q1_Year3_Performance Data final”

* Data is collected annually.

Infection control in PHC centers

The evaluation team visited five PHC centers and noted significant improvements in IC:

- Outdoor sputum collection posts in all facilities
- Ultraviolet lights (for aerosol sterilization) in areas where infectious people might come into contact with healthy people.
- Separate entrances for potentially contagious people (not universal and often mentioned as needed)
- Rapid referral and masks from receptionists to TB sections for any patient showing signs of TB

Despite improvements, many key informants mentioned continuing IC concerns.

As Table 8 illustrates, solid progress was achieved in Years 1 and 2. Data collected by the Family Group Practice and Nursing Association during monitoring visits showed increases in compliance with IC standards from 62.5 percent in Year 1 to 80.2 percent in Year 2. It should be mentioned that based on results of monitoring, the visited PHC facilities are supported in developing work plans to further improve managerial and administrative IC measures.

Nurses in PHC facilities’ TB rooms reported that they examined all medical staff every month and asked questions to detect symptoms, making appropriate notes in the special reporting form. While both nurses and doctors in contact with patients expressed concern about personal protection, only 11 of 4,219 (0.3 percent) health workers in pilot oblasts were diagnosed with TB in Year 2. Interestingly, all but one of the cases were women, presumably because nurses have greater contact with patients.

Infection control at family and community levels

Families and communities are most exposed to TB infection before treatment begins, one of the most important reasons for screening vulnerable populations and expediting self-referral for people with signs and symptoms. As only smear-negative cases are treated on an outpatient basis, further infection from outpatients under treatment is unlikely. Community focus groups nevertheless documented continuing concerns, even years after TB had been treated successfully. For example:
“A woman was babysitting. She was asked to make a sputum test, because in the past she was diagnosed with TB. When she came for the test, the medical worker asked why she is back. After the result was negative, this woman was allowed to look after the baby.”

Moreover, some fears are justified:

“In one small shop they were selling alcohol by [other non-alcoholic] drinks. Used the same plastic cup for all, including some of TB patients. How much money did they save on that?”

“One patient was escaping from treatment, coughing hard, spitted all over, was drinking a lot — and he was baking bread! We talked to the patient and owner of the bakery, but there was no change.”

Community support groups are attempting to address these concerns, as illustrated by the above quotation from the Alamedin Center of Family Medicine.

**Improved quality and use of data**

**Data collection and use**

<table>
<thead>
<tr>
<th><strong>Objective:</strong> Improve reporting, build on Project Hope database, strengthen use of MHIF data sets.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Achievement:</strong> Reliable and widely used MHIF dataset; however, limited data-based decision-making or population-based (epidemiological) analysis.</td>
</tr>
</tbody>
</table>

Accurate and timely data can be enormously useful for management, as well as for boosting public and donor confidence that success is possible against TB and drug resistance. Data must be complete and timely, of course, but they should also be comparable over time, which can be difficult when reporting systems change or become more comprehensive. Data are essential for a public health approach to TB reduction and MDR-TB control, and results need to be fed back to data collectors and reporters to motivate accuracy.

Working with the MHIF, DTB contributed significantly to the development and installation of electronic software for payment per treated case, based on diagnostic related groups. This software is now being rolled out to all national hospitals, both TB and general.

The evaluation team observed data use at the facility level at only the Kara-Balta hospital, but it did note that FMC data registers for ambulatory care were neat and apparently complete. Patients were observed signing each day when they took their drugs, and the additional pills that were sometimes distributed for holiday and weekend use at home were recorded. Although several providers complained about what they perceived as constantly shifting reporting requirements, the submitted reports generally appeared to be complete and timely. There were several comments that reporting seemed to be unidirectional, with limited or no feedback from the central level. A data quality assessment conducted in 2016 did not identify significant problems.

While use of data for decision-making has been a DTB priority, it appears that little has been done while awaiting installation of the electronic database being developed by Project Hope. The evaluation team nevertheless saw much that could be done immediately, including data that could influence TB management at the oblast, rayon, and perhaps even FMC level. Local managers could usually cite the number of cases currently under treatment, but the few respondents asked about trends in testing and diagnosis, ambulatory care, MDR-TB proportions, gender differences, and so forth were unable to cite data. Only at the Kara-Balta hospital did the evaluation team see project management data in easily understood wall charts that showed overall caseloads, patient characteristics, and details of case management.
EVALUATION QUESTION 2

To what extent would the current M&E indicators, if achieved, lead to the intended impact?

The intended impact of the DTB Project is to “reduce the burden of tuberculosis and the development of drug-resistant TB, by supporting universal and equitable access to high-quality TB services for vulnerable populations.” Part of DTB’s contribution to what is clearly a broader solution development process is “a strengthened and sustainable health system.” As further elaborated through project plans and eventually the Road Map for National TB Control, strengthening and sustainability are to be promoted through reduction in non-essential hospitalization and strengthening and expansion of clinic and community (ambulatory) case management.

GH Pro evaluated DTB, not the national program, because its contribution was never meant to be more than partial and in specified locations. The indicators and targets expressed in the AMEP, while necessarily proxies, should nevertheless motivate activities appropriately and reflect both the strengths and weaknesses of DTB’s contribution. Work plans and the associated AMEP focus on seven purposes:

1. More equitable access to comprehensive and appropriate TB diagnostic and treatment services for vulnerable and at-risk populations
2. Patient-centered system for TB and MDR-TB implemented across the country
3. Enhanced enabling environment promoting TB services that meet international standards
4. Human and institutional capacity of health system to manage TB and MDR-TB services strengthened
5. Laboratory services provide more timely, higher-quality TB and MDR-TB diagnosis
6. Coordination and linkage of TB with other health sectors and CSOs and community improved
7. Improved quality of TB data and use of data

Below, we examine each of these and consider whether associated indicators and targets will lead to “a strengthened and sustainable health system” and thus — in combination with other efforts — to enhanced equity and reduced TB burdens. As in Question 1, the discussion is grouped under three headings:

- Improved access to TB services
- Strengthened capacity to provide high-quality TB services
- Improved quality and use of TB data

Improved access

A strengthened and more sustainable health system in Kyrgyzstan requires TB to be managed in a more effective and efficient manner, moving toward optimal WHO standards (WHO: Implementing the End TB Strategy: the Essentials). Among other things, these standards call for prompt case detection and accurate diagnosis, DOTS with effective drugs, IC at all levels, and strong community support for detection and treatment. Treatment of non-infectious cases should normally occur in ambulatory care settings and continue until infection has been eliminated. USAID and the National Tuberculosis Control Program have collaborated with each other and with other donors and advisors, notably The Global Fund and WHO, to move toward these standards, and measurement of progress has been a major purpose for DTB’s AMEP.

DTB reports progress by enumerating the number of regulations, policies, and guidelines developed, the proportion of cases enrolled in full ambulatory treatment, the number of TB beds in TB facilities, and the percentage of patients in TB hospitals who do not have TB. The first of these (the regulatory and technical framework) is already at or near target, especially after national endorsement of the Road Map.
for further development of TB care in the Kyrgyz Republic; however, at this stage, full implementation of guidelines is more crucial than the documents themselves.

An essential indicator for monitoring progress toward restructuring is the proportion of DSTB and MDR-TB patients enrolled in fully ambulatory care. Fully ambulatory care is defined as starting at the point of diagnosis; therefore, it counts only those who are never hospitalized (i.e., usually those who are smear-negative when identified). DTB’s objective is that all non-infectious cases should be treated outside hospitals, though the end-of-project target is still high (48 percent) because many people will continue to require at least brief hospitalization. Fully ambulatory care for eligible patients is an essential project outcome for reducing hospital costs and minimizing family burdens for caretakers and breadwinners, but only if DOTS can be fully and effectively implemented in less controllable outpatient settings.

The number of beds in TB facilities also measures progress in moving patients from inpatient to outpatient treatment and is an important restructuring objective.

Efforts to restructure health systems cannot succeed without human and physical capacity, and they cannot be sustained without strong political and public support, assured financing, and motivated personnel. DTB can report its efforts to achieve these outcomes, but direct measurement is difficult, in part because the terms themselves are ambiguous for laymen. Moreover, DTB can enhance but not guarantee sustainability.

To facilitate the transition from hospital to ambulatory care, PHC clinics must be ready to manage fully ambulatory patients, and must link with families and community support groups to ensure effective follow-up. Trained and motivated personnel are essential, and they must stay on the job long enough to build sustainability systems. DTB reports the number of personnel trained in components of the WHO Stop TB strategy, but the evaluation team observed that most senior staff were of retirement age. (One had served in the same institution for 35 years.) This may have increased conservative approaches in what should be a rapidly changing field. The nurses that the evaluation met were younger, but with less professional experience and seemingly even higher turnover (not statistically confirmed); some were too new to have been trained for TB responsibilities, or had learned from former colleagues rather than through a formal course. In contrast to other indicators, the number trained might contribute to intended outcomes, but it does not reflect sustainable capacity and is, thus, an inadequate predictor.

As argued under Question 1, strong community ties are essential for increasing case identification and ambulatory treatment, especially as services are transitioned from hospital-focused to outpatient care. Community involvement — beyond stigma reduction — may become the leading edge for program evolution, requiring more careful monitoring and reporting than before. Full achievement of DTB targets for community-based treatment supporters and vulnerable groups, while important and necessary, will take the program only part way to intended impacts.

**Strengthened capacity to provide high-quality TB services**

Quality has many dimensions in a TB program, including managerial, diagnostic, IC, treatment, and community engagement. Quality will contribute greatly to achievement of intended project outcomes, but it has to be seen from both provider and client perspectives and is better understood as a process rather than as an end-state. DTB reports multiple quality indicators — and achievement of targets will contribute to intended outcomes — but, like other indicators, these cannot easily conceptualize and measure important elements.

**Case finding and diagnosis**

As noted under Question 1, DTB has played a major role in upgrading and standardizing diagnostic facilities, in terms of both accuracy and timeliness. Although the three quality indicators that are
reported (i.e., percent of oblast TB labs with acceptable QMS performance, percent of TB microscopy labs achieving <95 percent, and mean percentage of errors reported by GeneXpert machines) are important, in some ways they understate achievement. Morale was high in the newer labs the evaluation team visited, and innovative sputum transport systems are greatly reducing the time gap between case detection and correct treatment. Full achievement of these three quality indicators will contribute to intended outcomes, but other components of diagnostic quality will also be needed.

**Treatment**

Correct diagnosis should lead to targeted drug therapy, especially for complex cases and those requiring second-line drugs. Once treatment begins, full and correct therapy is essential to eliminate individual infections and prevent the evolution of resistant strains.

The project reports the percentage of MDR-TB cases started on second-line drugs, a proportion that should reach close to 100 percent (as it does).

DTB also reports on compliance with standard treatment regimens, as recorded at the clinic level and assessed by NTP staff. This is equally essential, especially because focus groups and individual patient and provider interviews documented that many patients find daily DOTS challenging. Compliance is measured as correct medication and duration of treatment, but missed pills are common and may lead to drug resistance. Clinic respondents said that irregular therapy was generally considered compliant, as long as patients continued to participate until the recommended end date. Staff usually do not observe home pill-taking on weekends and holidays, and must rely on patient self-reporting; therefore, compliance cannot be fully assured.

Full compliance with DOTS in both hospital and outpatient settings is essential for achievement of intended outcomes, but prevention of drug resistance requires consistent monitoring and management of missed pills. Achievement of M&E targets may contribute to desired outcomes, but only if missed pills and unobserved therapy are recorded consistently. While we did not detect pressure to record compliance, there is a risk that inappropriate targets may hide potential quality problems.

**Infection control**

IC is vital for preventing the spread of disease and further development of resistance. Public confidence in protection is equally vital for assuring community and family support and reintegration of TB patients into “normal life.” Nurses, sometimes reluctant to engage with TB, also need reassurance.

DTB reports implementation of priority IC measures in both hospitals and outpatient clinics, and progress has been good — and vital for achievement of desired outcomes. One indicator is expressed as the percentage of non-TB cases treated in TB hospitals (but measured as the proportion of patients in TB hospitals who do not have TB); this is an indicator of potential cross-infection within hospitals.

Key informants told the evaluation team that clinical staff in direct contact with patients are routinely tested for TB. Infection rates have been very low.

**Improved quality and use of TB data**

Data management and information use are vital adjuncts of public health programs and can facilitate intended outcomes. As noted earlier, neither is in place in Kyrgyzstan, although the two indicators currently reported (concerning recording and reporting training and use of the Web-based finance module) reflect important initiatives that should continue. Even if targets are fully met, however, much work will remain to achieve project outcomes.

The transition from hospital-based to ambulatory care is essential for optimizing resource use and increasing access, but it is inevitably disrupting established systems, imposing new demands on PHC
centers, and challenging community reluctance to take responsibility. There will eventually be many benefits; but confidence and continued financial support require transparent documentation, as well as data for real-time decentralized decision-making. Current indicators are not disaggregated in ways that would support local managers, guide gender-sensitive planning, or motivate staff performance.

As the project moves toward defeating TB, it will need indicators that not only document current work but also build public and donor confidence that incidence is decreasing, drug resistance is being managed, and hospital funds are moving to PHC. Most of the required data points are already in place, but need to be presented differently. For example:

- Is the number of new cases declining in DTB pilot sites?
- Is the proportion of DR cases also declining?
- Is cross-exposure in hospitals decreasing?
- What is the mean number of days between testing and initiation of appropriate treatment?

The point is not to increase data collection, which is already seen as burdensome, but to maximize the managerial and political utility of available data through better (i.e., simpler) presentations. Existing indicators tend to concentrate on what is changing (e.g., excessive hospitalization, weak labs, untrained personnel) and not enough on what has yet to be achieved (e.g., full community engagement, prompt diagnosis and treatment, effective ambulatory care). Moreover, if presented simply, indicators can play a vital role in energizing governments, communities, and managers to continue working (and funding) toward objectives.

**Summary**

Indicators and targets, as previously noted, motivate and measure activities, and have the potential for distorting programs if they point in the wrong direction. DTB’s AMEP appears to lead activities in appropriate directions without obvious distraction from priorities; however, it may be insufficiently challenging as interim targets are fully achieved. The current framework is appropriate but may need additional indicators and targets as activities evolve.
V. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The DTB Project is meeting its programmatic targets and is widely credited with making significant improvements in diagnostics and outpatient treatment. It appears to have played a leading role in reducing unnecessary hospitalization, as well as the risk of nosocomial infections within hospitals. The proportion of fully ambulatory cases — those that never go to a hospital — has increased, allowing for more efficient use of scarce resources and, we hope, greater community acceptance of TB as a “normal” if still long-term disease. The recently approved “Road Map for further development of TB care in the Kyrgyz Republic” sets a course for health system restructuring through 2026, as well as goals for improved technical standards in line with WHO recommendations. DTB’s chief of party and staff are influential and widely respected.

While applauding this effort, the evaluation team notes that both project and non-project-areas within Kyrgyzstan have a long way to go, and that the effort to forestall drug resistance has not yet turned the corner toward success. The inertia of old treatment modalities remains, and it is not yet clear that ambulatory DOTS will cure cases at a higher rate, or even the same rate, as hospital treatment, or that it will reduce the evolving threat of drug resistance. Two-and-a-half years (the life to date of DTB) is a short time in the centuries-long history of TB, and evaluators can assess only actions taken and issues addressed, not longer-term impact.

Given the uncertainty of donor and national funding for even worthy endeavors, it is important for DTB to develop public health alliances that will build a strong constituency for sustainability. In conjunction with the NTP, DTB is fully on course to achieve its interim objective of “reducing the burden” of TB and at least influencing policies that might eventually affect drug resistance. A more politically conscious selection and presentation of project indicators might help, especially because current indicators are difficult for non-specialists to understand. PHC managers at all levels, including rayons, need to know that prompt detection and treatment are reducing TB incidence, and families and communities need to see that ambulatory treatment is not only safe and effective, but reduces trauma caused by affected parents and breadwinners being absent for long periods. Cost savings from hospital closures need to bring visible benefits to local clinics and programs, not just pain to those losing jobs. Donors aware that drug resistance threatens TB cases in home countries need quantified indicators to show that investments in Kyrgyzstan are worthwhile. These efforts, supported by success stories and data-based evidence of progress, will do much to reinforce public, management, and donor enthusiasm and enhance sustainability.

The immediate strength of TB control efforts is that they are vertically focused on a single condition, even though they are already linked with health care financing (i.e., the MHIF) and PHC (i.e., ambulatory treatment). Long-term success, though, will depend more on general socioeconomic development and increased community acceptance of responsibility for prompt referral, reception of diagnosed (but not infectious) cases, and willingness to help those in need. TB affects both the rich and the poor, and has significant social dimensions that are partly beyond project control. These dimensions can be affected by generalized ACSM, but more hands-on outreach in conjunction with other social development agencies will have greater and more sustainable benefit. Community linkages — the perceived moral obligation to support both neighbors and strangers — may be one of Kyrgyzstan’s greatest potential strengths in fighting TB, but it is already declining for marginal populations and may weaken further with globalization and urbanization. DTB and USAID more broadly cannot fully address these challenges but should be open to collaboration with others.
RECOMMENDATIONS

*Improved access to TB services*

Kyrgyzstan, like other Central Asian countries, is moving from a predominantly hospital-based model for TB control to one based on PHC and outpatient treatment. USAID, through DTB and other partners, has been a strong partner to the Kyrgyz government in the transition from a largely vertical medical services system to a more integrated PHC model, based on objectives for case identification and treatment shared by three groups: medical systems, patients, and communities. The community leg of this three-way stool has not been fully developed, but the partnership cannot succeed without it.

**Community mobilization**

DTB has prepared the ground for community outreach by creative use of ACSM techniques to reduce stigma and fear and to encourage testing, but increased hands-on community engagement might contribute more. The WHO argues that “A strong coalition with communities, non-governmental and other civil society organizations is one of the four principles of the End TB Strategy.” (*End TB Essentials*, p. 66). This strategy promotes 11 suggestions for community-based TB activities, including:

- Facilitation of access to diagnostic services (e.g., sputum or specimen collection and transport)
- Initiation and provision of TB prevention measures for latent TB (e.g., isoniazid preventive therapy, IC)
- Treatment initiation, provision, and observation for TB and co-morbidities
- Treatment adherence through peer support and education and individual follow-up
- Social and livelihood support (e.g., food supplementation, income-generation activities)
- Home-based palliative care for TB and related diseases
- Community-led local advocacy activities

The WHO’s ENGAGE-TB Approach recommends two indicators for assessing community-based actions:

- **Referrals and new notifications**: Number of new TB patients (all forms) who were referred by community health workers and volunteers, expressed as a percentage of all new TB patients
- **Treatment success**: New TB patients successfully treated (cured plus completed treatment) who received support for treatment adherence from community health workers or volunteers among all new TB patients

These indicators of community involvement should be considered for future M&E plans, with appropriate targets, and actions should be taken to achieve them. Linkages with multi-sectoral community development programs may be helpful.

**Recommendation**

Working with other community development groups, DTB should move beyond stigma reduction to broaden community engagement for proactive prevention, case detection, and treatment support. Indicators (but perhaps not targets) should be created, in line with recommendations of the WHO’s ENGAGE-TB Approach.

**Outreach to vulnerable and at-risk populations**

DTB and its partners have demonstrated new ways of screening, testing, and treating vulnerable populations, including former prisoners and those with co-morbidities. However, similarly vulnerable international migrants, family members of diagnosed patients, and those who have dropped previous
treatment have benefited less. Those deemed likely to delay testing when symptomatic or to abandon treatment before completion endanger themselves as well as others, and may be considered at risk. Standardized approaches work only for standardized problems, but every TB case is medically and socially unique, and more experimentation may be needed to respond.

TB is a national problem in Kyrgyzstan, and responses can no longer focus exclusively on the health sector. Efforts to prevent and treat TB will be more effective if they reach across political and development sectors, as well as faith-based and CSOs. DTB cannot do this on its own, so it should collaborate with others as appropriate.

**Recommendation**
USAID should work with national and oblast governments to integrate community-level TB activities into multi-sectoral development activities.

**Strengthen capacity to provide high-quality TB services**

Quality requires both structure (i.e., human and physical resources) and process, and the two should develop together (e.g., sophisticated equipment requires skilled users). DTB has invested substantially and appropriately in all aspects of quality, aiming to upgrade labs, IC, and diagnosis-specific treatment. Sustainability is of particular concern for human resources due to high turnover rates, which apparently have gone unmeasured.

DTB and the NTP more broadly can do little on their own to improve work conditions, but they can develop technical support and quality assurance strategies that acknowledge instability. Quality involves processes that cross organizational lines, and becomes most vulnerable at “hand-off” points when one person or organization transfers responsibility to another. When turnover is high, either side may misunderstand hand-offs, and important actions may be neglected or omitted. Given reportedly high turnover, DTB’s human resources strategy may need to expand from training (and re-training) to in-facility supervision, local adaptation of protocols, and job aids to orient new staff and remind existing personnel of specific processes and responsibilities. In particular, the Consilium system seems overly dependent on a few individuals at the central level, with reportedly little effort to develop regional capacity and responsibilities.

**Recommendation**
Given high turnover among case management staff, DTB should extend internal quality management support from laboratories, where it is already strong, to ambulatory treatment and community outreach. Indicators should measure actual capacity, not just capacity development (i.e., more than numbers trained).

**Improved quality and use of TB data**

Reduction of TB incidence in Kyrgyzstan requires strengthened epidemiological capacity based on national data sets. Data already available from the Republican Center for Epidemiology and Information are moving toward quality standards and can be used for short-term trend analyses. They identify where and within which population groups TB is concentrated. The best way to even further improve quality is to create demand by using what is already there and asking for more. It is not DTB’s responsibility to conduct epidemiological analyses, but USAID should encourage others to do so.

Perhaps because of language constraints, the evaluation team did not find significant “publicity” products, especially quantifiable results and “success stories” presented in easily understood “packages” addressed to staff and the public at large. Theoretical discussions about the predicted benefits of enhanced testing, increased ambulatory care, and potentially declining caseloads may not impress political and community leaders: People need to see local trends and feel pride in their own achievements. USAID-style “success stories” will help ensure continued funding.
To motivate staff performance, better indicators are needed for information use, community engagement, and ambulatory DOTS — not simply completed treatment, but also missed pills and community support.

DTB has been delaying major information management work pending completion of the Project Hope electronic database, but there are some things that can and should be done now:

- Provide data-based feedback to oblast and rayon offices concerning diagnostic and treatment trends, as well as financial savings due to hospital restructuring
- Encourage use of data for local decision-making through data feedback, improved presentation (e.g., wall charts and other visuals), and staff performance reviews
- Assist local managers to quantitatively monitor quality-related processes, especially those related to drug sensitivity testing (e.g., sputum transport and results), Consilium decision-making and initiation of treatment (i.e., timeliness), and ambulatory DOTS (i.e., hand-offs from hospitals to clinics to communities), and train teams for continuous data-based quality improvement
- Develop tools to periodically assess FMC readiness for ambulatory care, including IC, staff workload and skills, internal supervision, and use results to upgrade structural quality
- Develop tools to periodically assess community readiness, including stigma, potential support networks, transport arrangements to clinics, and use results to guide targeted interventions
- Develop before/after assessments of community readiness and use them to guide ACSM interventions
- Consider quality assays for non-Global Fund drugs, and work with national authorities to begin monitoring drug quality to provide greater assurance of efficacy

**Recommendation**

DTB should support oblast and rayon managers to use existing data, including paper-based systems, and not delay efforts until the Project Hope database has been implemented.
ANNEX I. SCOPE OF WORK

Assignment #: 360 [assigned by GH Pro]

Global Health Program Cycle Improvement Project (GH Pro)
Contract No. AID-OAA-C-14-00067

EVALUATION OR ANALYTIC ACTIVITY STATEMENT OF WORK (SOW)

Date of Submission: 1/23/2017
Last update: 5/11/2017

I. Title: Midterm Evaluation of USAID Defeat TB (DTB) Project in Kyrgyzstan

II. Requester / Client
☐ USAID Country or Regional Mission

Mission/Division: Kyrgyz Republic /

III. Funding Account Source(s): (Click on box(es) to indicate source of payment for this assignment)
☐ 3.1.1 HIV  ☐ 3.1.4 PIOET  ☐ 3.1.7 FP/RH
☐ 3.1.2 TB  ☐ 3.1.5 Other public health threats  ☐ 3.1.8 WSSH
☐ 3.1.3 Malaria  ☐ 3.1.6 MCH  ☐ 3.1.9 Nutrition
☐ 3.2.0 Other (specify): USAID/Kyrgyz Republic

IV. Cost Estimate: $150,000 (Note: GH Pro will provide a cost estimate based on this SOW)

V. Performance Period
- Expected Start Date (on or about): May 8, 2017
- Anticipated End Date (on or about): September 30, 2017

VI. Location(s) of Assignment: (Indicate where work will be performed)

Kyrgyzstan: Bishkek city, Chui oblast, and Jalal-Abad oblast
VII. Type of Analytic Activity (Check the box to indicate the type of analytic activity)

EVALUATION:

☐ Performance Evaluation  (Check timing of data collection)
  ☐ Midterm  ☐ Endline  ☐ Other (specify):

Performance evaluations encompass a broad range of evaluation methods. They often incorporate before–after comparisons but generally lack a rigorously defined counterfactual. Performance evaluations may address descriptive, normative, and/or cause-and-effect questions. They may focus on what a particular project or program has achieved (at any point during or after implementation); how it was implemented; how it was perceived and valued; and other questions that are pertinent to design, management, and operational decision making.

☐ Impact Evaluation  (Check timing(s) of data collection)
  ☐ Baseline  ☐ Midterm  ☐ Endline  ☐ Other (specify):

Impact evaluations measure the change in a development outcome that is attributable to a defined intervention. They are based on models of cause and effect and require a credible and rigorously defined counterfactual to control for factors other than the intervention that might account for the observed change. Impact evaluations in which comparisons are made between beneficiaries that are randomly assigned to either a treatment or a control group provide the strongest evidence of a relationship between the intervention under study and the outcome measured.

PEPFAR EVALUATIONS  (PEPFAR Evaluation Standards of Practice 2014)

Note: If PEPFA-funded, check the box for type of evaluation

☐ Process Evaluation  (Check timing of data collection)
  ☐ Midterm  ☐ Endline  ☐ Other (specify):

Process Evaluation focuses on program or intervention implementation, including, but not limited to access to services, whether services reach the intended population, how services are delivered, client satisfaction and perceptions about needs and services, management practices. In addition, a process evaluation might provide an understanding of cultural, socio-political, legal, and economic context that affect implementation of the program or intervention. For example: Are activities delivered as intended, and are the right participants being reached? (PEPFAR Evaluation Standards of Practice 2014)

☐ Outcome Evaluation

Outcome Evaluation determines if and by how much, intervention activities or services achieved their intended outcomes. It focuses on outputs and outcomes (including unintended effects) to judge program effectiveness, but may also assess program process to understand how outcomes are produced. It is possible to use statistical techniques in some instances when control or comparison groups are not available (e.g., for the evaluation of a national program). Example of question asked: To what extent are desired changes occurring due to the program, and who is benefiting? (PEPFAR Evaluation Standards of Practice 2014)

☐ Impact Evaluation  (Check timing(s) of data collection)
  ☐ Baseline  ☐ Midterm  ☐ Endline  ☐ Other (specify):

Impact evaluations measure the change in an outcome that is attributable to a defined intervention by comparing actual impact to what would have happened in the absence of the intervention (the counterfactual scenario). IEs are based on models of cause and effect and require a rigorously defined counterfactual to control for factors other than the intervention that might account for the observed change. There are a range of accepted approaches to applying a counterfactual analysis, though IEs in which comparisons are made between beneficiaries that are randomly assigned to either an intervention or a control group provide the strongest evidence of a relationship between the intervention under study and the outcome measured to demonstrate impact.

☐ Economic Evaluation (PEPFAR)

Economic Evaluations identifies, measures, values and compares the costs and outcomes of alternative interventions. Economic evaluation is a systematic and transparent framework for assessing efficiency focusing on the economic costs and outcomes of alternative programs or interventions. This framework is based on a comparative analysis of both the costs (resources consumed) and outcomes (health, clinical, economic) of programs or interventions. Main types of economic evaluation are cost-minimization analysis (CMA), cost-effectiveness analysis (CEA), cost-benefit analysis (CBA) and cost-utility analysis (CUA). Example of question asked: What is the cost-effectiveness of this intervention in improving patient outcomes as compared to other treatment models?
VIII. Background

If an evaluation, Project/Program being evaluated:

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>Defeat TB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award/Contract Number:</td>
<td>AID 176-A-14-00004-00</td>
</tr>
<tr>
<td>Award/Contract Dates:</td>
<td>2014-2019</td>
</tr>
<tr>
<td>Project Funding:</td>
<td>$12,730,120</td>
</tr>
<tr>
<td>Implementing Organization(s):</td>
<td>Abt Associates (prime), in partnership with FHI 360 and RPX</td>
</tr>
<tr>
<td>Project/Activity AOR/COR:</td>
<td>Chynara Kamarli</td>
</tr>
</tbody>
</table>

Background of project/program/intervention (Provide a brief background on the country and/or sector context; specific problem or opportunity the intervention addresses; and the development hypothesis)

Over the past decade that USAID has supported Tuberculosis (TB) control efforts in the Kyrgyz Republic, TB morbidity and mortality indicators have significantly improved, with fewer TB cases and fewer deaths, compared to a decade ago. Yet TB still remains a high priority public health threat in Kyrgyzstan. WHO data confirm an alarming increase over the past decade in rates of multi drug resistance TB (MDR-TB) in Kyrgyzstan, which continues to present significant challenges for TB prevention and control and poses a threat to the economic development in the region.

The 2015 WHO Global TB Report disclosed that Kyrgyzstan has the second highest MDR-TB estimated new case in the world. The national TB program for 2015 reports 1,182 newly diagnosed MDR TB cases. However, the quality of treatment remains poor and the treatment completion rate is low. In 2015, the treatment success rate of MDR TB was only 58%.

Kyrgyzstan still implements a hybrid approach to TB prevention and control with elements of internationally accepted standards of care and treatment that are intertwined or run in parallel with elements of the outdated Soviet-era model of TB control. This highly medicalized approach leads to a strong focus on clinical management of TB and MDR-TB, overuse of hospitalization during treatment, and an underdeveloped public health approach to TB and MDR-TB prevention and control.

Worldwide, according to WHO’s Annual TB Report 2015, more men than women are diagnosed with TB, thus, TB incidence and prevalence rates are higher among men than women. Whether or not there is a true disparity in male to female TB prevalence is not clear, as most studies have not collected data on factors that can influence vulnerability to infection or uptake of services.

a. Description of activity/project/program
The USAID Defeat TB project (DTB) aims to strengthen National Tuberculosis Program (NTP) systems so they can provide more effective and accessible TB diagnosis and treatment.

The goal of the USAID DTB Program is to ensure more effective and more accessible TB diagnosis and treatment for all, including vulnerable populations, so as to reduce the burden of TB and the development of drug-resistant TB in Kyrgyzstan. The following outputs expected:

Output 1 - Improved access to quality TB services
Early diagnosis, timely and adequate treatment and effective infection control measures help to break the chain of TB and MDR-TB transmission, yet the region continues to suffer from delayed diagnosis, inappropriate, inadequate and incomplete treatment and inadequate infection control measures. Vulnerable and high-risk groups such as prisoners, migrants and socially disadvantaged persons continue to be underserved and are vulnerable to TB and MDR-TB. The project assists in reducing
barriers to access for these vulnerable groups to improving equitable access and reducing the burden of TB and slowing the development of drug resistant TB.

An outdated model of care with long term in-patient hospital admission increases opportunities for transmission of MDR-TB to other patients in TB wards. The project assists governments in the development of strategic and/or operational plans, consistent with international standards that will promote different modalities of outpatient care for patients with TB and MDR-TB. PHC services, CSOs and other social organizations form part of the care and support structure, all using the same protocols and strategies. The provision of patient-centered support enables outpatients to overcome the difficulties of coping with a diagnosis of TB or MDR-TB and to better manage treatment side effects or other emotional, social or economic problems interfering with treatment adherence.

While there is strong commitment within the Kyrgyz Republic for TB control programs, the country is nonetheless designing and implementing policies and guidelines that rely on outdated practices. Supporting an enabling environment at the national and oblast levels for improved access to quality TB diagnosis and treatment requires intervention and advocacy to redirect national energies toward more productive and effective program interventions and practices, as delineated in policies and strategic guidelines.

Through this project, USAID Kyrgyz Republic continues to work at the policy level to promote policies, legislation and guidelines that are consistent with international standards and WHO recommendations for MDR-TB control. These policies, regulations and guidelines will strengthen the enabling environment for the piloting, implementation and institutionalization of internationally accepted practices for MDR-TB control and support universal access to TB diagnosis and treatment.

Output 2 – Strengthened capacity to provide quality TB services
The health system in the Kyrgyz Republic is based upon highly specialized, disease-specific vertical programs and separated from the general health system from the vertical TB system. This project seeks out opportunities to promote the greater coordination of disparate systems to ensure linkages between existing systems so that they function in a way that improves continuity of care, facilitates improved access to services and strengthens adherence to treatment. Key interventions include assisting governments and CSOs to effectively plan and manage their human resources for health. This includes improving supervision approaches, strengthening the capacity of health care workers to manage TB services, including outpatient treatment and care and improved drug management. The NTP in the Kyrgyz Republic lacks the capacity at the central level to effectively manage operations at lower levels. The four councils (Consiliums) that review and make decisions on TB case management are weak. The project focuses its attention in strengthening the central and regional Consiliums as well as improving programmatic management of Drug resistant TB (PMDT), infection control (IC), and TB drug management. The lab strengthening activities include quality assured smear microscopy, culture and drug susceptibility tests and development of transportation system as delays in transport of sputum samples is a major obstacle to timely diagnosis and treatment. In addition, the project further rolls out the quality management system (QMS) system for laboratories. The project also assists to increase collaboration between the TB, PHC and HIV/AIDS systems to ensure more timely TB diagnosis, treatment and follow-up. Drug-resistant TB in patients who are also co-infected with HIV is of particular concern because of the rapid progression from TB infection to disease among persons living with HIV.

Output 3- Improved quality of TB data and use of data
A strong evidence base for monitoring and evaluating program performance is a core function of a national TB program. Quality data need to be available for analysis and use at all levels, particularly at
the facility level where they are collected. Unified medical information systems as well as timely and high-quality data are keys to improving stewardship and coordination among all NTP actors. The Project works to unify the TB information system (TB IS), connect to general Health Information System (HIS) including mandatory health insurance fund (MHIF) billing systems, and reduce primary health service (PHC) paperwork burden to facilitate the transition to fully outpatient TB. In assessing strategic information needs, the Recipient reviews current technologies and data systems, define technology requirements for improved TB IS and prioritize sustainable high impact/low cost solutions. The project provides support to NTP actors on development of TB policy documents in relation to databases, technology, and evidence-based decision making on TB programs. The project reviews and adapts the data quality assurance (DQA) tool developed with USAID and Global Fund support as well as build capacity of rayon- and oblast-level TB specialists to improve the quality and quantity of data developed and deployed. The project supports specific gender analysis, including examination of the high ratio of female and male TB cases. The project provides education and advocacy among all stakeholders on the value of data for decision-making in order to build a “culture of data use” and evidence-based decision making. The project introduces GxAlert, a simple internet-based to rapidly communicate of Xpert test results to providers throughout the TB health system to support early initiation of treatment as well as improved program management through real-time disease surveillance. The Project documents and disseminates best practices in both quality of data and use of data within the country and CAR.

Theory of Change of target project/program/intervention

See Goal and Output above

What is the geographic coverage and/or the target groups for the project or program that is the subject of analysis?

Defeat TB is implemented Countrywide, as TA is provided on development and roll out of national policies and guidelines, with pilot sites in in Bishkek city, Chui and Jalal-Abad oblasts.

The evaluation will be executed in Bishkek city, project pilot sites in Chui oblast, and Jalal-Abad oblast.

The target groups for evaluation will include: MoH, National TB program, Mandatory Health Insurance Fund (MHIF), TB facilities, primary health care facilities, TB patients, and other project partners.

IX. Scope of Work

A. Purpose:

This is a midterm evaluation of the five years USAID Defeat TB project (Aug 2014-August 2019) with the following objectives:

1. To assess the progress in achieving the project goals for more effective and accessible TB and MDR TB diagnosis and treatment services at the national level and pilot sites.
2. To identify implementation gaps/challenges and determine performance and levels of attainment for identified targets and indicators.
3. To document lessons learned and provide recommendations that will inform future programming directions.

B. Audience:

➢ USAID Kyrgyz Republic Health and Education and Program offices
➢ USAID/CAR Health and Education Office
C. Applications and use:
- Findings and recommendations from this program evaluation will be used for further improvement and direction for the remaining activity period.
- The evaluation will be used to decide whether or not the USG should continue investing in this area and if so, how (i.e., should there be a follow on and if so, how should it be designed).

D. Evaluation/Analytic Questions & Matrix:

<table>
<thead>
<tr>
<th>Evaluation Question</th>
<th>Suggested methods for answering this question</th>
<th>Sampling Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent the project has achieved its intended outputs and outcomes as per agreed M&amp;E plan</td>
<td>What data sources and data collection and analysis methods will be used to produce the evidence for answering this question?</td>
<td>Who is the best source for this information? What is the sampling criteria?</td>
</tr>
<tr>
<td>To what extent the current M&amp;E indicators if achieved would lead to achieving of intended impact?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

E. Methods:

General Comments related to Methods:
This evaluation will be qualitative in nature; with some secondary, quantitative data analysis. The evaluation team shall start its work with a literature review. Then the evaluation team will:

- Meet with USAID Kyrgyzstan and to meet with stakeholders including international health partners, MoH, National TB program, TB and health care service providers, and program recipients;
- Review USAID strategies, country strategies, project work plans including annual monitoring and evaluation work plans (AMEP), reports, and any relevant assessments;
- Review current interventions and estimate expected results of the USAID DTB project against the USG TB Strategy and WHO End TB Strategy;
- Validate or propose modifications to the planned activities under the DTB project;
- Identify potential areas for national and pilot sites interventions and cross-sectoral programming.

The methodology will be comprised of a mix of tools appropriate to the evaluation’s research questions. These tools may include a combination of, but are not limited to, the following:

- Protocol(s) for individual or group interviews with representatives of project partners and additional stakeholders;
- Protocol(s) for interviews and/or focus groups with project beneficiaries;
- Protocol(s) for interviews/meetings with representatives of USAID Kyrgyzstan;
- Protocol(s) for interviews/meetings with national and local government officials, as appropriate;
Protocol(s), such as an observation guide, for site visits to project pilot areas.

**Document and Data Review** *(list of documents and data recommended for review)*

This desk review will be used to provide background information on the project/program, and will also provide data for analysis for this evaluation. Documents and data to be reviewed include:

- USAID TB strategies
- country TB strategies
- Defeat TB project work plans
- Defeat TB annual monitoring and evaluation work plans (AMEP)
- Defeat TB reports
- Defeat TB relevant assessments

**Key Informant Interviews** *(list categories of key informants, and purpose of inquiry)*

Interviews will be conducted among informants who can provide information needed to answer the evaluation questions. Key informants include:

- Defeat TB staff
- Defeat TB partners
- USAID/Kyrgyzstan
- National (MOH, NTP, MHIF) and local (oblast, and rayon pilot site TB and primary health care facilities) government officials
- Other Stakeholders, including NTP, UNDP, PIU, GF, MSF, and ICRC

**Focus Group Discussions** *(list categories of groups, and purpose of inquiry)*

Focus groups with project beneficiaries will be conducted to assess the effectiveness of interventions executed by DTB, and how the services provided perceived by project beneficiaries. Other information gathered includes, what is working well and what is not, and recommendations to consider.

**Group Interviews** *(list categories of groups, and purpose of inquiry)*

Key informants can be grouped and interviewed together, as long as the respondents feel free to express their opinions openly.

**Observations** *(list types of sites or activities to be observed, and purpose of inquiry)*

Using a semi-structured observation guide, observations will be conducted during site visits to project pilot area.

**X. Human Subject Protection**

The Analytic Team must develop protocols to insure privacy and confidentiality prior to any data collection. Primary data collection must include a consent process that contains the purpose of the evaluation, the risk and benefits to the respondents and community, the right to refuse to answer any question, and the right to refuse participation in the evaluation at any time without consequences. Only adults can consent as part of this evaluation. Minors cannot be respondents to any interview or survey, and cannot participate in a focus group discussion without going through an IRB. The only time minors can be observed as part of this evaluation is as part of a large community-wide public event, when they are part of family and community in the public setting. During the process of this evaluation, if data are abstracted from existing documents that include unique identifiers, data can only be abstracted without this identifying information.
An Informed Consent statement included in all data collection interactions must contain:
- Introduction of facilitator/note-taker
- Purpose of the evaluation/assessment
- Purpose of interview/discussion/survey
- Statement that all information provided is confidential and information provided will not be connected to the individual
- Right to refuse to answer questions or participate in interview/discussion/survey
- Request consent prior to initiating data collection (i.e., interview/discussion/survey)

XI. Analytic Plan

All analyses will be geared to answer the evaluation questions. Additionally, the evaluation will review both qualitative and quantitative data related to the project/program’s achievements against its objectives and/or targets.

Quantitative data will be analyzed primarily using descriptive statistics. Data will be stratified by demographic characteristics, such as sex, age, and location, whenever feasible. Other statistical test of association (i.e., odds ratio) and correlations will be run as appropriate.

Thematic review of qualitative data will be performed, connecting the data to the evaluation questions, seeking relationships, context, interpretation, nuances and homogeneity and outliers to better explain what is happening and the perception of those involved. Qualitative data will be used to substantiate quantitative findings, provide more insights than quantitative data can provide, and answer questions where other data do not exist.

Use of multiple methods that are quantitative and qualitative, as well as existing data (e.g., project performance indicator data, assessment data, etc.) will allow the Team to triangulate findings to produce more robust evaluation results.

The analysis should include gender aspects on the achievement of the equitable access to TB services for men and women.

The Evaluation Report will describe analytic methods and statistical tests employed in this evaluation.

XII. Activities

**Background reading** – Several documents are available for review for this analytic activity. These include Defeat TB proposal, annual work plans, M&E plans, quarterly progress reports, and routine reports of project performance indicator data, as well as survey or assessment data reports. This desk review will provide background information for the Evaluation Team, and will also be used as data input and evidence for the evaluation.

**Team Planning Meeting (TPM)** – A four-day team planning meeting (TPM) will be held at the initiation of this assignment and before the data collection begins. The TPM will:
- Review and clarify any questions on the evaluation SOW
- Clarify team members’ roles and responsibilities
- Establish a team atmosphere, share individual working styles, and agree on procedures for resolving differences of opinion
- Review and finalize evaluation questions
• Review and finalize the assignment timeline
• Develop data collection methods, instruments, tools and guidelines
• Review and clarify any logistical and administrative procedures for the assignment
• Develop a data collection plan
• Draft the evaluation work plan for USAID’s approval
• Develop a preliminary draft outline of the team’s report
• Assign drafting/writing responsibilities for the final report

**Briefing and Debriefing Meetings** – Throughout the evaluation the Team Lead will provide briefings to USAID. The In-Brief and Debrief are likely to include the all Evaluation Team experts, but will be determined in consultation with the Mission. These briefings are:

- **Evaluation launch**, a call/meeting among the USAID, GH Pro and the Team Lead to initiate the evaluation activity and review expectations. USAID will review the purpose, expectations, and agenda of the assignment. GH Pro will introduce the Team Lead, and review the initial schedule and review other management issues.
- **In-brief with USAID**, as part of the TPM. At the beginning of the TPM, the Evaluation Team will meet with USAID to discuss expectations, review evaluation questions, and intended plans. The Team will also raise questions that they may have about the project/program and SOW resulting from their background document review. The time and place for this in-brief will be determined between the Team Lead and USAID prior to the TPM.
- **Workplan and methodology review briefing**. At the end of the TPM, the Evaluation Team will meet with USAID to present an outline of the methods/protocols, timeline and data collection tools. Also, the format and content of the Evaluation report(s) will be discussed.
- **In-brief with project** to review the evaluation plans and timeline, and for Defeat TB to give an overview of the project to the Evaluation Team.
- The Team Lead (TL) will brief the USAID weekly to discuss progress on the evaluation. As preliminary findings arise, the TL will share these during the routine briefing, and in an email.
- **A final debrief** between the Evaluation Team and USAID will be held at the end of the evaluation to present preliminary findings to USAID. During this meeting, a summary of the data will be presented, along with high level findings and draft recommendations. For the debrief, the Evaluation Team will prepare a **PowerPoint Presentation** of the key findings, issues, and recommendations. The evaluation team shall incorporate comments received from USAID during the debrief in the evaluation report. *(Note: preliminary findings are not final and as more data sources are developed and analyzed these finding may change.)*

**Fieldwork, Site Visits and Data Collection** – The evaluation team will conduct site visits to for data collection. Selection of sites to be visited will be finalized during TPM in consultation with USAID. The evaluation team will outline and schedule key meetings and site visits prior to departing to the field.

**Evaluation/Analytic Report** – The Evaluation Team under the leadership of the Team Lead will develop a report with findings and recommendations (see Analytic Report below). Report writing and submission will include the following steps:

1. Team Lead will submit draft Evaluation Report to GH Pro for review and formatting
2. GH Pro will submit the draft report to USAID
3. USAID will review the draft report in a timely manner, and send their comments and edits back to GH Pro
4. GH Pro will share USAID's comments and edits with the Team Lead, who will then do final edits, as needed, and resubmit to GH Pro.
5. GH Pro will review and reformat the final Evaluation Report, as needed, and resubmit to USAID for approval.
6. Once Evaluation Report is approved, GH Pro will re-format it for 508 compliance and post it to the DEC.

The Evaluation Report excludes any procurement-sensitive and other sensitive but unclassified (SBU) information. This information will be submitted in a memo to USIAD separate from the Evaluation Report.

Executive Summary Translated from English to Russian – Following technical approval, the Executive Summary, approximately 5 pages, will be translated from English to Russian.

Data Submission – All quantitative data will be submitted to GH Pro in a machine-readable format (CSV or XML). The datasets created as part of this evaluation must be accompanied by a data dictionary that includes a codebook and any other information needed for others to use these data. It is essential that the datasets are stripped of all identifying information, as the data will be public once posted on USAID Development Data Library (DDL).

When feasible, qualitative data that do not contain identifying information should also be submitted to GH Pro.

Follow-up Actions Workshop – USAID/Kyrgyzstan is considering a workshop with the IP and key stakeholders to plan follow-up actions based on findings and recommendations from this evaluation. Select GH Pro Evaluation Team Consultants may be retained to organize and facilitate this workshop.

XIII. Deliverables and Products

<table>
<thead>
<tr>
<th>Deliverable / Product</th>
<th>Timelines &amp; Deadlines (estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launch briefing</td>
<td>May 8, 2017</td>
</tr>
<tr>
<td>In-brief with USAID</td>
<td>May 22, 2017</td>
</tr>
<tr>
<td>Workplan and methodology review briefing</td>
<td>May 24, 2017</td>
</tr>
<tr>
<td>Workplan (must include questions, methods, timeline, data analysis plan, and instruments)</td>
<td>May 26, 2017</td>
</tr>
<tr>
<td>In-brief with target Defeat TB</td>
<td>May 23, 2017</td>
</tr>
<tr>
<td>Routine briefings</td>
<td>Weekly</td>
</tr>
<tr>
<td>Out-brief with USAID with Power Point presentation</td>
<td>June 2, 2017</td>
</tr>
<tr>
<td>Draft report</td>
<td>Submit to GH Pro: June 26, 2017</td>
</tr>
<tr>
<td></td>
<td>GH Pro submits to USAID: June 30, 2017</td>
</tr>
<tr>
<td>Final report</td>
<td>GH Pro submits to USAID: September 5, 2017</td>
</tr>
<tr>
<td>Executive Summary Translated from English to Russian</td>
<td>September 25, 2017</td>
</tr>
<tr>
<td>Raw data (cleaned datasets in CSV or XML with data dictionary)</td>
<td>September 5, 2017</td>
</tr>
<tr>
<td>Report Posted to the DEC</td>
<td>September 25, 2017</td>
</tr>
<tr>
<td>Follow-up Actions Workshop</td>
<td>September 2017 (date TBD)</td>
</tr>
</tbody>
</table>
**Estimated USAID review time**
Average number of business days USAID needs to review the Evaluation Report? __15__

Business days

**XIV. Team Composition, Skills and Level of Effort (LOE)**

**Evaluation/Analytic team:** When planning this analytic activity, consider:

<table>
<thead>
<tr>
<th>Overall Team requirements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The evaluation team will consist of the following staff:</td>
</tr>
<tr>
<td>➢ Evaluation Specialist/Team Leader</td>
</tr>
<tr>
<td>➢ Tuberculosis (TB) Technical Specialist</td>
</tr>
<tr>
<td>➢ Translator</td>
</tr>
<tr>
<td>➢ Local Evaluator/Logistics/Assistant</td>
</tr>
</tbody>
</table>

**Team Lead:** This person will be selected from among the key staff, and will meet the requirements of both this and the other position. The team lead should have significant experience conducting project evaluations/analyses.

**Roles & Responsibilities:** The team leader will be responsible for (1) providing team leadership; (2) managing the team’s activities, (3) ensuring that all deliverables are met in a timely manner, (4) serving as a liaison between the USAID and the evaluation/analytic team, and (5) leading briefings and presentations.

**Qualifications:**
- Minimum of 10 years of experience in public health, which included experience in implementation of health activities in developing countries
- Demonstrated experience leading health sector project/program evaluation/analytics, utilizing both quantitative and qualitative methods
- Excellent skills in planning, facilitation, and consensus building
- Excellent interpersonal skills, including experience successfully interacting with host government officials, civil society partners, and other stakeholders
- Excellent skills in project management
- Excellent organizational skills and ability to keep to a timeline
- Good writing skills, with extensive report writing experience
- Experience working in the former Soviet Union, and experience in Central Asia is desirable
- Familiarity with USAID
- Familiarity with USAID policies and practices
  - Evaluation policy
  - Results frameworks
  - Performance monitoring plans

**Key Staff 1 Title:** Evaluation Specialist

**Roles & Responsibilities:** Serve as a member of the evaluation team, providing quality assurance on evaluation issues, including methods, development of data collection instruments, protocols for data collection, data management and data analysis. S/He will oversee the training of all engaged in data collection, insuring highest level of reliability and validity of data being collected. S/He is the lead analyst, responsible for all data analysis, and will coordinate the analysis of all data, assuring all quantitative and qualitative data analyses are done to meet the needs for this evaluation. S/He will participate in all aspects of the evaluation, from planning, data collection, data analysis to report writing.
Qualifications:
- At least 10 years of experience in evaluation and/or research procedures and implementation, preferably in health, public health, economics, and/or a related field.
- At least 5 years managing M&E, including evaluations.
- Post-graduate degree with emphasis on research and/or evaluation.
- Experience in design and implementation of evaluations.
- Strong knowledge, skills, and experience in qualitative and quantitative evaluation tools.
- Experience implementing and coordinating surveys, key informant interviews, focus groups, observations, and other evaluation methods that assure reliability and validity of the data.
- Experience in data management.
- Able to analyze quantitative, which will be primarily descriptive statistics.
- Able to analyze qualitative data.
- Experience using analytic software.
- Demonstrated experience using qualitative evaluation methodologies, and triangulating with quantitative data.
- Able to review, interpret and reanalyze existing data pertinent to the evaluation.
- Strong data interpretation and presentation skills.
- Experience working in the former Soviet Union is desirable.
- Ability to understand and speak Russian is desirable.
- Proficient in English.
- Good writing skills, including extensive report writing experience.
- Familiarity with USAID health programs/projects, primary health care or health systems strengthening preferred.
- Familiarity with USAID and M&E policies and practices:
  - Evaluation policies
  - Results frameworks
  - Performance monitoring plans.
- Familiarity with health systems strengthening and/or health care financing is desirable.

Key Staff 2 Title: TB Specialist

Roles & Responsibilities: Serve as a member of the Assessment Team, providing technical expertise on TB programming. S/He will participate in all aspects of the assessment, including planning, data collection, data analysis and report writing.

Qualifications:
- At least 5 years of experience working with TB programs in developing country settings.
- A master’s degree in TB, health, public health, and/or a related field.
- At least 10 years of experience with TB control efforts, preferably internationally.
- Experience in strategic planning of TB programs, as well as in the implementation of health projects and/or evaluation of health programs.
- Experience working in the former Soviet Union is desirable.
- Ability to understand and speak Russian is desirable.
- Proficient in English.
- Good interpersonal communication skills.
- Good writing skills, specifically technical and evaluation report writing experience.
• Experience in conducting USAID evaluations of health programs/activities
• Familiarity with health systems strengthening and/or health care financing is desirable

**Other Staff** Titles with Roles & Responsibilities (include number of individuals needed):

| Local **Evaluator/Logistics** (1 consultant) will to assist the Evaluation Team with data collection, analysis and data interpretation., as well as support the Team with all logistics needed to carry out this evaluation. S/He will have a good command of English, Kyrgyz and Russian, and will have knowledge of key actors in the health sector and their locations including MOH, donors and other stakeholders. To support the Team, s/he will be able to efficiently liaise with hotel staff, arrange in-country transportation (ground and air), arrange meeting and workspace as needed, and insure business center support, e.g. copying, internet, and printing. S/he will work under the guidance of the Team Leader to make preparations, arrange meetings and appointments. S/he will should also have experience collecting data, conducting interviews, and analyzing data. S/He may also be asked to assist in translation (written and oral). As Local Evaluator, consultant will assist the Evaluation Team with data collection, analysis and data interpretation. They will have basic familiarity with health topics, as well as experience conducting surveys interviews and focus group discussion, both facilitating and note taking. Furthermore, they will assist in translation of data collection tools and transcripts, as needed, and may be asked to interpret during interviews and discussions. The Local Evaluators will have a good command of English, Kyrgyz and Russian. They will also assist the Team and the Logistics Coordinator, as needed. They will report to the Team Lead.

**Translator** (1) will be hired on as needed basis, particularly to interpret during meeting and interviews. S/He must have a good command of English, Kyrgyz and Russian.

Will USAID participate as an active team member or designate other key stakeholders to as an active team member? This will require full time commitment during the evaluation or analytic activity.

☐ Yes – If yes, specify who:
☐ Significant Involvement anticipated – If yes, specify who:
☒ No

**Staffing Level of Effort (LOE) Matrix:**
Level of Effort in days for each Evaluation/Analytic Team member
(The following is an Illustrative LOE Chart. Please edit to meet the requirements of this activity.)

<table>
<thead>
<tr>
<th>Activity / Deliverable</th>
<th>Team Lead / Evaluation Spc</th>
<th>Evaluation/Analytic Team</th>
<th>Logistics/Local Eval</th>
<th>Interpreter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of persons →</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1 Launch Briefing</td>
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<td>0.5</td>
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</tr>
<tr>
<td>2 HTSOS Training</td>
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</tr>
<tr>
<td>3 Desk review</td>
<td></td>
<td>5</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>4 Preparation for Team convening in-country</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>5 Travel to country</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 In-brief with Mission</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>7 Team Planning Meeting</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>8 Workplan and methodology briefing with USAID</td>
<td>0.5</td>
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</table>
### Activity / Deliverable

<table>
<thead>
<tr>
<th>#</th>
<th>Activity / Deliverable</th>
<th>Team Lead / Evaluation Spc</th>
<th>TB Specialist</th>
<th>Logistics/ Local Eval</th>
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<tbody>
<tr>
<td>9</td>
<td>Eval planning deliverables: 1) workplan with timeline analytic protocol (methods, sampling &amp; analytic plan); 2) data collection tools</td>
<td></td>
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<tr>
<td>10</td>
<td>In-brief with project</td>
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<td>0.5</td>
<td>0.5</td>
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<tr>
<td>11</td>
<td>Data Collection DQA Workshop (protocol orientation/training for all data collectors)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Prep / Logistics for Site Visits</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
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<tr>
<td>13</td>
<td>Data collection / Site Visits (including travel to sites)</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
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<tr>
<td>14</td>
<td>Data analysis</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td></td>
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<tr>
<td>15</td>
<td>Debrief with Mission with prep</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>16</td>
<td>Depart country</td>
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<tr>
<td>17</td>
<td>Draft report(s)</td>
<td>7</td>
<td>5</td>
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<tr>
<td>18</td>
<td>GH Pro Report QC Review &amp; Formatting</td>
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<td></td>
<td></td>
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<tr>
<td>19</td>
<td>Submission of draft report(s) to Mission</td>
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<td></td>
<td></td>
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<tr>
<td>20</td>
<td>USAID Report Review</td>
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<td></td>
</tr>
<tr>
<td>21</td>
<td>USAID manages Stakeholder review (eg, IP(s), government partners, etc) and submits any Statement of Difference to GH Pro.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Revise report(s) per USAID comments</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Finalize and submit report to USAID</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>USAID approves report</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Final copy editing and formatting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>508 Compliance editing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Eval Report(s) to the DEC</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### Total LOE per person

<table>
<thead>
<tr>
<th></th>
<th>Team Lead / Evaluation Spc</th>
<th>TB Specialist</th>
<th>Logistics/ Local Eval</th>
<th>Interpreter</th>
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<tr>
<td>Total LOE per person</td>
<td>35</td>
<td>34</td>
<td>26</td>
<td>12</td>
</tr>
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</table>

### Total LOE

<table>
<thead>
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<th></th>
<th>Team Lead / Evaluation Spc</th>
<th>TB Specialist</th>
<th>Logistics/ Local Eval</th>
<th>Interpreter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total LOE</td>
<td>35</td>
<td>34</td>
<td>26</td>
<td>12</td>
</tr>
</tbody>
</table>

If overseas, is a 6-day workweek permitted

- Yes
- No

**Travel anticipated:** List international and local travel anticipated by what team members.

**Kyrgyzstan:** Bishkek city, Chui oblast, and Jalal-Abad oblast

### XV. Logistics

**Visa Requirements**

List any specific Visa requirements or considerations for entry to countries that will be visited by consultant(s):
List recommended/required type of Visa for entry into counties where consultant(s) will work

<table>
<thead>
<tr>
<th>Name of Country</th>
<th>Type of Visa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kyrgyzstan</td>
<td>☒ Tourist ☐ Business ☐ No preference</td>
</tr>
</tbody>
</table>

**Clearances & Other Requirements**

**Note:** Most Evaluation/Analytic Teams arrange their own work space, often in conference rooms at their hotels. However, if a Security Clearance or Facility Access is preferred, GH Pro can submit an application for it on the consultant’s behalf.

GH Pro can obtain **Secret Security Clearances** and **Facility Access (FA)** for our consultants, but please note these requests processed through USAID/GH (Washington, DC) can take 4-6 months to be granted, with Security Clearance taking approximately 6 months to obtain. If you are in a Mission and the RSO is able to grant a temporary FA locally, this can expedite the process. If Security Clearance or FA is granted through Washington, DC, the consultant must pick up his/her badge in person at the Office of Security in Washington, DC, regardless of where the consultant resides or will work.

If **Electronic Country Clearance (eCC)** is required prior to the consultant’s travel, the consultant is also required to complete the **High Threat Security Overseas Seminar (HTSOS)**. HTSOS is an interactive e-Learning (online) course designed to provide participants with threat and situational awareness training against criminal and terrorist attacks while working in high threat regions. There is a small fee required to register for this course. [Note: The course is not required for employees who have taken FACT training within the past five years or have taken HTSOS within the same calendar year.]

If eCC is required, and the consultant is expected to work in country more than 45 consecutive days, the consultant may be required complete the one-week **Foreign Affairs Counter Threat (FACT) course** offered by FSI in West Virginia. This course provides participants with the knowledge and skills to better prepare themselves for living and working in critical and high threat overseas environments. Registration for this course is complicated by high demand (consultants must register approximately 3-4 months in advance). Additionally, there will be the cost for additional lodging and M&E to take this course.

Check all that the consultant will need to perform this assignment, including USAID Facility Access, GH Pro workspace and travel (other than to and from post).

- ☐ USAID Facility Access (FA)
- ☒ Electronic County Clearance (ECC) (International travelers only)
- ☒ High Threat Security Overseas Seminar (HTSOS) *required in most countries with ECC*
- ☐ Foreign Affairs Counter Threat (FACT) (for consultants working on country more than 45 consecutive days)
- ☐ GH Pro workspace
- Specify who will require workspace at GH Pro: ____________________________
- ☐ Travel -other than posting (specify): ____________________________
- ☐ Other (specify): ____________________________

Specify any country-specific **security concerns and/or requirements**
XVI. GH Pro Roles and Responsibilities

GH Pro will coordinate and manage the evaluation/analytic team and provide quality assurance oversight, including:

- Review SOW and recommend revisions as needed
- Provide technical assistance on methodology, as needed
- Develop budget for analytic activity
- Recruit and hire the evaluation/analytic team, with USAID POC approval
- Arrange international travel and lodging for international consultants
- Request for country clearance and/or facility access (if needed)
- Review methods, workplan, analytic instruments, reports and other deliverables as part of the quality assurance oversight
- Report production - If the report is public, then coordination of draft and finalization steps, editing/formatting, 508ing required in addition to and submission to the DEC and posting on GH Pro website. If the report is internal, then copy editing/formatting for internal distribution.

XVII. USAID Roles and Responsibilities

Below is the standard list of USAID’s roles and responsibilities. Add other roles and responsibilities as appropriate.

<table>
<thead>
<tr>
<th>USAID Roles and Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USAID</strong> will provide overall technical leadership and direction for the analytic team throughout the assignment and will provide assistance with the following tasks:</td>
</tr>
</tbody>
</table>

**Before Field Work**

- **SOW**
  - Develop SOW.
  - Peer Review SOW
  - Respond to queries about the SOW and/or the assignment at large.
- **Consultant Conflict of Interest (COI)**. To avoid conflicts of interest or the appearance of a COI, review previous employers listed on the CV’s for proposed consultants and provide additional information regarding potential COI with the project contractors evaluated/assessed and information regarding their affiliates.
- **Documents**. Identify and prioritize background materials for the consultants and provide them to GH Pro, preferably in electronic form, at least one week prior to the inception of the assignment.
- **Local Consultants**. Assist with identification of potential local consultants, including contact information.
- **Site Visit Preparations**. Provide a list of site visit locations, key contacts, and suggested length of visit for use in planning in-country travel and accurate estimation of country travel line items costs.
- **Lodgings and Travel**. Provide guidance on recommended secure hotels and methods of in-country travel (i.e., car rental companies and other means of transportation).

**During Field Work**

- **Mission Point of Contact**. Throughout the in-country work, ensure constant availability of the Point of Contact person and provide technical leadership and direction for the team’s work.
- **Meeting Space**. Provide guidance on the team’s selection of a meeting space for interviews and/or focus group discussions (i.e. USAID space if available, or other known office/hotel meeting space).
- **Meeting Arrangements**. Assist the team in arranging and coordinating meetings with stakeholders.
- **Facilitate Contact with Implementing Partners**. Introduce the analytic team to implementing partners and other stakeholders, and where applicable and appropriate prepare and send out an introduction letter for team’s arrival and/or anticipated meetings.
After Field Work

• Timely Reviews. Provide timely review of draft/final reports and approval of deliverables.

XVIII. Analytic Report

Provide any desired guidance or specifications for Final Report. (See How-To Note: Preparing Evaluation Reports)

The Evaluation/Analytic Final Report must follow USAID’s Criteria to Ensure the Quality of the Evaluation Report (found in Appendix I of the USAID Evaluation Policy).

• The report should not exceed 30 pages (excluding executive summary, table of contents, acronym list and annexes).
• The structure of the report should follow the Evaluation Report template, including branding found here or here.
• Draft reports must be provided electronically, in English, to GH Pro who will then submit it to USAID.
• For additional Guidance, please see the Evaluation Reports to the How-To Note on preparing Evaluation Draft Reports found here.

USAID Criteria to Ensure the Quality of the Evaluation Report (USAID ADS 201):

• Evaluation reports should be readily understood and should identify key points clearly, distinctly, and succinctly.
• The Executive Summary of an evaluation report should present a concise and accurate statement of the most critical elements of the report.
• Evaluation reports should adequately address all evaluation questions included in the SOW, or the evaluation questions subsequently revised and documented in consultation and agreement with USAID.
• Evaluation methodology should be explained in detail and sources of information properly identified.
• Limitations to the evaluation should be adequately disclosed in the report, with particular attention to the limitations associated with the evaluation methodology (selection bias, recall bias, unobservable differences between comparator groups, etc.).
• Evaluation findings should be presented as analyzed facts, evidence, and data and not based on anecdotes, hearsay, or simply the compilation of people’s opinions.
• Findings and conclusions should be specific, concise, and supported by strong quantitative or qualitative evidence.
• If evaluation findings assess person-level outcomes or impact, they should also be separately assessed for both males and females.
• If recommendations are included, they should be supported by a specific set of findings and should be action-oriented, practical, and specific.

Reporting Guidelines: The draft report should be a comprehensive analytical evidence-based evaluation/analytic report. It should detail and describe results, effects, constraints, and lessons learned, and provide recommendations and identify key questions for future consideration. The report shall follow USAID branding procedures. The report will be edited/formatted and made 508 compliant as required by USAID for public reports and will be posted to the USAID/DEC.

The findings from the evaluation/analytic will be presented in a draft report at a full briefing with USAID and at a follow-up meeting with key stakeholders. The report should use the following format:
• Abstract: briefly describing what was evaluated, evaluation questions, methods, and key findings or conclusions (not more than 250 words)
• Executive Summary: summarizes key points, including the purpose, background, evaluation questions, methods, limitations, findings, conclusions, and most salient recommendations (2-5 pages)
• Table of Contents (1 page)
• Acronyms
• Evaluation/Analytic Purpose and Evaluation/Analytic Questions: state purpose of, audience for, and anticipated use(s) of the evaluation/assessment (1-2 pages)
• Project [or Program] Background: describe the project/program and the background, including country and sector context, and how the project/program addresses a problem or opportunity (1-3 pages)
• Evaluation/Analytic Methods and Limitations: data collection, sampling, data analysis and limitations (1-3 pages)
• Findings (organized by Evaluation/Analytic Questions): substantiate findings with evidence/data
• Conclusions
• Recommendations
• Annexes
• Annex I: Evaluation/Analytic Statement of Work
• Annex II: Evaluation/Analytic Methods and Limitations ((if not described in full in the main body of the evaluation report)
• Annex III: Data Collection Instruments
• Annex IV: Sources of Information
  o List of Persons Interviews
  o Bibliography of Documents Reviewed
  o Databases
  o [etc.]
• Annex V: Statement of Differences (if applicable)
• Annex VI: Disclosure of Any Conflicts of Interest
• Annex VII: Summary information about evaluation team members, including qualifications, experience, and role on the team.

The evaluation methodology and report will be compliant with the USAID Evaluation Policy and Checklist for Assessing USAID Evaluation Reports

The Evaluation Report should exclude any potentially procurement-sensitive information. As needed, any procurement sensitive information or other sensitive but unclassified (SBU) information will be submitted in a memo to USIAD separate from the Evaluation Report.

All data instruments, data sets (if appropriate), presentations, meeting notes and report for this evaluation/analysis will be submitted electronically to the GH Pro Program Manager. All datasets developed as part of this evaluation will be submitted to GH Pro in an unlocked machine-readable format (CSV or XML). The datasets must not include any identifying or confidential information. The datasets must also be accompanied by a data dictionary that includes a codebook and any other information needed for others to use these data. Qualitative data included in this submission should not contain identifying or confidential information. Category of respondent is acceptable, but names,
addresses and other confidential information that can easily lead to identifying the respondent should not be included in any quantitative or qualitative data submitted.

### XIX. USAID Contacts

<table>
<thead>
<tr>
<th>Primary Contact</th>
<th>Alternate Contact 1</th>
<th>Alternate Contact 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Chynara Kamarli, MD, MBA, MSW</td>
<td>Sevim Ahmedov</td>
</tr>
<tr>
<td>Title:</td>
<td>Health Project Management Specialist, TB Lead, Project AOR</td>
<td>Senior TB Adviser, regional TB back up</td>
</tr>
<tr>
<td>USAID Office/Mission</td>
<td>USAID/Kyrgyz Republic</td>
<td>USAID/Washington</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:ckamarli@usaid.gov">ckamarli@usaid.gov</a></td>
<td><a href="mailto:sahmedov@usaid.gov">sahmedov@usaid.gov</a></td>
</tr>
<tr>
<td>Telephone:</td>
<td>+996 312 597 661</td>
<td>+1.202.207.6747</td>
</tr>
<tr>
<td>Cell Phone:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

List other contacts who will be supporting the Requesting Team with technical support, such as reviewing SOW and Report (such as USAID/W GH Pro management team staff)

<table>
<thead>
<tr>
<th>Technical Support Contact 1</th>
<th>Technical Support Contact 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
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<tr>
<td>Title:</td>
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<td>USAID Office/Mission</td>
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<td>Email:</td>
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<tr>
<td>Telephone:</td>
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<tr>
<td>Cell Phone:</td>
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</table>

### XX. Other Reference Materials

Documents and materials needed and/or useful for consultant assignment, that are not listed above

### XXI. Adjustments Made in Carrying out This SOW after Approval of the SOW

*(To be completed after Assignment Implementation by GH Pro)*
ANNEX II. EVALUATION METHODS & LIMITATIONS

This evaluation was conducted in two phases, in June and in October 2017. Phase I gathered a broad range of data from the program perspective at national, oblast, and rayon levels. Phase II assessed community and patient responses within pilot zones. The two phases provided differing but complementary information and are reported together in this evaluation.

The Phase I team was led by an international evaluation specialist and included a Kyrgyz TB specialist, a logistics coordinator, and a translator. Phase II added two Kyrgyz researchers with extensive community experience. The team leader participated on the ground for Phase I but remotely during Phase II.

As requested in the evaluation team’s scope of work, this was primarily a qualitative evaluation based on site visits, interviews, focus groups, and document reviews. Before visiting clinics, the team drafted data collection tools for key informants, patients, and community support groups (see Annex V). The patient questionnaire was standardized for each interview, but other tools were used as open-ended discussion guides to accommodate anticipated diversity in participants’ roles and functions. Key informants included the directors of the National TB Center (NTBC), the Mandatory Health Insurance Fund (MHIF), the Hospital Association of the Kyrgyz Republic, and the Republican Health Promotion Center, the country representative for the World Health Organization (WHO), and senior representatives of the National Red Crescent Society, Alternatives in Narcology, and Resource Policy Exchange. The team spent almost two full days in the DTB Project office, asking questions and hearing useful suggestions about documentation and interviews, then interviewed directors and deputies at five Family Medical Centers (FMCs), including #4 in Bishkek, one oblast and two rayon FMCs in Jalal-Abad, and one rayon FMC in Chui. The team also visited laboratories, including the impressive National Reference Laboratory in Bishkek, as well as facilities in Jalal-Abad, Suzak, and Kara-Balta.

Phase I worked primarily through program offices and primary health care (PHC) facilities, and achieved only limited contact with TB patients and community support groups. The team expected to meet DTB clients as they came for treatment; however, it quickly became apparent that additional steps would be needed to reach clients who did not seek treatment regularly and to fully understand the practical difficulties they faced in coming for daily directly observed therapy, short course (DOTS). The Phase I schedule provided insufficient time for community-level interviews; therefore, at USAID’s request, the Phase II team conducted additional data collection. Annex III lists interviews, visits, and focus groups.

In total, the teams interviewed six TB coordinators, eight nurses, and 29 patients, as well as numerous doctors, coordinators, and others. They visited five hospitals, five PHC centers, and three labs. The Phase II team organized and reported on eight focus groups with a total of 70 participants, as well as 26 individual patient interviews. The evaluation did not attempt statistical analyses of interviews and observations because they were too few and diverse for valid aggregation.

The evaluation team also conducted extensive document reviews, partly for background information but more specifically to understand DTB’s constraints and ways of working. The data annex to DTB’s Year 2 Annual Report provided significant quantitative data, but did not include age, gender, and oblast details. (DTB has noted gender data within clinic records but has not yet aggregated it.)

The scope and methodology employed for this evaluation permitted assessment only of performance, not impact. DTB acted throughout as a catalyst, not an implementer, and much credit is due to the National Tuberculosis Program (NTP), The Global Fund, and predecessor USAID projects. No counterfactual control group was available; in fact, by working at the national level, DTB induced change on a countrywide basis, not only in pilot sites. The evaluation uses time series data wherever available, but even interpretations based on these analyses may be affected by improving reporting methods and coverage.
### ANNEX III. LIST OF PEOPLE MET

<table>
<thead>
<tr>
<th>Date</th>
<th>Organization</th>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.05.2017</td>
<td>USAID</td>
<td>Nora Madrigal</td>
<td>Health and Education Office, Director</td>
</tr>
<tr>
<td></td>
<td>USAID</td>
<td>Chynara Kamarli</td>
<td>Health and Education Office, Health Project Management Specialist</td>
</tr>
<tr>
<td>23.05.2017</td>
<td>USAID DTB Project</td>
<td>Ainura Ibraimova</td>
<td>Director</td>
</tr>
<tr>
<td>24.05.2017</td>
<td>USAID DTB Project</td>
<td>Tatyana Toichkina</td>
<td>MDR TB Advisor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elmira Abdakhmanova</td>
<td>Outpatient TB Treatment Specialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nazgul Bokusheva</td>
<td>Outpatient TB Treatment Specialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nurgul Asankadyrova</td>
<td>Drug Management Specialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maka Akhalaia</td>
<td>Laboratory Specialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Klara Takieva</td>
<td>Laboratory Specialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ainura Kadyralieva</td>
<td>M&amp;E Coordinator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rahat Cholurova</td>
<td>Health Systems Strengthening Coordinator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ainura Baiborieva</td>
<td>Financial Specialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cholpon Ibraimova</td>
<td>ACSM Coordinator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dilshat Khaitov</td>
<td>ACSM Specialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Temir Tologonov</td>
<td>ACSM Specialist</td>
</tr>
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ANNEX V. DATA COLLECTION INSTRUMENTS

GUIDE FOR SEMI-STRUCTURED INTERVIEWS WITH OUTPATIENT CLINICIANS (DOCTORS AND NURSES)

Interviewer____________________________________________________________

The name of organization__________________________________________________

Location of organization __________________________________________________

# of interview ____________________________________________________________

Respondents’ name ______________________________________________________

Date of conducting interview ______________________________________________

Beginning of interview: ____hours_____minutes

Introduction

Good morning/afternoon/evening. My name is __________________. I am a researcher carrying out a study on the evaluation of the USAID Defeat TB Project. The Main objective of the evaluation is to assess the progress of the Project, document lessons learned and develop recommendations that will inform future programming directions.

The interview should take about an hour. I am kindly asking for your permission if I could go ahead with this interview. All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent.

Remember, you do not have to talk about anything you do not want to and you may end the interview at any time. Therefore, I sincerely request your cooperation in responding to the following questions. However, at any time during the course of the interview, you are free to terminate the interview.

Do you have any questions for me? Do I have your agreement to participate?

Yes: Proceed with questions

No: Thank you. Terminate the interview.

Start asking questions.

Questions for individual interviews for each respondent (doctor or nurses) to be interviewed will be selected from the questionnaire prior to the interview.

Questions:

1. Could you, please, describe main activities performed in your TB room/facility? What are your responsibilities?
2. How do you routinely manage your work in your clinic?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
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__________________________________________________________________________

3. When did you get TB training last time? What kind of support did you receive from DTB Project? Have you involved in any other activities within this Project?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

4. Do you have confidence in the technical skills of your staff or do you think that they need additional trainings?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

5. In what way family doctors are involved in treatment of TB patients? Have they been trained on TB issues? Do you think they are ready to serve TB patients?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

6. What is the role of different people in implementing case management? How is this modified co-infection with MDR?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

7. How many patients per day are you serving in average (including patients for diagnostic testing and patients referred to out-patient and inpatient treatment)?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
8. How many patients with sensitive TB and MDR TB forms are you serving currently?

9. Do you have any difficulties to keep the requirements indicated in the TB clinical guidelines? How often TB patients are tested to control treatment? Do you have any problem with anti-TB drug provision? In what cases patients have to buy any drugs? What kind of drugs?

10. How often TB patients have side effects? What do you usually undertake in such cases?

11. What is the success rate of treatment among TB patients served by your TB room/facility?

12. Do patients come every day to take pills/test? Can they come every day if they work, live far away or in case it is woman with young children? How long they have to wait for to see doctor/nurse?

13. What do you usually do if patients do not come to take pills/test? What are the main reasons to interrupt treatment? How long can this break last?

14. What is the situation in terms of infection control in case of out-patient treatment?
15. What is patients’ and their families’ perception of TB treatment at out-patient level?

__________________________________________________________________________________________________________________________________________

16. Do TB patients have any support from their families, relatives or friends? Are there any cases of stigma? Is it mostly related to TB or to co-infection and addictions?

__________________________________________________________________________________________________________________________________________

17. Do you think that the work with TB patients you work is rewarded so that you motivated enough to do your job? What would make you feel better to deal with this difficult work? Do you feel that the people you work with, your colleagues and patients that they are motivated enough to continue their treatment till the end? What beside money would motivate you to do your job for a longer time?

__________________________________________________________________________________________________________________________________________

18. Are you comfortable with your work conditions?

__________________________________________________________________________________________________________________________________________

Thank you for your time and do you have any questions or suggestions?
GUIDE FOR SEMI-STRUCTURED INTERVIEWS WITH TB PATIENTS (HOME INTERVIEWS)

Interviewer _____________________________________________________________

Location _______________________________________________________________

# of interview ___________________________________________________________

Date of conducting interview _____________________________________________

Beginning of interview: ____hours ______minutes

Introduction

Good morning/afternoon/evening. My name is ____________________________. I am a researcher carrying out a study on the evaluation of the USAID Defeat TB Project. The main objective of the evaluation is to assess the progress of the Project, document lessons learned and develop recommendations that will inform future programming directions.

According to clinic staff, you have been diagnosed with tuberculosis and are being treated as an outpatient. We would like to learn more about how ambulatory care is being managed and what difficulties you might have encountered. The interview should take about 20 minutes. I am kindly asking for your permission if I could go ahead with this interview. All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent.

Remember, you do not have to talk about anything you do not want to and you may end the interview at any time. Therefore, I sincerely request your cooperation in responding to the following questions. However, at any time during the course of the interview, you are free to terminate the interview.

Do you have any questions for me? Do I have your agreement to participate?

Yes: Proceed with questions

No: Thank you. Terminate the interview.

Start asking questions.

Questions:

1. Please tell me more about how you became sick and found out that you have TB. Do you know how you became infected? When and where were you first tested?

2. Did you begin outpatient treatment immediately, or were you hospitalized for a period of time?

3. Are you currently taking medications for tuberculosis? Do you know what they are?
4. Do you go the clinic for your medicines? How often do you go? Do you receive your meds daily, or do they give them to you for longer periods (please specify whether for a week, month, etc.)

5. Have you been able to take your pills every day? Have you ever had difficulty going to the clinic for directly observed treatment?

6. Describe the most important barriers/problems to using this TB room/facility? Other health facilities?
   - transport,
   - working hours,
   - waiting time, personnel attitude,
   - stigma (are you worried about your family that neighbours or relatives will avoid you)
   - pills’ provision,
   - access to info,
   - other

7. When you have had difficulties, have clinic staff understood your difficulties? Have they modified your treatment plan to make it easier for you to comply?

8. How have your medicines affected you? Have you had any problems that you think resulted from the medicines? What have you or the clinic staff done when this has occurred?

9. Have you ever thought about discontinuing your treatment, either because the drugs made you feel sick or because you thought that you no longer needed them?

10. Do your family and friends know that you have tuberculosis? Have your relationships with them changed since you were diagnosed?
11. Have your friends, neighbors, or somebody else helped you during your illness? In what way?

12. Have there been any interruptions during TB treatment? If yes, for what reasons and for how long?

13. Do you know when you are supposed to finish your treatment? How much information have you received about TB? And from whom: TB doctors in the hospital, nurses in the clinic, friends, media?

Thank you for your time and feel free to ask questions if you have any?
GUIDE FOR FOCUS DISCUSSIONS WITH COMMUNITY SUPPORT GROUPS

Interviewer _____________________________________________________________

The name of organization _________________________________________________________

Location of organization _____________________________________________________________

# of interview _____________________________________________________________

Date of conducting interview _____________________________________________________________

Beginning of interview: ____hours ______minutes

Introduction

Good morning/afternoon/evening. My name is __________________. I am a researcher carrying out a study on the evaluation of the USAID Defeat TB Project. The Main objective of the evaluation is to assess the progress of the Project, document lessons learned and develop recommendations that will inform future programming directions.

This discussion should take about one hour. I am kindly asking for your permission to join the focus group. All responses will be kept confidential. This means that your interview responses will only be shared with research team members, and we will ensure that any information we include in our report does not identify you as the respondent.

Remember, you do not have to talk about anything you do not want to and you may end the interview at any time. Therefore, I sincerely request your cooperation in responding to the following questions. However, at any time during the course of the interview, you are free to terminate the interview.

Do you have any questions for me? Do I have your agreement to participate?

Yes: Proceed with questions

No: Thank you. Terminate the interview.

Start asking questions.

Questions / Topics for discussions:

1. As you know, tuberculosis affects many people in Kyrgyzstan and can create family hardship and economic problems.

2. What do you know about Tuberculosis? Is there TB in your community, and how has it affected people that you know?

3. If diagnosed with TB, do people have sufficient support to complete the treatment? If not, what might help them to complete the treatment?

4. If somebody has TB in your community, do relatives and friends help the family, or are they concerned about infection? How do they respond?

5. Would the family support relatives receiving ambulatory treatment for tuberculosis?

6. Do you think that there are things that your group and community can do to reduce tuberculosis
7. The National TB program, assisted by USAID (Defeat TB), is trying to help communities cope better with tuberculosis. Do you think this is helping? Do you think they should do more?

Thank you for your time.

Issues to probe

- **User perspectives on government hospitals and clinics**: Are clinics considered “friendly” places? How comfortable are community members in going for testing and treatment? Do clinic staff understand community life and constraints and – for DOTS patients – adapt daily and weekend treatment to user constraints?

- **Stigma**: How common is it? How does it affect promptness of testing, completion of required treatment? Do spouses reject sick persons?

- **Support for family caretakers**: Do family, neighbors and others share the burdens of those under treatment? Does fear of family burdens cause people to delay testing?

- **Fear of infection**: Do people avoid ambulatory patients because they fear infection?

- **Program interventions**: What has the project done to engage communities for more proactive roles? Is it only communication through the Republican Health Promotion Center, or have program people worked directly with community organizations?

- **Community groups without program outreach**: Are they different from communities where the project has actively engaged communities? Can we see benefit from project efforts?
ANNEX VI. DISCLOSURE OF ANY CONFLICTS OF INTEREST

GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT PROJECT

USAID NON-DISCLOSURE AND CONFLICTS AGREEMENT

USAID Non-Disclosure and Conflicts Agreement-Global Health Program Cycle Improvement Project

As used in this Agreement, Sensitive Data is marked or unmarked, oral, written or in any other form, "sensitive but unclassified information," procurement sensitive and source selection information, and information such as medical, personnel, financial, investigatory, visa, law enforcement, or other information which, if released, could result in harm or unfair treatment to an individual or group, or could have a negative impact upon foreign policy or relations, or USAID's mission.

Intending to be legally bound, I hereby accept the obligations contained in this Agreement in consideration of my being granted access to Sensitive Data, and specifically I understand and acknowledge that:

1. I have been given access to USAID Sensitive Data to facilitate the performance of duties assigned to me for compensation, monetary or otherwise. By being granted access to such Sensitive Data, special confidence and trust has been placed in me by the United States Government, and as such it is my responsibility to safeguard Sensitive Data disclosed to me, and to refrain from disclosing Sensitive Data to persons not requiring access for performance of official USAID duties.

2. Before disclosing Sensitive Data, I must determine the recipient’s “need to know” or “need to access” Sensitive Data for USAID purposes.

3. I agree to abide in all respects by 41, U.S.C. 2101 - 2107. The Procurement Integrity Act, and specifically agree not to disclose source selection information or contractor bid proposal information to any person or entity not authorized by agency regulations to receive such information.

4. I have reviewed my employment (past, present and under consideration) and financial interests, as well as those of my household family members, and certify that, to the best of my knowledge and belief, I have no actual or potential conflict of interest that could diminish my ability to perform the duties assigned to me in an impartial and objective manner.

5. Any breach of this Agreement may result in the termination of my access to Sensitive Data, which, if such termination effectively negates my ability to perform the duties assigned, may lead to the termination of my employment or other relationships with the Departments or Agencies that granted my access.

6. I will not use Sensitive Data, while working at USAID or thereafter, for personal gain or detrimentally to USAID, or disclose or make available all or any part of the Sensitive Data to any person, firm, corporation, association, or any other entity for any reason or purpose whatsoever, directly or indirectly, except as may be required for the benefit USAID.

7. Misuse of government Sensitive Data could constitute a violation, or violations, of United States criminal, and Federally-affiliated workers (including some contract employees) who violate privacy safeguards may be subject to disciplinary actions, a fine of up to $5,000, or both. In particular, U.S. criminal law (18 USC § 1905) protects confidential information from unauthorized disclosure by government employees. There is also an exemption from the Freedom of Information Act (FOIA) protecting such information from disclosure to the public. Finally, the ethical standards that bind each government employee also prohibit unauthorized disclosure (5 CFR 2635.703).

8. All Sensitive Data to which I have access or may obtain access by signing this Agreement is now and will remain the property of, or under the control of, the United States Government. I agree that I must return all Sensitive Data which has or may come into my possession (a) upon demand by an authorized representative of the United States Government; (b) upon the conclusion of my employment or other relationship with the Department or Agency that last granted me access to
9. Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that: (i) is or becomes generally available to the public other than as a result of an unauthorized disclosure by me; (ii) becomes available to me in a manner that is not in contravention of applicable law; or (iii) is required to be disclosed by law, court order, or other legal process.
Global Health Program Cycle Improvement Project

Sensitive Data; or (c) upon the conclusion of my employment or other relationship that requires access to Sensitive Data.

9. Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that: (i) is or becomes generally available to the public other than as a result of an unauthorized disclosure by me; (ii) becomes available to me in a manner that is not in contravention of applicable law; or (iii) is required to be disclosed by law, court order, or other legal process.

Acceptance

The undersigned accepts the terms and conditions of this Agreement.

October 10, 2017

Signature

Aigul Alymkulova

Date

Doctor

Name

Title

I consulted the French Office of ART Associates Inc in Kyrgyz Republic USAID Defeat TB on gender issues, based on a temporary short-term contract. Dates of employment are January-July 2017, Total 53 days. The scope of work is as described below:

In collaboration with the Project staff and other relevant stakeholders he/she will work to provide consultancy in the area of gender and TB and assist with implementation gender related challenges into the project activities.

Specific activities:

1. Draft review and updating training materials on TB patient management, psycho-social counseling, TB stigma and discrimination with emphasis on gender related differences.

2. Develop separate session on Gender issues for training materials (lectures and case studies) for different types of target audience which planned to be trained under the project (medical workers, outreach workers, village leaders, Community leaders).

3. Provide special training session on gender specific considerations during training on case finding, follow up and adherence of TB patient.

a. Three training for PHC, MDR, SLB doctors (in 3 pilot sites: Bishkek, Chui and Jalal-Abad oblasts)

b. Three training for PHC nurses and outreach nurses of the National Red Crescent Society (in 3 pilot sites: Bishkek, Chui and Jalal-Abad oblasts)

c. One training for staff of Alternative in Naryn to counseling clients with TB and their families to improve adherence to treatment, including mothers with children, and providing information for family members on infection control measures of home.


5. Contribute to development of Guidelines on Psychological counselling for PHC health workers and ensure that gender specific issues are included in the guidelines.

6. Contribute to development of Guidelines for religious leaders on TB prevention, benefits of outpatient treatment and TB patient adherence to treatment. To ensure that gender specific issues are included in the guidelines.

7. Contribute to Survey with focus on gender differences in management TB patients, their access to TB services, need of TB patients; stigma etc. to ensure that gender related issues are considered and included in the Survey.

This conflict of interest was raised directly with USAID who reviewed and approved the GCO form and confirmed confidence in the consultant's ability to evaluate the project without bias. To mitigate this I informed the leader of this evaluation has instructed Ms. Alymkulova that she should recuse herself from evaluating any of her past work on the project. Additionally, as a gender specialist on the project, she would recuse her self from participating in any gender-focused focus groups.
GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT
PROJECT

| Sensitive Data; or (c) upon the conclusion of my employment or other relationship that requires access to Sensitive Data. 
| Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that: 
| (i) is or becomes generally available to the public other than as a result of an unauthorized disclosure by me; (ii) becomes available to me in a manner that is not in contravention of applicable law; or (iii) is required to be disclosed by law, court order, or other legal process.

| ACCEPTANCE |
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**ACCEPTANCE**
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<tr>
<td>Sergei Gavrilin</td>
<td>Mr.</td>
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August 30, 2017

Signature Date
GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT PROJECT

Sensitive Data; or (c) upon the conclusion of my employment or other relationship that requires access to Sensitive Data.

9. Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that: (i) is or becomes generally available to the public other than as a result of an unauthorized disclosure by me; (ii) becomes available to me in a manner that is not in contravention of applicable law; or (iii) is required to be disclosed by law, court order, or other legal process.

ACCEPTANCE
The undersigned accepts the terms and conditions of this Agreement.

[Signature]

Signature Date

[Name]

Name Title
GLOBAL HEALTH PROGRAM CYCLE IMPROVEMENT
PROJECT

9. Notwithstanding the foregoing, I shall not be restricted from disclosing or using Sensitive Data that:
   (i) is or becomes generally available to the public other than as a result of an unauthorized disclosure by me; (ii) becomes available to me in a manner that is not in contravention of applicable law; or (iii) is required to be disclosed by law, court order, or other legal process.

ACCEPTANCE
The undersigned accepts the terms and conditions of this Agreement.

Signature: [Signature]
Date: April 6, 2017

Name: Gulasel Nogoibaeva
Title: Program Assistant

Logistics Coordinator
ANNEX VII. SUMMARY BIOS OF EVALUATION TEAM

Wayne Stinson, Team Lead, is a widely experienced public health evaluator, with special interest in quality of care, management information systems, community engagement, and primary health care interventions. He has lived and worked in Thailand, India, Nepal, and several African countries, and has additional professional experience in Bangladesh, Cambodia, Indonesia, and Myanmar.

Aigul Alymkulova, TB Specialist, has been a health/gender and health specialist since 1997. She participated in and often led teams in various studies, including on healthcare systems and gender aspects of health issues. She took part in monitoring and evaluation and other assignments in Kyrgyzstan, Kazakhstan, Turkmenistan, and Russia (North Caucasus), and worked on the development of national/organizational strategies. She has been a civil society activist since 1996.

Sergei Gavrilin, TB Specialist, has participated in international health programs and worked with key affected populations since 2000. He has acted as consultant and manager in various regions, including as a regional USAID-funded HIV project director in Eastern Europe, Baltic Sea States, and the Russian Federation. In Central Asia and in Kyrgyzstan, he worked with HIV and TB patients, presented patients’ interests in the Country Coordinating Mechanism, developed non-governmental and community-based organizations, and was a consultant with the Global Fund.

Gulgun Murzalieva, TB Specialist, is an M&E specialist with extensive experience evaluating health care delivery arrangements, including equity, quality of care, access to health services, gender, restructuring of health care systems, primary care, hospital care, and human resources). She has also worked with programs in the areas of HIV, TB, and maternal and child health. An MD and PhD, she has participated in multi-country studies and performed evaluations and training activities on health policy issues for Central Asian countries.

Gulasel Nogoibaeva, Logistics Coordinator/Research Assistant, has experience as an internal auditor and acting operations manager in microfinance, a project manager and trainer in local organizations, and a program development officer and grant manager in international organizations. She has conducted participatory community appraisals and participated in research in gerontology, improvement of maternal and child health, improvement of social services, the status and prospects of NGO sector development in the Kyrgyz Republic, and prevention of corruption in oncological health care facilities. She holds an MD degree from the Kyrgyz State Medical Institute and an MBA from the Academy of Management.
For more information, please visit
http://ghpro.dexisonline.com/reports-publications