

**GFATM ROUND 4 GRANT FOR TB CONTROL**  
**TO THE RUSSIAN FEDERATION**  
**GFATM-RHCF END OF PROGRAM EVALUATION**

**May-June 2011**

The evaluation team thanks the IFRC and the staff of the institutions visited for their cooperation to carry out the mission; and the health authorities of Saratov, Karelia and Khakhasia for the personal attentions received during the field visits.

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## Abbreviations

|           |  |
|-----------|--|
| AIDS      | Acquired immune deficiency syndrome                                      |
| CDR       | Case detection rate  |
| CEQCCLR.  | Center of External Quality Control of Laboratory Research                |
| CRIMISHC  | Central Research Institute for Management and Information in Health Care |
| CTRI      | Central TB Research Institute  |
| DOT       | Directly observed treatment  |
| DOTS      | WHO-recommended TB control strategy                                      |
| DR        | Drug resistance  |
| DST       | Drug susceptibility testing  |
| EQA       | External quality assurance   |
| FLD       | First line drugs   |
| FSIN      | Federal Penitentiary System of the Russian Federation                    |
| GFATM, GF | Global Fund to Fight AIDS, Tuberculosis and Malaria                      |
| GLC       | Green Light Committee  |
| HIV       | Human immunodeficiency virus   |
| HLWG      | High Level Working Group on tuberculosis of the Russian Federation       |
| HRD       | Human resource development   |
| IFRC      | International Federation of Red Cross and Red Crescent Societies         |
| ISTC      | International Standards for Tuberculosis Care                            |
| MDR       | Multi-drug resistance  |
| MDR-TB    | Multi-drug-resistant tuberculosis  |
| MMR       | Mass miniature radiography; photofluorography in the general population  |
| NGO       | Nongovernmental organization   |
| MoHSD     | Ministry of Health and Social Development                                |
| NTP       | National Tuberculosis Control Program                                    |
| PHC       | Primary health care  |
| PIH       | Partners in Health (NGO)   |
| PPD       | Purified tuberculin  |
| PTB       | Pulmonary tuberculosis   |
| RAMS      | Russian Academy of Medical Sciences                                      |
| RF        | Russian Federation   |
| RHCF      | Russian Health Care Foundation   |
| RIPP      | Research Institute of Phthisiopulmonology, Moscow Medical Academy        |
| RRC       | Russian Red Cross  |
| SLD       | Second-line drugs  |
| TB        | Tuberculosis   |
| TB/HIV    | Patients co-infected with HIV and TB                                     |
| USD       | United States dollars  |
| WB        | World Bank   |
| WHO       | World Health Organization  |
| XDR       | Extensively drug resistant tuberculosis                                  |

## Executive Summary

In 2004 the Global Fund (4<sup>th</sup> Round) approved a grant to strengthen TB control in the Russian Federation. The grant was implemented by the Russian Health Care Foundation (RHCF) between 2005 and 2010. An end of program evaluation of the implementation and outcomes of the grant was carried out from 15 to 28 May 2011. The evaluation was coordinated by the International Federation of Red Cross/Red Crescent and carried out by two international and two national TB consultants that reviewed documents and interviewed staff of the civilian and the prison system in Moscow, Saratov, Khakhasia and Karelia.

The grant represented less than 3% of the funds available for the TB program during the period, and complemented a WB loan for the same time-frame. The government budget for TB increased fourfold during the period and is now over 1 billion US dollars per annum (about \$8000 per patient or \$10 per capita). The reported TB incidence has kept stable (84 per 100 000 in 2005 and 82.6 in 2009), with a large proportion of cases diagnosed and treated without bacteriological confirmation. Treatment success in new smear positive cases (the cohort of 2008 is the last available data) is very low (57.4%) and decreasing, with a large proportion of cases lost from treatment (default and transfer 12.9%), dead (11.9%) and failures (17.8%). Failures include not only cases found to have MDR-TB but also a large proportion of cases considered failure on the basis of clinical criteria and X-rays, without positive bacteriology.

In this context, the project aimed to scale up TB services, laboratory renovations, supplies and equipment, training to improve diagnosis and treatment, and expansion of DOTS-Plus for multidrug-resistant TB. The Round 4 application identified as main problems the national TB control policy; over-reliance on clinical diagnosis, MMR and inpatient treatment; low success in initial treatment; and diagnosis and management of MDR-TB.

The GF grant funds were implemented effectively and the management by the Principal Recipient RHCF was perceived as appropriate and flexible to program needs by the persons interviewed at regional level and the health system of the prisons (MoJ). The coordination of the RHCF, the technical agencies collaborating in the program, the regional level (Republics, oblasts) and the prison system was good. The management and the coordination at regional level between the officers responsible for TB, for the general health system and correctional system are satisfactory

The GF grant had a substantial and disproportionate impact on the capacity for TB control, particularly in support to the laboratory (human resource capacity and equipment); the information system and the capacity to diagnose and treat MDR-TB. GF support was essential to develop areas inadequately funded or given priority by the government budge, such as diagnostic equipment, second line drugs and technical assistance to develop MDR-TB management capacity. The funds were essential for the prison system, where TB interventions are underfunded. TB incidence and mortality have diminished substantially in the prisons. The project supported improvement of drug procurement and supply and develop models for social support.

However, the project was unable to influence current guidelines and practices that are ineffective to reduce TB transmission, to increase cure and to prevent MDR. Ineffective practices include mass X-ray and PPD screening, mandatory hospitalization, diagnosis of a large proportion cases without

laboratory confirmation and non-standard treatment. Infection control has improved but is still poor in many of the facilities visited during the evaluation.

The external support of the GF and technical agencies, minor in comparison with the huge government TB budget, has facilitated a basis for MDR-TB diagnosis and treatment but cannot compensate for the number of MDR patients created by ineffective program interventions and generalized poor diagnostic and treatment practices. It can be expected that MDR-TB will continue growing and that the expansion of HIV infection will increase TB incidence in the immediate future.

The main recommendations are:

To the government:

- The Ministry of Health should reconsider the costly control interventions which have proven ineffective globally and in Russia to reduce TB transmission, in particular hospitalization, mass X-ray and PPD screening, and clinical diagnosis without laboratory confirmation. Operational research on the effectiveness of the interventions would be of value to guide national policy.
- A NTP team at national level to help managing and supervising the TB program (including MDR-TB) is part of the DOTS strategy formally adopted by the Russian Federation but does not exist. Its public health functions would be best carried out from the Central Research Institute for Management and Information in Health Care, which already has staff that can be trained in the new functions.
- The government should ensure that the most effective components of TB control are well funded (supplies for laboratory diagnosis, first and second line drugs), expand rapid diagnosis and DST, and ensure that the laboratory results are the main criteria for diagnosis of TB, particularly for retreatment cases.
- The national TB program should reconsider the criteria of failure and base it on bacteriology, revise the treatment regimen as per the latest WHO guideline and give priority to laboratory diagnosis over clinical methods and X-ray.
- The national TB program should reduce the number and utilization of TB beds nationally, and promote home-based supervised treatment through primary health care and community based paramedical staff.
- Quality-assured fixed dose combinations of TB drugs should be adopted also by the civilian sector and drug prices of FLD and SLD should be negotiated to approach international costs.

To the GFATM:

- The GF should pay more careful attention to the real context of the recipient country; to the implementation of the DOTS strategy, the international standards for TB care and the WHO technical recommendations in everyday practice; and to the selection of interventions that will have a major impact on TB transmission. Supporting national program reviews with participation of the technical agencies would help to improve GF decisions.

- Future GF grants -if any- to the Russian Federation and other countries in the ex-Soviet Union with similar epidemiological pattern should focus on critical components of the program such as prevention and control of MDR TB.

To technical support partners

- WHO should concentrate its technical assistance on strengthening the management of the program at national level, updating the national guidelines to current international recommendations and supporting operational research to convince the authorities and specialists that global knowledge is also valid in the Russian Federation.
- The GLC should consolidate its site reports in an annual monitoring report and promote the establishing of a counterpart unit at national level to support expansion and monitoring of MDR-TB, as committed by the government in the Round 4 GF application.

## Introduction

In 2004 the Russian Federation applied to the GF (4<sup>th</sup> Round) for a grant to strengthen TB control. The grant was approved and implemented by the Russian Health Care Foundation (RHCF) between 2005 and 2010.

An end of program evaluation of the implementation and outcomes of the GF grant to support TB control in the Russian Federation was carried out from 15 to 28 May 2011. The evaluation was coordinated by the Regional Office of the International Federation of Red Cross/Red Crescent and was carried out by two international consultants (Dr Fabio Luelmo and Dr Tushar Kanti Ray) and two national consultants (Dr. Elena Nikishova – chief lecturer of the TB department, North State Medical University, and Dr. Svetlana Safonova – Chief Bacteriologist of the Federal Service of Sentence Execution). The present report summarizes the findings of the evaluation team through analysis of the planning and monitoring documents, interviews with parties involved and findings during field visits in Moscow, Saratov, Khakhasia and Karelia.

As the GF supported activities were an intrinsic part of the national program to control TB, the report includes an analysis of the use and impact of the additional financial resources from the grant (in the future called “the project”) and also the general structure and results of the national TB control program (in future called “the TB program”). The report provides observations and recommendations to the GF for future support to countries and to the government of the Russian Federation on strategies to increase the impact and cost effectiveness of the national technical and financial resources to reduce TB.

## Objectives and methods

The objectives of the evaluation were to evaluate the extent of progress and the relevance, effectiveness, efficiency, sustainability and impact of the program activities and formulate recommendations. Specific objectives included the following:

- To assess activities, inputs, process, output, accomplishment as implemented by RHCF as PR and make recommendations to the Principal recipient and CCM under TB Round 4.
- To assess the grant implementation and program achievement against targets
- To evaluate the grant expenditure against the grant plan, the steps followed and challenges encountered in procurement.
- To assess the activities of PR and fulfillment of TOR as specified in the initial proposal and CCM document and its effectiveness in each service delivery area.
- To identify significant program changes made in the course of program implementation.
- To assess the PR and CCM capacity and structure for managing GF in relation to human resource and infrastructure, and the extent to which the GF structures have been fulfilling their roles.
- Assess whether GF funds in the Russian Federation are efficiently utilized and whether GF funds are making a substantial contribution to control Tuberculosis,
- Document lessons learned and best practices during the implementation phase.

The results of the evaluation will be used to strengthen future implementation of similar GF programs. The findings will help in planning project documents for future rounds of the GF. It will also highlight areas where funding should be allocated. The end of program review will try to identify the Global fund structure at country level and review its effectiveness.

An inception report was prepared and presented to the IFRC on the basis of the terms of reference and documents provided. The matrix including the main issues evaluated is included as Table 1 below. Before leaving Russia, members of the team shared the findings and conclusions of the evaluation in a debriefing attended by the Russian Health Care Foundation, the IFRC and WHO.

The terms of reference of the evaluation are included as Annex 1, Scope of work. The list of key persons interviewed and institutions visited by the evaluation team is included as Annex 2. The list of documents consulted is included as Annex 3.

Table 1  
Evaluation matrix

| Criteria                        | Questions   | Sources   | Methods/tools              | Indicators   |   |   |                                |
|---------------------------------|---|---|----------------------------|--|---|---|--------------------------------|
| Grant implementation            | Expenditure   | Grant performance report                        | Desk review                |  |   |   |                                |
|                                 | PR management   | PR, SRs, program field staff                    | Interviews                 |  |   |   |                                |
|                                 | Constraints and changes   | PR, SRs, program field staff                    | Interviews                 |  |   |   |                                |
|                                 | PR and CCM capacity   | PR, SR, CCM                                     | Interviews                 |  |   |   |                                |
| Achievements                    | Against targets   | Performance reports                             | Desk review                |  |   |   |                                |
|                                 |   | PR, SRs, program field staff                    | Interviews                 |  |   |   |                                |
|                                 | For effective TB control  | PR, SRs, program field staff                    | Interviews                 | Compliance with DOTS<br>Population and patient access<br>Case detection / sputum microscopy<br>Success / patient loss rate   |   |   |                                |
|                                 |   | Field visits                                    | Observation and interviews |  |   |   |                                |
| WHO and RF reports              | Analysis  |   |                            |  |   |   |                                |
| Impact                          | On national policy  | PR, SRs, NTP staff                              | Interviews                 |  | National funding, costs, hospitalization, ambulatory care, DOT, FDCs, mass screening, TB treatment for diagnosis, treatment post cure, criteria for success/failure |   |                                |
| Operational                     | Operational   | WHO and RF reports                              | Analysis                   | Case detection/sputum microscopy<br>% of smear/culture positive among new cases and re-treatments<br>Success/default rate<br>Number of MDR on treatment<br>Information system; Laboratory capacity |   |   |                                |
|                                 |   |   |                            | Epidemiological  | WHO and RF reports  | Analysis  | Trends of incidence, mortality |
|                                 |   |   |                            | Constraints and lessons learned  | Did the grant made a substantial improvement in TB control? Why?  | PR, SRs, program field staff<br>Assessment team | Interviews and analysis        |
| Constraints and lessons learned | What were the problems and which are the needs and priorities for future support? | PR, SRs, program field staff<br>Assessment team | Interviews and analysis    | See impact above   |   |   |                                |

## Background

### Epidemiology of tuberculosis in the Russian Federation

Russia is a federation comprising 49 oblasts, 21 republics, 10 autonomous okrugs, 6 kays, 2 federal cities, and 1 autonomous oblast. The capital is Moscow. The population is estimated at 141 million (2009). Russia is in the 12<sup>th</sup> position among one of 22 high-TB-burden countries in the world, based on WHO estimates of the total burden of TB disease. The estimated TB incidence (all forms) in 2009 was 106 per 100 000 (150 000 cases)<sup>1</sup>. The estimated TB mortality in 2009 was 18 per 100000 (25 000 TB deaths per year).

Resistance to TB drugs is a major problem. The proportion of multi-drug-resistant TB (MDR-TB) was estimated at 10% of new cases and 40% of previously treated cases on the grant application; and according to the 2010 WHO Global Tuberculosis Report, 17 percent of new TB cases reported had MDR-TB. The 2009 Report on Tuberculosis in Russia indicates a prevalence of 15.4% MDR-TB in new cases and 33.5% in relapses<sup>2</sup>. This is a substantial increase from the estimates in 2008, respectively 13.6 % and 28.8%. In the prison system the proportions were 20.2% in new cases and 34.9% in relapses in 2008 and 20.1% in new and 36.6% in relapses in 2009.

Reported incidence declined gradually from 70 per 100 000 in 1970 to 48 in 1980 and 34 in 1990, probably reflecting a gradual decrease in the TB burden. The breakdown of the former Soviet Union resulted in deterioration of the social conditions including an increase in poverty and homelessness and internal migration, and a breakdown of TB drug supplies which resulted in an erratic supply of anti-TB drugs, inadequate treatment, and drug resistance. Reported TB incidence almost tripled from 50 641 cases in 1990 to 140 677 in 2000. Since then there was a very slow decrease in cases reported until 2010, mainly influenced by a reduction of cases in the prison system (Figure 1). Contributing factors were a decrease in population, a significant (over 60 percent) reduction of TB cases in prisons, and gradual improvement of health services and social conditions.

In 2009 the country reported 126 227 new and relapse TB cases, of which 33350 were new pulmonary smear-positive (23.5 per 100 000). Most detected TB cases were registered by Ministry of Health and Social Development (MoHSD) facilities. The notification rate for smear-positive cases increased slightly from 2005 to 2008 (Figure 2), due mainly to expansion of laboratory capacity and changes in diagnostic practices (more emphasis on laboratory confirmation). However the majority of the TB cases reported is diagnosed on clinical and radiological basis: only 42% of the cases are confirmed by bacteriology (smear or culture). Most of the cases reported are pulmonary, with extra-respiratory TB representing less than 4% of the total and decreasing<sup>3</sup>.

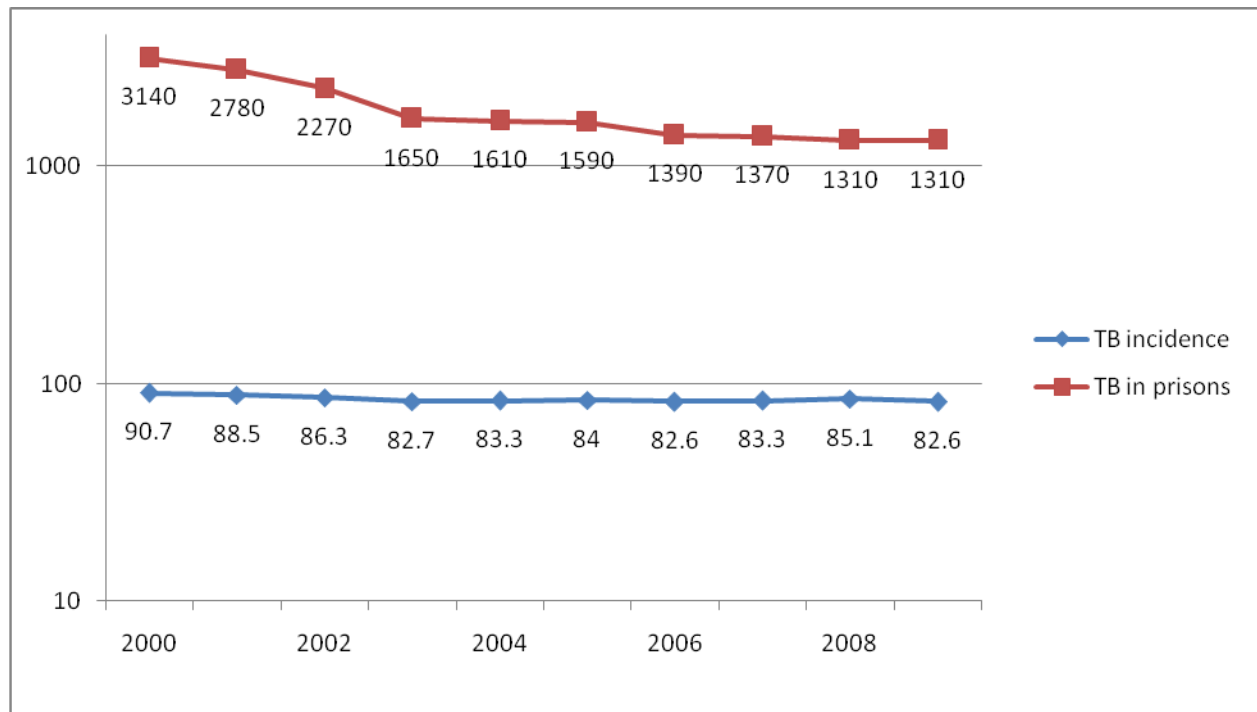
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<sup>1</sup> Global Tuberculosis Control: WHO Report 2010

<sup>2</sup> Tuberculosis in the Russian Federation, 2009

<sup>3</sup> Tuberculosis in the Russian Federation, 2008

Figure 1  
 Reported TB incidence in prisons and general population in Russia, 2000-2009. Rates per 100 000 population



The TB notification rate in prisons decreased from 3 137 cases per 100 000 in 2000 to 2 027 cases per 100 000 population in 2002 and 1 308 in 2008. TB mortality in prisons decreased from 181 deaths per 100 000 population in 2000 to 112 per 100 000 in 2002 and 80.1 in 2008. In 2008 TB in prisons represented about 10 percent of the total cases, a substantial reduction in eight years.

### TB control in the Russian Federation

At the regional level, all TB services are provided by specialized facilities called tuberculosis dispensaries, TB hospitals and TB sanatoria. Each of the Russian regions has one or more dispensaries. In large and populous regions where more than one dispensary is present, one of them is appointed to co-ordinate activities in that region. A 1995 MoHSD decree specifies the functions of the dispensaries. The national TB program is the responsibility of the Ministry of Health, under the Director of the Department on Health Protection and Sanitary and Epidemiological Control, but there is no fully dedicated TB team at that level. The Central Research Institute for Public Health is responsible for information and policy, it is well staffed and it has obtained, analyzed and published valuable TB data in collaboration with other national institutions and WHO.

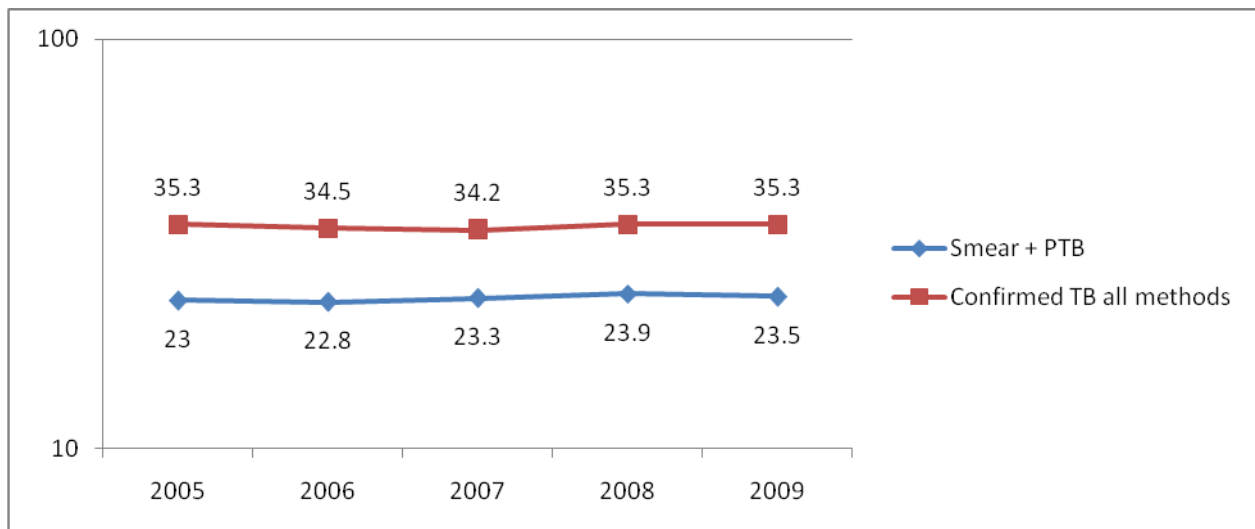
At regional level the responsibility is with the regional health authority, usually backed by fully dedicated specialized professionals from the TB dispensary network. In addition, a network of five Tuberculosis Research Institutes provides specific technical and methodological assistance to the regional tuberculosis services. The leading role belongs to the Russian Institute of Phthisiopulmonology (RIPP) in Moscow. The institutes include regional reference laboratories.

Tuberculosis control in prisons is the responsibility of the Department of Health of the Federal Service for Sentence Execution (FSSE) in the Ministry of Justice. The prison system has its own network of TB laboratories, human resources and beds for TB including MDR-TB.

The Russian Federation has formally adopted the DOTS strategy, with 100 percent coverage since 2007. Political commitment is high as evidenced by a very large government funding, but there is no managerial TB unit (with focus on public health) in the Ministry of Health and many TB control interventions and norms differ from internationally recommended standards<sup>4</sup>. Drug supply is still occasionally irregular and the civilian sector still uses separate drugs, case detection is mainly based on screening of the general population, a substantial proportion of patients are diagnosed without bacteriological confirmation, and treatment is almost fully through hospitalization (average stay 80 days in hospital, in many cases followed by 2 months in sanatoria). The national TB program has a very large budget (over 1 billion dollars per year), almost all is government funding. About 40% of this budget corresponds to activities not directly related to patient diagnosis and treatment (research, surveys, other)<sup>5</sup>.

Figure 2

Reported TB incidence confirmed by all diagnostic methods and pulmonary smear positive TB in Russia, 2005-2009. Rates per 100 000



<sup>4</sup> TBCTA. International Standards for Tuberculosis Care (ISTC). Tuberculosis Coalition for Technical Assistance, The Hague, 2006.

<sup>5</sup> WHO, 2011: [www.who.int/tb/data](http://www.who.int/tb/data)

The country is slowly modifying its traditional strategies to comply with internationally recommended methods of TB control. Major steps were Order #109 of the Ministry of Health (March 2003) and its annexes, and the Statute of the High Level Working Group on TB in the Russian Federation (HLWG), November 2005. However, many old practices that are currently not recommended internationally are still maintained in the guidelines and in practice. These include repeated BCG vaccination, case detection through mass screening of children with tuberculin tests and of the general population with mass miniature radiography (MMR) or normal X-ray film, a large number of specialized TB hospitals, sanatoria and TB beds with systematic hospitalization, restriction of the diagnosis and treatment indication to TB specialists even in cases confirmed by the laboratory, use of specific TB drugs as a method for differential diagnosis, changes in treatment regimens and definition of failure based on clinical and radiological evolution, active follow-up of cured patients and post-cure “seasonal” treatment. They contribute to the high costs of the national TB program (over US\$8 per capita or \$10000 per patient in 2010), reduce the focus on prevention of transmission by infectious sources and may contribute to drug resistance. Integration of TB care in general health facilities is still rare, limiting the patient access to ambulatory treatment. Major factors to slow progress are the low priority given to interrupt transmission versus clinical diagnosis and the restrictions to change imposed by current national documents (prikazes). As a consequence treatment success rates have diminished and MDR-TB has increased in the past decade, in spite of major increases in government funding. In 2008, cohort analysis of newly reported cases showed treatment success of 57.4 percent, 34 percent in re-treatment cases and 75% in new smear negative and extra-pulmonary TB. In 2009 treatment success was 54% in new smear-positive patients and 30 percent in re-treatment cases.

The low initial treatment success rates are strongly influenced by high mortality during treatment (12 percent in new cases) and by high proportion of failures (18% in new cases in 2008, 20% in 2009). Failures include changes of treatment, mainly due to confirmation of multidrug resistance (MDR), but also (different from the international norms) patients that did not respond clinically or still had X-ray lesions “active” in the opinion of the treating specialist. Failures may also include patients that show resistance to one or more drugs and have changed regimens by adding second line drugs. Due to the high prevalence of MDR and mortality during treatment, the success rate is not a very good indicator of program effectiveness; the proportion of patients lost (default, transfer, outcome not evaluated) would be more useful to compare the program capacity to ensure treatment compliance with the expected results and with other countries.

In 2009 the default rate for new TB cases in the Russian Federation was 9 percent, transfer 4% and not evaluated 3%; a total of 16% of cases lost from control of the program. In re-treatments the default rate was 11%, the death rate 12% and the failure rate 28%; 13% were not evaluated. A consequence of high default and other lost cases (including not evaluated), as of irregular drug supply, is the development and transmission of drug resistant TB, which has very high levels and is still increasing. MDR in new culture positive patients was 12.8% in 2007, 13.6% in 2008 and 15.5% in 2009. The corresponding figures for previously treated relapse cases were 27.3%, 29.5% and 33.7%. This recent increase cannot be fully attributed to the past social and economic problems but is a result of still inappropriate treatment practices.

## GF support for TB control in the RF

In 2004 the Russian Federation applied to the GF (4<sup>th</sup> Round) for a grant of US\$92.5 million in five years to strengthen TB control. The proposal<sup>6</sup> was based on implementation of the WHO-recommended DOTS strategy and would expand the experience of a previous GF Round 3 grant to support a pilot project in Tomsk through PIH (now in the extension phase for 6 years). Priorities of the project were scaling up of standardized treatment and directly observed therapy (DOT) in outpatient settings or home care, and insuring adherence to treatment.

The principal recipient was the Russian Health Care Foundation (RHCF), with multiple organizations providing implementation and technical assistance. Support complemented a \$100 million World Bank loan. The main areas for funding were staff training (\$5 Million), laboratory equipment (\$16 million), social support to patients and centers of excellence (\$14 million), second line drugs (\$18 million) monitoring and supervision (\$8 million), infection control (\$9 million) and infrastructure (\$11 million). The grant was estimated to provide an additional 20% annually to the financial resources available.

The grant was aimed to strengthen TB control and contribute to the improvement of the NTP indicators. Specific targets for the last year of the grant (2009) were increasing case detection of smear positive cases from 27% to 70%, success from 68% to 80%, reduction of TB mortality from 21.6 per 100 000 to 18 and stabilization of TB case notification. Planned activities to strengthen MDR-TB control included the creation of a supervisory team at the Ministry of Health and establishment of five regional centers; implementation of 300 facilities with appropriate infection control standards in 88 territories to provide DOTS-Plus patient management; laboratory strengthening for culture and susceptibility testing (DST) and procurement of second line drugs. Support to the prison system was mainly in the area of monitoring of diagnosis and treatment. Other planned activities included training of human resources in prevention and management of TB/HIV, strengthening of the information system, supervision and monitoring.

The approved amount was US\$88 million, to be implemented from December 2005 to November 2010. The main areas were strengthening health system coordination and management of supplies, DOT, infection control, management of drug resistance, monitoring of case management (detection and treatment) and prevention of HIV and ARV treatment in TB patients. The implementation of the project was classified as B1 by the GF. The results according to the GF monitoring system<sup>7</sup> and comments on the indicators used are included in Table 2.

A new application to support TB control in RF for a total of US\$127 million, mainly to strengthen MDR-TB management and TB/HIV, was presented to the GF in 2010. Support for the initial 2 year phase was approved by the GF board for a total of \$63.4 million. The grant is still in negotiations with the RF government and has not yet been signed.

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<sup>6</sup> GFATM, [www.theglobalfund.org/en/](http://www.theglobalfund.org/en/). Promoting a Strategic Response to HIV/AIDS and TB Treatment and Care for Vulnerable Population in the Russian Federation. RF application to the GF, 4<sup>th</sup> Round, 2004

<sup>7</sup> GFATM webpage: <http://portfolio.theglobalfund.org/Grant/Index/RUS-405-G04-T>

Table 2  
Grant RUS-405-G04-T performance indicators and outcome by June 2010

| Indicator  | Target | Result | Comments   |
|--|--------|--------|--|
| % of smear positive in diagnosed TB cases  | 43     | 32     | The target was very low (WHO recommends over 50%), yet it was not reached            |
| Success rate in new smear positive cases   | 60*    | 55     | The target was very low (global target 85%, application 80%), yet it was not reached |
| Number of phthisiologists trained in treatment and monitoring                                | 1120   | 1163   | Achieved, but no major changes in practices  |
| Number of facilities reporting   | 342    | 342    | Achieved   |
| Regional centers supervising   | 85     | 88     | Achieved   |
| Patients with DOT support (in thousands)   | 217    | 208    | Almost reached   |
| Centers of excellence  | 9      | 9      | Achieved   |
| Number of new MDR-TB patients enrolled in DOTS-Plus treatment in prison and civilian sectors | 7500   | 6533   | Almost reached   |
| Regions with DOTS Plus   | 30     | 30     | Achieved   |
| Laboratories performing DST  | 92     | 92     | Achieved   |
| HIV + patients receiving ARV   | 5 500  | 5 012  | Slow initial expansion   |
| Number of new smear + TB detected  | 36 700 | 26 899 | The target was based on estimates, real incidence seems to be stabilizing            |

\* The original target was 80%. It was modified for the second phase of the grant, which is an incorrect procedure. Note that with success rates under 70%, treatment of TB cases increases TB transmission, chronics and MDR-TB, so the target should never be less than 70%.

## Findings

### Financing of TB control in Russian Federation

In the year 2004 Russian Federation had allocated US\$316 million for the TB control program, according to the WHO Report<sup>8</sup>. The application to GF Round 4<sup>9</sup> indicated for the same year 69.9 million USD from domestic and 2 million from external sources (a substantial difference), with a total need of USD 262.4 million and unmet need of USD 190.5 million. Funding by the Federal government has been significantly increased over the years (Figure 3). In 2011 the allocation to the

<sup>8</sup> Global Tuberculosis Control – Surveillance, planning, financing. WHO Report 2005.

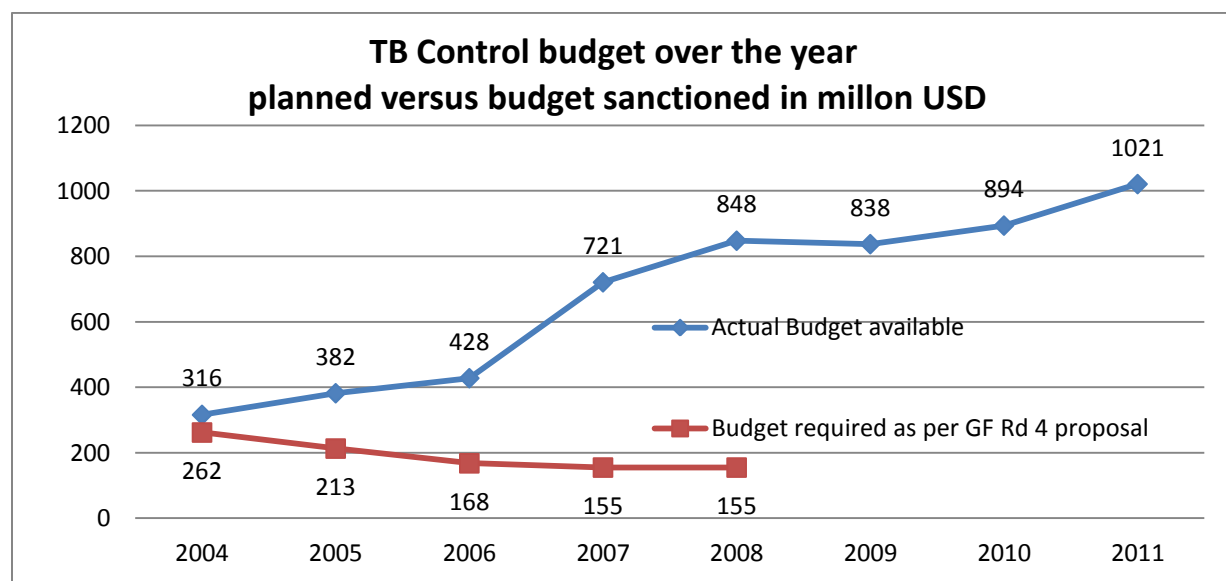
<sup>9</sup> RF application to GF Round 4, 2004: Promoting a Strategic Response to HIV/AIDS and TB Treatment and Care for Vulnerable Population in the Russian Federation

TB program has reached over 1 billion USD. Political commitment to TB control appears to be high at Federal and local level and it is translated into increased budget allocations to TB control. There was more than a threefold increase in the TB budget between 2004 and 2011, whichever data source is used.

The funding of the TB program by source of funds is shown in Tables 4 and 5 and Figure 4. The distribution by component of the program is reflected in Figure 5. Many technical partners such as WHO, Partners in Health and Finish Lung Association are collaborating with TB control program in Russia. There was World Bank loan planned and approved simultaneously with the GF support.

Figure 3

TB budget in the Russian Federation in USD, 2004-2011



Ref: Global Fund Round 4 and Round 10 grant applications and NTP data from Global report

Table 4

Funding of the TB control program in the Russian Federation in million USD, 2006 to 2010

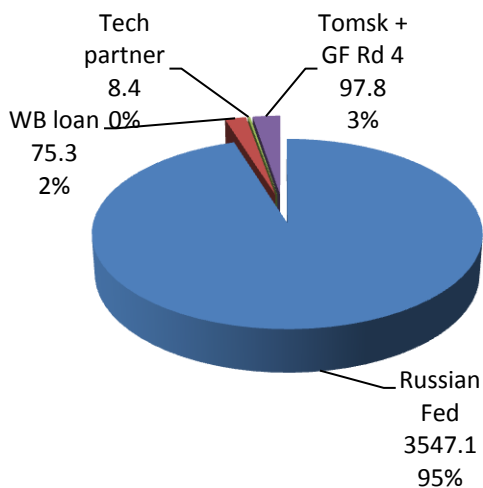
| Source of Funding                    | 2006       | 2007       | 2008       | 2009       | 2010       | Total      |
|--------------------------------------|------------|------------|------------|------------|------------|------------|
| <b>Russian Federation</b>            | 375.5      | 658.2      | 799.2      | 828.1      | 886.1      | 3547.1     |
| <b>WB loan</b>                       | 23.2       | 34.7       | 17.4       | 0.0        | 0.0        | 75.3       |
| <b>Technical partners</b>            | 2.0        | 2.0        | 2.2        | 1.3        | 1.0        | 8.4        |
| <b>Tomsk GF</b>                      | 3.1        | 2.2        | 1.3        | 1.3        | 1.8        | 9.7        |
| <b>Global fund R4</b>                | 24.2       | 23.8       | 27.8       | 6.9        | 5.4        | 88.2       |
| <b>Total</b>                         | 428.0      | 721.0      | 848.0      | 837.5      | 894.3      | 3728.7     |
| <b>GF Total (Tomsk+R4/R10)</b>       | 27.3       | 26.0       | 29.1       | 8.2        | 7.2        | 97.8       |
| <b>Global fund contribution in %</b> | <b>6.4</b> | <b>3.6</b> | <b>3.4</b> | <b>1.0</b> | <b>0.8</b> | <b>2.6</b> |

Table 5  
 Funding of the TB control program in the Russian Federation in million USD 2011 to 2015  
 (Planned)

| Source of Funding                        | 2011       | 2012       | 2013       | 2014       | 2015       | Total      |
|--|------------|------------|------------|------------|------------|------------|
| <b>Russian Federation</b>                | 986.2      | 1072.6     | 1168.9     | 1271.3     | 1351.0     | 5850.1     |
| <b>WB loan</b>                           | 0.0        | 0.0        | 0.0        | 0.0        | 0.0        | 0.0        |
| <b>Technical partners</b>                | 0.7        | 0.7        | 0.7        | 0.7        | 0.7        | 3.5        |
| <b>Tomsk GF</b>                          | 2.5        | 2.2        | 2.3        | 2.0        | 1.4        | 10.3       |
| <b>Global fund R 10 (not yet signed)</b> | 31.6       | 31.9       | 36.8       | 13.3       | 13.4       | 126.9      |
| <b>Total</b>                             | 1021.0     | 1107.4     | 1208.6     | 1287.2     | 1366.5     | 5990.8     |
| <b>GF Total (Tomsk+R4 + R10)</b>         | 34.1       | 34.1       | 39.0       | 15.2       | 14.8       | 137.2      |
| <b>Global fund contribution in %</b>     | <b>3.3</b> | <b>3.1</b> | <b>3.2</b> | <b>1.2</b> | <b>1.1</b> | <b>2.3</b> |

Figure 4  
 Funding of TB control in the Russian Federation according to source of funds, 2006-2010 (actual)  
 and 2010-2015 (planned)

**Funding of the TB control program  
 in Russia in million USD, 2006 to  
 2010 (Actual)**



**Funding of the TB control program  
 in Russia in million USD, 2011 to  
 2015 (Planned)**

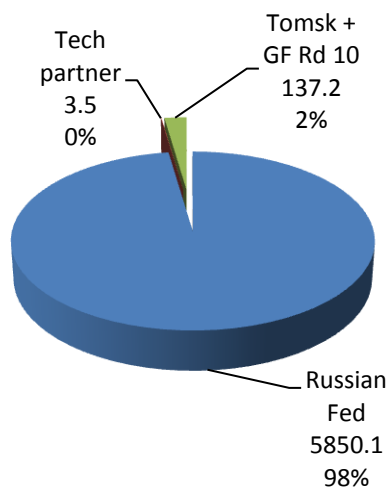
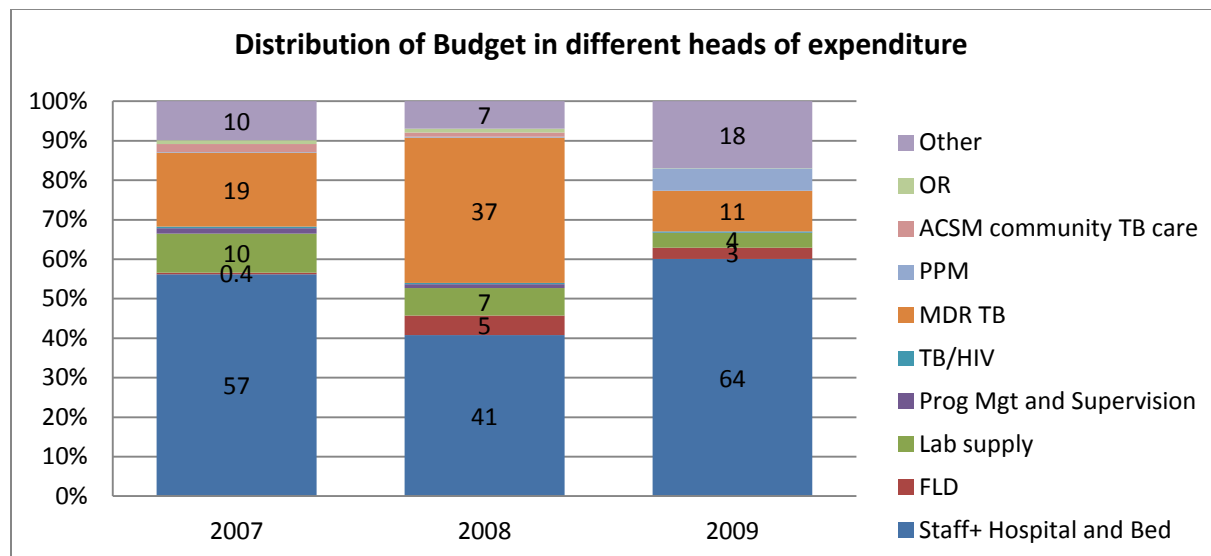


Figure 5  
Distribution of the TB budget in the RF according to component, 2007-2009



Russia has one of the highest costs and budget per patient and per capita among all HBCs; the total costs, budget and expenditure per patient are increasing mainly due to reliance on hospitalization and increasing needs for MDR drug and treatment. As MDR is still increasing, the current strategy would require even higher allocations in the future. A major budget component is salaries for staff dedicated to TB control including TB hospitals; the running cost of 85 000 TB beds and the cost of mass screening of Russian population through chest X-ray.

The cost of procurement of first line as well as 2<sup>nd</sup> line anti TB drugs is very high compared to the international prices. The cost of first line drug per new patient in Russia is about 100 USD whereas the cost of quality assured anti TB treatment regimen with FDC is less than 40 USD per patient as per Global Drug Facility price list.

The distribution of funds does not correspond to the relative effectiveness of the interventions to reduce TB transmission. Hospitalization receives special attention while many BACTEC machines are idle due to insufficient funding for reagents and chemicals due to a limited budget for laboratory consumables.

In summary, 38% of the patients of the European region live in the Russian Federation, which consumes 62% of the budget available in the region.

Management and supervision is one of the weak areas in TB control program; this is also reflected in the budget breakdown as very negligible amount is available for this purpose.

## TB control in the grant period

The Russian Federation has a population of 141 million people with a landmass of 17.1 million square kilometers. The country is divided into 89 administrative regions or oblasts. The Russian Federation does not have a formally established NTP unit at federal level to provide leadership and technical and operational support to provinces and districts. TB control services are provided by a network of specialized TB dispensaries and hospitals that are not optimally integrated into the general health care system. TB diagnosis and treatment are also provided in specialized medical institutions in penitentiaries run by the Ministry of Justice. Despite considerable progress in implementing DOTS and growing financial support from the government of the Russian Federation, the TB control program is hampered by the prevailing medical/clinical approach in TB control, as distinct from the public health model. Some of the findings of the mission are as follows:

- Good political commitment to allocate financial resources to TB control program.
- Although GF Round 4 support was less than 3%, the project was supportive and complementary to existing NTP resources and a WB loan, particularly to improve diagnosis and MDR treatment. The GF project, the management by the PR RHCF, and financial and technical support by WHO and GLC are well recognized at provincial level and by the prison system
- At intermediary level good coordination exists between the TB specialized services, prison system, general health care, Red Cross and other partners
- A computerized data compilation system has been introduced and running successfully at provincial level, with annual comprehensive reports produced by the MoHSD, CRIMISHC, RIPP, CTRI, FSIN, WHO and the CEQCCLR. However the use of data to make decisions on policy and to evaluate clinical practices is limited or negligible at all levels.
- There is high reliance on chest X- rays in confirmation of the diagnosis and outcome of treatment of tuberculosis at each level of service delivery. About half of the country's population is screened through chest X-ray and MMR each year, with a detection of infectious TB cases of less than 0.03%.
- Bacteriological diagnosis has been improved in the last 4 years in the case of MDR-TB, however it was noted that BACTECH machines in many places are underutilized due to lack of reagents and supplies.
- Russia has witnessed significant growth in multidrug resistance TB (MDR-TB). More than 10% of new TB cases and 40% of retreatment cases are reported to be MDR-TB.
- Technical support from GLC is highly appreciated at intermediate level and it has improved the management of MDR TB in the country and more specifically in pilot areas.
- The majority of TB patients in Russia belong to socially vulnerable groups, such as the homeless, unemployed, migrants, and alcohol-dependent people. In addition, about 10% of Russian prison inmates are suffering from TB. There is a widely spread wrong belief that as a consequence, TB cannot be controlled without additional social support.
- HIV infection and HIV/TB co-infections have been on the rise since 2003. As of 2009, reported HIV infection in Russia was 43.9 per 100 000, and the proportion of TB/HIV co-infected patients was 6.2%.

- Drug supply has improved over the years. However, FLD are still in single dose composition in the civilian system, quality control is not systematic and regimens are not consistent with international recommendations, which is one of cause of increasing MDR cases.
- The majority of patients are treated under hospitalization; ambulatory treatment from the start is exceptional and ambulatory treatment in the continuation phase is mostly done by specialized facilities, either by patients coming to the facility, use of day beds including feeding or if necessary nurse visits to the patient's home. There is little use of general facilities, PHC facilities or community members to ensure DOT. This system is very expensive and is not patient-oriented.
- 85 000 TB beds are available for an incidence of nearly 35 000 new smear and culture positive patients. In 2009 the country reported 106 000 new pulmonary cases (only 31% smear positive), 11 000 new extra-pulmonary cases and 33 000 re-treatments (more than half of them not confirmed by bacteriology)<sup>10</sup>.
- The national program is unable to achieve the global target of treatment success or the more modest targets selected for the GF support due to the high proportion of patients lost through default, transfer and not-evaluated, high proportion of failure (many decided on clinical basis in patients with negative bacteriology, or detected as poli-resistant or MDR-TB), and high proportion of deaths. The indicator of treatment failure has deteriorated in the last five years, probably due to increase in cases considered drug resistant and changing treatment.
- A large number of retreatment cases are bacteriological negative and provided anti TB treatment for more than a year as because the x-ray is suggestive of shadow and cavity in lungs.
- Infection control has acquired importance and progress was made during the period, particularly in the TB laboratories. However, during the evaluation visits to TB facilities and laboratories and to general policlinics it was observed that inadequate administrative procedures and insufficient ventilation were common in some high risk areas, and that the reasons for selecting the interventions to prevent air transmission were not always well known.
- Social support in shape of food supplement is considered is one of the high priority activities in NTP whereas the relative impact of the food supplement is very low. The resources available under social support can be more effectively use in patient retrieval and treatment adherence.
- The management and the coordination at regional level between the officers responsible for TB, for general health system and correctional system are satisfactory.
- At national level the coordination and communication between different institutions involved in tuberculosis is limited. A major constrain is the absence of a NTP managerial team with public health functions clearly responsible for guiding and supervising the program.

### Program and grant management

The Russian Federation experienced a dramatic increase in TB during the nineties. The support by the Global Fund Round 4 grant was to scale up TB services in line with the Russian National TB Control Program's strategic plans. Grant funds were used for laboratory renovations, supplies and scaling up the smear microscopy laboratory network. The project expanded DOTS-Plus for the treatment of multidrug-resistant TB and also supports the establishment of a solid basis for TB/HIV control in the country.

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<sup>10</sup> Global Tuberculosis Control. WHO Report 2009.

The PR, the Russian Health Care Foundation, has managed the program and grant very well: most of the outcome indicators are at- or above targets. The Grant was on track, the total expenditure against the budget was 99% (Table 6). Programmatic achievement has been sound overall with the exception of treatment activities and there were good management structures in place to monitor the program's financial and programmatic activities. The Program promoted cooperation between governmental, NGO, the prison system (penitentiary institutions) and UN agencies such as WHO. The Russian Red Cross Society is involved in provision of social services, which complement the medical and public health interventions.

Table 6  
Grant utilization status Round 4 Global Fund TB grant

| <b>Grant particulars</b> | <b>Amount in USD</b> | <b>%</b> |
|--------------------------|----------------------|----------|
| Budgeted                 | 88 165 448           | 100      |
| Grant received           | 88 067 100           | 99.9     |
| Expenditure              | 87 211 150           | 98.9     |

Overall, the project reached the majority of its targets. The main cause of concern for this grant thus far is related to delays to scale up treatment for MDR TB patients. The reason for is a global shortage of MDR TB drugs for which the PR cannot be held accountable. As the achievement rates of all other targets indicate, the PR has prepared the grounds for the treatment of MDR TB: there is sufficient diagnostic capacity and culture and drug susceptibility testing (DST) are widely available. Necessary technical assistance through training was delivered and infrastructures of the treatment facilities have improved, including the support of 9 centers of excellence for MDR TB treatment in Russia. However the government commitment of creating a team for MDR at federal level was not achieved.

The average costs of the MDR TB treatment course have significantly increased (by approximately 50%) since the project started, from USD 2 350 at the time of the initial budget planning to an average of USD 3 500 for patients under treatment according to current estimates from the WHO office in Russia; and of USD 4 700 for new patients to be enrolled. Hence, the program is under severe limitations to procure the full treatment courses for the initially planned number of 7 500 patients. At the end of June 2010 a total of 6 533 patients have been provided with the second-line anti-TB treatment under the GLC mechanism in 29 regions of the Russian Federation. At that time (Q18) the grant utilized 97% of the total budget.

The performance and achievements of the Round 4 TB grant have been instrumental in developing the potential for MDR-TB control in Russia.

## Conclusions

1. The application to GF Round 4 was intended to complement funding from the Government and a WB loan to control tuberculosis in Russia. The Round 4 application identified as main problems the national TB control policy; over-reliance on clinical diagnosis, MMR and inpatient treatment; low success in initial treatment; and diagnosis and management of MDR-TB. The plan included commitment to the DOTS strategy, priority to bacteriological methods, strengthening of laboratories and infection control, training to improve diagnosis and treatment, support to the prison system and creation of a managerial team for MDR-TB in the MoHSD. The grant was approved by the GF Board on appeal, as the Technical Review Panel did not recommend it in its current format.
2. The grant represented less than 3% of the total funds for TB control in the RF. The government funding has increased since 2004 and is now four times the total annual funding indicated in the application as necessary for all TB activities.
3. The GF grant had a substantial and disproportionate impact on the capacity for TB control, particularly in support to the laboratory (human resource capacity and equipment); the information system and the capacity to diagnose and treat MDR-TB. GF support was essential to develop areas inadequately funded or given priority by the government budget, such as diagnostic equipment, second line drugs and technical assistance to develop MDR-TB management capacity.
4. The GF grant funds were implemented effectively and the management by the Principal Recipient RHCF was perceived as appropriate and flexible to program needs by the persons interviewed at regional level and the health system of the prisons (MoJ). The coordination of the RHCF, the technical agencies collaborating in the program, the regional level (Republic, oblast) and the prison system was good. The management and the coordination at regional level between the officers responsible for TB, for the general health system and correctional system are satisfactory.
5. Major achievements were:
  - The information system, which provides valuable data for the program. However it is insufficiently used for corrective action through changes in guidelines and is not supported by supervision to ensure compliance with norms and improvement of quality of case management.
  - Strengthening of laboratories for microscopy and culture, through equipment and human resource development. However the increase of capacity was not accompanied by an adequate funding and supply of reagents or by utilization of the resource by the clinicians: diagnosis, follow up of patients on treatment and the decision of cure or failure are still done mostly on radiological basis. This is in contradiction with the modern international standards of care. There is a high risk that the next priority in laboratory, expansion of rapid tests, will fail if the guidelines do not restrict clinical diagnosis without laboratory results and if there is no training and supervision to reduce diagnosis based only on x-rays.

- Improvement of case management and treatment outcomes in the prison system, where the support had more impact as the TB activities are still underfunded.
- Increased capacity to manage MDR-TB, support to procurement, distribution and use of second line drugs, and development of pilot sites with support of WHO and GLC; which can serve as basis for a national program to prevent and manage MDR.
- Improved the management of drug supplies. In particular, the prison system uses fixed dose combinations that result in fewer pills for the patient and lower the risk of monotherapy and MDR. However in the civilian sector FLD are still in separate presentations, quality control is not systematic, regimens are not consistent with current recommendations and there is variable consideration to patient-friendly methods to ensure drug intake.
- Development of social support strategies, mainly compensation for patient travel and food packages. However, food is often considered by staff a necessary part of treatment (it is not) or a welfare activity, and not only an incentive to attend for DOT.

6. Major weaknesses were:

- At national level, the Ministry of Health has officers responsible for the NTP but not a team to guide TB control with a public health approach and supervise general program activities (as per the DOTS strategy) or to oversee and supervise the MDR component now in expansion, as committed in the GF Round 4 application.
- The training program was carried out but had limited or no impact on the criteria or methods for diagnosis and treatment of TB patients. The problems identified in the application (over-reliance on clinical diagnosis, MMR and inpatient treatment; non-standard treatments; low success in initial treatment) are still present. TB diagnosis is confirmed by the laboratory in only 40% of the cases (not a problem of laboratory capacity but of over-diagnosis of cases with negative results or without bacteriology); in particular more than half the retreatment patients are not confirmed by bacteriology while according to WHO this should be exceptional cases. Regarding treatment, patients are hospitalized unnecessarily for long periods; treatment is often non-standard or according to WHO recommendations (both because of national guidelines and specialist practices), there is a high loss of patients from treatment due to default, transfer and not evaluated; there active follow-up and chemoprophylaxis of cured patients; and children are diagnosed and treated on the basis of the reaction to PPD only, in spite of the practice of multiple BCG vaccinations discouraged by WHO. The success of treatment of new cases is low and is decreasing, in part due to MDR. Increase of HIV will worsen the situation. Most of the above problems are outside the scope of the project, and are a consequence of national policy.

7. It is difficult to justify the need for external support with the high level of national resources, which would be excessive for a TB control program carried out on rational basis – Russia has the most expensive program in the world (\$8 per capita, \$ 10 000 per patient), with poor results. However, most of the national TB budget is spent on interventions of little or no value to reduce TB transmission and contributes to sustain inappropriate clinical practices. The treatment of MDR cases with national and GF resources will not be sufficient to compensate the additional

MDR resulting from loss of patients (default, transfer) and from inappropriate treatment regimens in the national program. The GF support would be justified to prevent or treat MDR-TB and prevent the expansion of the risk to other countries in Europe; or to facilitate technical assistance to change the national policies, program structure and use of government resources. This however requires a political decision of the RF. Currently the MoHSD which should be the leading member of the CCM and signs the applications for GF support does not seem open to these changes.

## Lessons learned

- Increasing funding for TB control without an effective strategy will not decrease the TB problem, and may even worsen the situation by promoting waste of national resources, maintaining inappropriate practices and increasing the prevalence of chronic and MDR-TB patients.
- A relatively small amount of funds can achieve substantial changes and benefit patients and staff if used correctly. The capacity of the PR to coordinate with the technical agencies and providers may be more important than the number of staff.
- A strong NTP management unit is an essential part of the first component of the DOTS strategy (government commitment) and should be a mandatory requirement for of a GF TB grant.
- The recommendations of the TRP of the GF are based on current knowledge about the country situation and the value of the proposed interventions to reduce the transmission and burden of disease. The applications do not always reflect real policy and practices, and joint program reviews including external experts can contribute to a better use of GF resources.

## Recommendations

### To the government

- The Ministry of Health should reconsider the costly control interventions which have proven ineffective globally and in Russia to reduce TB transmission, in particular hospitalization, mass X-ray and PPD screening, and clinical diagnosis without laboratory confirmation. Operational research on the effectiveness of the interventions would be of value to guide national policy.
- A NTP team at national level to help managing and supervising the TB program (including MDR-TB) is part of the DOTS strategy formally adopted by the Russian Federation but does not exist. Its public health functions would be best carried out from the Central Research Institute for Management and Information in Health Care, which already has staff that can be trained in the new functions.
- The government should ensure that the most effective components of TB control are well funded (supplies for laboratory diagnosis, first and second line drugs), expand rapid diagnosis and DST, and ensure that the laboratory results are the main criteria for diagnosis of TB, particularly for retreatment cases.

- The national TB program should reconsider the criteria of failure and base it on bacteriology, revise the treatment regimen as per the latest WHO guideline and give priority to laboratory diagnosis over clinical method and X-ray.
- The national TB program should reduce the number and utilization of TB beds nationally, and promote home-based supervised treatment through primary health care and community based paramedical staff.
- Quality-assured fixed dose combinations should be adopted also by the civilian sector and drug prices of FLD and SLD should be negotiated to approach international costs.

### **To the GFATM**

- The GF should pay more careful attention to the real context of the recipient country; to the implementation of the DOTS strategy, the international standards for TB care and the WHO technical recommendations in everyday practice; and the selection of interventions that will have a major impact on TB transmission. Supporting national program reviews with participation of the technical agencies would help to improve GF decisions.
- Future GF grants -if any- to the Russian Federation and other countries in the ex-Soviet Union with similar epidemiological pattern should focus on critical components of the program such as prevention and control of MDR TB.

### **To technical support partners**

- WHO should concentrate its technical assistance on strengthening the management of the program at national level, updating the national guidelines to current international recommendations and supporting operational research to convince the authorities and specialists that global knowledge is also valid in the Russian Federation.
- The GLC should consolidate its site reports in an annual monitoring report and promote the establishing of a counterpart unit at national level to support expansion and monitoring of MDR-TB, as committed by the government in the Round 4 GF application.



## Annex 1. Terms of reference

### 1. Background and context

**The Global Fund to Fight AIDS, Tuberculosis and Malaria (GF)** was set up as an international financing institution to increase resources to fight the three diseases namely HIV/AIDS, Tuberculosis and Malaria. Global fund has supported large scale prevention, treatment and care program against the three diseases. The purpose of GF is to attract, manage and disburse resources in public –private partnership that will make sustainable and significant contribution to the reduction of mortality and morbidity caused by the three major diseases and contributing for achievement of millennium development goals. To date, over 2 million peoples are on ARVs, 7.4 million peoples under DOTS and 70 million bed nets have been distributed. The Russian Health Care Foundation (RHCF) is assuming the role of Principal Recipient of GF grants in the Russian Federation. As Principal Recipient for the GF grant, it is assisting the country to meet its main goals in reducing mortality and morbidity from TB. RHCF is responsible for the financial and programmatic management of the GF grant as well as for the procurement of health and non health products. In all areas of implementation, it provides capacity development services to relevant national institutions, sub recipients and implementing partners. Currently, RHCF, as Principal Recipient bears full responsibility for the operational and financial management of 2 grants: Tuberculosis Round 4, and HIV/AIDS Round 4. Currently RHCF run the Global Fund grant to totals USD 88,165,448. RHCF is planning to conduct end-of-program evaluation for its Tuberculosis Round 4 grant of the GF program.

### 2. Evaluation Purpose

The end of program evaluation will enable the team to assess, determine and report on GF project inputs, processes, accomplishment, lesson learned and to make recommendation to CCM. It mainly focuses on evaluating the outcome and impact the grant achieved during its five year implementation. The evaluation should:

- 1) Estimate the implementation process of Tuberculosis Round 4 grant
- 2) Estimate Round 4 Project contribution in strengthening TB care services in RF. Estimate major achievements during the grant implementation, mainly focusing on outcome and impact.
- 3) Estimate the implementation effectiveness of MDR-TB treatment projects
- 4) Examine the performance of the PR in terms of coordination, procurements and supply management, finance, and monitoring and evaluations as well as evaluate the role of RHCF in managing the GF portfolio in the Russian Federation.
- 5) Estimate the major problems and constraints faced by the GF project at different levels including national, state, county, health facilities and SRs. Estimate the degree to which the GF project fits into the Ministry of Health and Social Development (MoHSD) health strategic program.
- 6) Estimate the relationship among different stakeholders involved in the implementation of GF project including CCM, PR and SRs, and the relationship with GF.
- 7) Estimate the extent of RHCF commitment to the human development approach and how effectively equality and gender mainstreaming have been incorporated in the design and execution of the program.

### **3. Objectives of End of Program Evaluation**

The objectives of end of program evaluation are to evaluate the extent of progress and the relevance, effectiveness, efficiency, sustainability and impact of the program activities and formulate recommendations. Specific objectives include the following:

- To assess activities, inputs, process, output, accomplishment as implemented by RHCF as a PR and put recommendation to Principal recipient and CCM under TB Round 4.
- To assess the grant implementation steps at country level.
- To assess program achievement against target throughout the implementation of the grants
- To evaluate the grant expenditure against the grant plan and the steps followed in the procurements. Furthermore it will document the challenges related with the procurement.
- To assess the activities of PR and fulfillment of TOR as specified in the Initial proposal and CCM document. And assess its effectiveness in each service delivery area per each grant designed to implement set targets.
- To assess the extent to which the grant plans have been implemented and goals have been achieved by PRs and SRs. Identify significant program changes made in the course of program implementation.
- To assess constraints and challenges that the grants implementation encountered and how these have been resolved by implementing partners including SRs and PRs.
- To assess PR and CCM capacity and structure for managing GF in relation to human resource and infrastructure. Determine the extent to which the GF structures have been fulfilling their roles.
- Examine the efficacy of management of GF in the Russian Federation by relevant entities (PR and SRs) and assess how well they met the Global fund requirements with particular focus in the future grants.
- Assess whether GF funds in the Russian Federation are efficiently utilized
- Assess whether GF funds are making a substantial contribution in the existing program to control Tuberculosis,
- Document lessons learned and best practices during the implementation phase.

### **4. Scope of the Evaluation**

The evaluation will review RHCF-GF country program TB Round 4. It will refer to the RHCF activities under PR by providing an examination of the effectiveness and sustainability of the RHCF programs by i) highlighting main achievements at program since the implementation of GF project, at the national level in the last five years and RHCF's contribution in terms of key outputs, ii) ascertaining current progress made in achieving different outcomes and impact in the given thematic areas and RHCF's support to this. Qualify RHCF's contribution to the program with a fair degree of plausibility.

The results of the evaluation will be used to strengthen future implementation of similar GF programs. The findings will help in planning the project document for future rounds of Global Fund. It will also highlight areas where more funding should be allocated. The End of program review will try to identify the Global fund structure at country level and review its effectiveness.

The report will be submitted for consideration to the FG, CCM, MOHSD and HLWG. The report data will be placed through internet resources on the thematic sites ([www.tbpolicy.ru](http://www.tbpolicy.ru), [www.hivrussia.ru](http://www.hivrussia.ru), [phtiziatr.ru](http://phtiziatr.ru)). The regions (oblasts) to be visited as part of end of program evaluation process will be selected in consultation with CCM.

## 5. Methodology

The Evaluation will utilize both qualitative and quantitative methodology. The consultants will make the best use of the existing documents and conduct individual interviews/group meetings with relevant stakeholders. Thus both primary and secondary data will be utilized. The following data collection methods should be included as minimum.

- Desk review of relevant documents
- Discussions with the CCM, Senior Management at RHCF's office;
- Briefing and debriefing sessions with RHCF-GF, as well as with other SRs
- Interviews with partners and stakeholders (including gathering the information on what the partners have achieved with regard to the outcome and what strategies they have used); other donors
- Field visits to selected project sites and discussions with project teams, project beneficiaries
- The evaluation will be led by one national and one international consultant. The lead consultant, International after brief orientation, s/he will develop plan of action stating the methodologies and required resources for the end of program evaluation. In the plan of action, areas of evaluation, indicators and data collection should be clearly spelled out. The consultants need to attach interview questionnaires and focus group guide.
- Evaluation questions will be agreed upon among users and other stakeholders and accepted or refined in consultation with the evaluation.

## 6. Key deliverables (Evaluation products)

The consultants will produce a comprehensive structured End-of-program evaluation report that provide evidence on the results and impact of the grants as well as lessons learnt and give a rating of performance.

- 1) **Evaluation inception report.** An inception report should be prepared by the evaluators before going into the full fledged evaluation exercise. It should detail the evaluators' understanding of what is being evaluated and why, showing how each evaluation question will be answered by way of: proposed methods; proposed sources of data; and data collection procedures. The inception report should include a proposed schedule of tasks, activities and deliverables, designating a team member with the lead responsibility for each task or product. The inception report provides the program unit and the evaluators with an opportunity to verify that they share the same understanding about the evaluation and clarify any misunderstanding at the outset.
- 2) **Evaluation matrix** should be included in the inception report. The evaluation matrix is a tool that evaluators create as map and reference in planning and conducting an evaluation. It also serves as a useful tool for summarizing and visually presenting the evaluation design and methodology for discussions with stakeholders. It details evaluation questions that the evaluation will answer, data sources, data collection, analysis tools or methods appropriate for each data source, and the standard or measure by which each question will be evaluated. (See the Table below)
- 3) Debrief RHCF, CCM members, SRs, Regional TB dispensaries and other relevant health facilities
- 4) Provide a draft report before leaving Russian Federation, and submit a final report within two weeks

## **7. RHCF's obligations- Implementation arrangements**

### **RHCF will:**

- a) Provide the consultants with all the necessary support (not under the consultant's control) to ensure that the consultants undertake the study with reasonable efficiency.
- b) Appoint a focal point in the program section to support the consultant(s) during the evaluation process.
- c) Collect background documentation and inform partners and selected project counterparts.
- d) Meet all travel related costs to project sites as part of the program evaluation cost.
- e) Support to identify key stakeholders to be interviewed as part of the evaluation.
- f) The program staff members will be responsible for liaising with partners, logistical backstopping and providing relevant documentation and feedback to the evaluation team
- g) Cover any costs related to stakeholder workshops during dissemination of results
- h) Organize inception meeting between the consultants, partners and stakeholders prior to the scheduled start of the evaluation assignment.

## **8. Supervision and Management of the Assignment**

The consultants will work under the supervision of CCM and RHCF-GF project director with technical guidance from the GF M&E unit. MoHSD (at regional level), shall provide further guidance in the review of TB grant activities

## **9. Time Frame**

The evaluation consultancy is tentatively scheduled to take place from **March, 2011-30 May, 2011**

## **10. Reporting**

The consultant(s) will directly report to the RHCF Project Director and CCM Chairperson.

## **11. Evaluation team composition and required competencies**

The evaluation team shall consist of 2-4 consultants: an International consultant (team leader and member 2) and national consultants (2) with extensive knowledge of the country situation. The Team Leader (International) will have the responsibility for the overall co-ordination of the evaluation and for the overall quality and timely submission of the evaluation report to the RHCF. The team is expected to have experiences and skills in the following area:

- Primary health care system, functionality of health system
- knowledge on HIV/AIDS, Tuberculosis
- Program designing and strategic planning
- Grant manager familiarity with financial function .knowledge on global fund financial system will be an asset
- Procurements ,supply system managements at international level, monitoring and evaluation of the implementations system, designing of work flow
- General monitoring and evaluation system, basic monitoring frame work and result based management
- Experience in GF process and programs will be an asset



## Annex 2. Key persons interviewed and institutions visited

| Institution   | Key persons            | Position   |
|---|------------------------|--|
| <b>Moscow</b>   |                        |  |
| Russian Health Care Foundation  | Dmitry Goliaev         | The Global Fund Project Director   |
|   | Tatiana Ye. Fomicheva  | Deputy Director, The GF Project  |
|   | Elena Lisenkova        | Project manager  |
| Ministry of Health and Social Development, RF.<br>Central Research Institute for Management and Information Services in Health Care | Yuliya V. Mikhailova   | First Deputy Director  |
| Federal Service for Sentence Execution (FSSE)   | Sergey N. Baryshev     | Head of the Medical Department, FSSE                                       |
|   | Vitaliy E. Odintsov    | Chief TB specialist, Medical Department of the FSSE                        |
| International Federation of Red Cross and Red Crescent Societies (IFRC Russia)  | Dr. Davron Mukhamadiev | Head of Regional Representation in Moscow                                  |
| Russian Red Cross   | Raisa N. Lukutsova     | President of Russian Red Cross   |
|   | Dmitriy G. Fedotov     | Vice-president   |
|   | Ludmila M. Kamožina    | Director, Department of Regional Activities and Organizational Development |
| Central TB Research Institute, Russian Academy of Medical Science (CTRI RAMN)   | Vladislav V. Erokhin   | Director, CTRI RAMN  |
|   | Olga V. Demikhova      | Deputy Director for Scientific Work, CTRI RAMN                             |
|   | Irina A. Vasilieva     | Head of TB Department, CTRI RAMN   |
|   | Victor V. Punga        | Head of Epidemiologic Department, CTRI RAMN                                |
| Partners in Health (PIH)  | Oksana I. Ponomarenko  | Director, PIH office in the RF   |
|   | Dmitry V. Taran        | Coordinator, TB programs in Russia   |
| World Health Organization (WHO)   | Dmitry Pashkevitch     | Coordinator, WHO TB control program in Russia                              |
|   | Evgeny M. Belilovsky   | Project Officer, WHO TB program in Russia                                  |
|   | Vadim Testov           | Project Officer, WHO TB program in Russia                                  |
|   | Irina Danilova         | Project Officer, WHO TB program in Russia                                  |
|   | Alain Disu             | Technical Officer, WHO TB program in Russia                                |

| <b>Saratov Region</b>                      |                                |  |
|--|--------------------------------|--|
| Ministry of Health, Saratov region         | Nikulina Zhanna Alexeevna      | Deputy Minister of Health of the Saratov region (HIV, STD, TB, Immunizations)  |
|  | Morozova Tatiana Ivanovna      | Chief Doctor of Regional Anti-TB dispensary, Chief TB doctor of Saratov Region, Chief TB doctor of Privolzhsky Okrug |
| Regional Anti-TB Dispensary, Saratov       | Afanasjeva Regina Raviljevna   | Deputy Chief TB Doctor   |
| Ehngels Anti-TB Dispensary                 | Strazhnikova Neilja Rashidovna | Deputy Chief Doctor  |
|  | Kapkova Ludmila Pavlovna       | Deputy Chief Doctor  |
|  | Vasiljevna Tamara Dmitrievna   | Chief of the Laboratory  |
| Ehngels Town Polyclinic                    | Saltirova Ekaterina Ivanovna   | Chief Doctor   |
| Balakovo Central District Polyclinic       | Grishenko Marina Vasiljevna    | Deputy Chief Doctor  |
|  | Sharabanova Tatiana Georgievna | Deputy Chair, Balakovo Municipal Healthcare Committee  |
| Balakovo Anti-TB Dispensary                | Bronnikova Ludmila             | Chief Doctor, Dispensary Unit  |
|  | Strazhnikova Neilja Rashidovna | Deputy Chief Doctor on Medical Work  |
| <b>Khakhasia region</b>                    |                                |  |
| Ministry of Health                         | Oleg V. Ananievskiy            | Acting Minister of Health of the Republic of Khakasia  |
|  | Olga O. Netkacheva             | Former head of the Bacteriological laboratory of the TB Dispensary of the Republic of Khakasia                       |
| TB Dispensary of the Republic of Khakasia” | Elvira V. Kyzlasova            | Head Doctor  |
|  | Vladimir V. Gusev              | Deputy Head Doctor for Statistics  |
|  | Alexander S. Tulin             | Head Doctor of Tashtip Central District Hospital   |
| <b>Karelia region</b>                      |                                |  |
| Ministry of Health, Republic of Karelia    | Smirnova Anna Vasiljevna       | Deputy Minister on Medical Issues  |
|  | Belozeroва Anna Sergeevna      | Chief TB Doctor of the Ministry of Health of the Republic of Karelia   |
|  | Ulich Valentina Vasiljevna     | Ministry of Healthcare and Social Development  |
|  | Markelov Yuri Mikhailovich     | Chief of a TB Training Course, Medical Faculty, Petrozavodsk State University  |

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| Karelia Anti-TB Dispensary   | Yaven Alexandra Arnoldovna     | Chief of the Inpatient Unit                          |
|  | Dorodnaya Irina Alexandrovna   | Chief of the Laboratory                              |
|  | Bobrikova Anna Sergeevna       | Chief of the Outpatient Unit                         |
|  | Shevlyagina Natalia Viktorovna | Chief of the Day Inpatient Unit                      |
|  | Kostyakova Elena Viktorovna    | Chief of the Organizational and Methodological Unit  |
|  | Gvozdovskaya Larisa Ivanovna   | Deputy Chief, Organizational and Methodological Unit |
|  | Mikhailova Elena Victorovna    | Chief Doctor   |
| Federal Service for Sentence Execution (FSSE) Republic of Karelia        | Terekh Alexander Vladimirovich | Head of the FSSE, Karelia                            |
|  | Azarchenko Juri Mikhailovich   | Deputy Head  |
|  | Dronov Alexandr Anatoljevich   | Medical Department Head                              |
|  | Goncharenko Eva Olegovna       | Chief TB Doctor                                      |
| Federal Service for Sentence Execution Treatment Institution (FSSETI) #4 | Goncharenko Eva Olegovna       | Chief TB Doctor, Federal Penitentiary Service        |
|  | Shulgovich Juri Valentinovich  | Head   |
|  | Kudinova Sveltana Sergeevna    | Doctor Bacteriologist                                |

### Annex 3. Reference documents

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