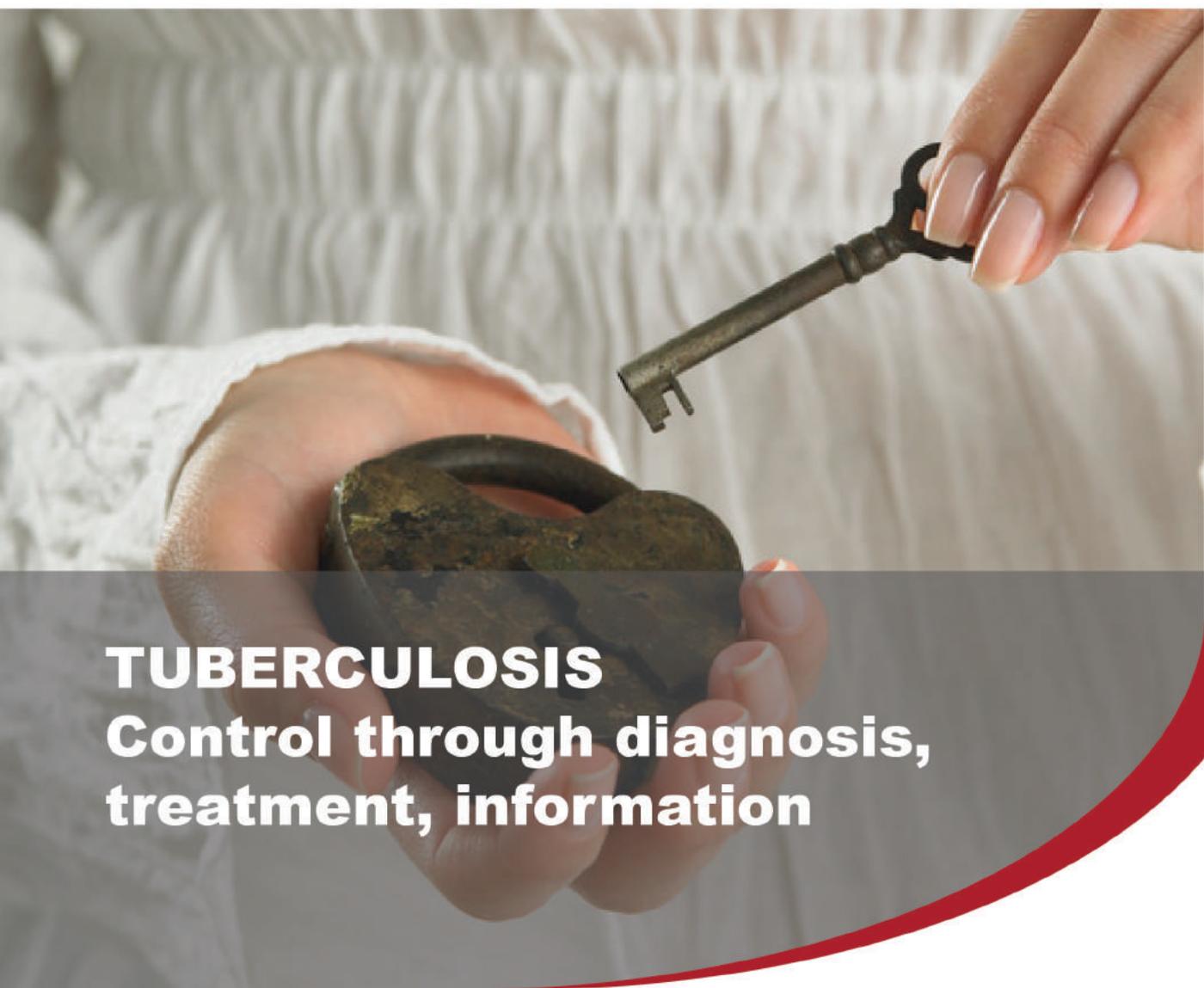




LHL International

A close-up photograph of a hand holding a large, dark, rusted metal padlock. Another hand is holding a matching antique-style metal key, positioned as if to unlock the padlock. The background is a soft-focus white fabric.

**TUBERCULOSIS**  
**Control through diagnosis,**  
**treatment, information**

A close-up photograph of a person's hand holding a vintage brass pocket watch. The watch has a white face with black Arabic numerals and a small seconds sub-dial at the 6 o'clock position. The hands are positioned to show the time as approximately 11:58. The background is a white, wrinkled fabric. A semi-transparent dark grey box with a thin red border is overlaid in the bottom-left corner, containing white text.

**Each minute,  
3 people die  
because of  
tuberculosis  
worldwide.**

## **More than one third of the world population is infected with tuberculosis bacilli (TB) and one in 10 infected people will develop the disease.**

More than one third of the world population is infected with tuberculosis bacilli (TB) and one in 10 infected people will develop the disease.

Faced with the evidence that tuberculosis is by no means a condition of the past century, but a health priority, more and more governments have become aware of how serious the situation is and are engaged in fighting to eradicate this illness.

This is the reason why, at global level, the TB mortality rate decreased with 45% between 1993 and 2013 and 37 million lives were saved between 2000 and 2013 due to early diagnostic and treatment.

86% of the new cases which developed TB and began treatment in 2013 worldwide were successfully treated<sup>1</sup>.

**In Romania**, the past decade efforts of the public authorities and the NGO sector, the mutual matching in concrete interventions, through projects which contributed to the co-financing of the National Program for TB Prevention, Surveillance and Control (NPTPSC), lead to an improvement of the situation regarding diagnostic, as well as the successful treatment of the patients.

At present, the TB detection rate in Romania is at least 79%, the global incidence decreased from 142.2‰000 in 2002 to 72,9‰000 in 2014, the mortality decreased

<sup>1</sup> World Health Organization data, October 2014

with 50.9%, while the treatment success rate of new bacteriological confirmed cases is more than 85% starting with 2006<sup>2</sup>.

**Nonetheless, Romania has around 20% of the tuberculosis patients in the European Union, being one of the EU countries mostly affected by TB.**

More than that, multidrug resistant and extensively resistant tuberculosis (MDR/XDR TB) continues to raise problems, being under-diagnosed at present and with a curing rate of only 26.5% (in 2011).

## **Resistant tuberculosis**

Tuberculosis resistant to drugs develops in patients due to improper or defective tuberculosis treatment, or when a person infected with resistant bacilli becomes ill.

In Romania, until 2014, the diagnosis of resistant tuberculosis was delayed, in most cases.

Long term hospitalization and isolation from the family, prolonged treatment (up to 24 months in case of MDR/XDR TB), severe adverse reactions of the anti-TB medicines, poverty, lack of social support and psychological support make the patients abandon the treatment and/or to come back to work in order to support their family.

In the absence of a proper treatment, the MDR/XDR TB patients remain contagious for longer periods of time, exposing their families and community to the disease, for several months or even years. Because of the high mortality risk (4 times higher compared to the patients with drug-sensitive tuberculosis), default to treatment (3-4 times higher) and treatment failure

<sup>2</sup> National Program for TB Prevention, Surveillance and Control

(8 times higher), the patients with MDR/XDR TB are confronted with a low quality of life and are a difficult burden for the health system, family and society.

**„The importance of implementing this program speaks for itself. Romania has the highest incidence of tuberculosis and multidrug-resistant tuberculosis in the European Union. About 10.000 patients shall be tested, and 1000 patients shall be treated thanks to the Norwegian support in fighting tuberculosis in Romania. It’s an important step in eliminating tuberculosis in this country, as well as in Europe. We believe that Romania shall continue the fight in this area after the ending of the project, in 2016.“**

Tove Bruvik Westberg, Ambassador of the Kingdom of Norway in Romania

## ***Improving the Health Status of the Romanian Population in Romania by Increasing Tuberculosis Control, a project for rapid diagnostic, correct and complete treatment and information of the population***

### **3 Key-information**

#### **1. Implementing partners**

“Marius Nasta” Pulmonology Institute in Bucharest is the project promoter, and the implementing partners are the Romanian Angel Appeal Foundation, the Centre for Health Policies and Services Foundation and the LHL International Tuberculosis Foundation from Norway. Each partner brings into the project its

own specialists and expertise gained over many years of activity in the area of tuberculosis. The diagnosis and treatment of the TB patients, management of programs, procurement of drugs and equipment, organizing training sessions, direct work with the patient are the area of expertise of the implementing organizations, which are ideally complementing each other, for a successful project.

#### **2. Objectives**

The project aims to strengthen the tuberculosis control in Romania, with focus on the treatment resistant tuberculosis and poor and vulnerable groups, by:

- Increasing the national capacity of early MDR/XDR TB diagnosis
- Ensuring complete, continuous and quality treatment for MDR/XDR TB patients
- Development of a integrated community support model for TB treatment and prevention
- Increasing the treatment adherence of the TB patients
- Strengthening the TB infection control in the pulmonology facilities
- Increasing the TB awareness in Romania, among patients, vulnerable groups and general population

#### **3. Budget and financing**

With a total budget of 10,748,280 Euros, the project is 85% financed through Norwegian Grants 2009 – 2014, within the program Initiatives in the Area of Public Health, and 15% from the state budget. The Program Operator is the Ministry of Health.

20 months of implementation for a better tuberculosis control in Romania.

A close-up photograph of a young man with dark hair, looking down and coughing into his right hand. His eyes are closed, and his facial expression is one of discomfort. The background is plain white. A semi-transparent dark grey rectangular box is overlaid on the bottom right corner of the image, containing white text.

**Romania has  
around 20% of  
the tuberculosis  
patients in the  
European  
Union**

The project began in August 2014 and is planned to end in April 2016.

The “Marius Nasta” Institute together with the Romanian Angel Appeal Foundation, the Centre for Health Policies and Services Foundation and LHL International Tuberculosis Foundation use their specialists and entire experience to develop the capacity for early diagnosis of the multidrug resistant tuberculosis in Romania, to provide complete, continuous and directly observed treatment for the patients with multidrug resistant and extensively resistant tuberculosis and to provide community support for patients and poor population, in order to prevent the spread of tuberculosis.

## In figures, the project means:

- 8 laboratories fitted with modern equipment for early diagnostic of MDR/XDR TB; laboratory staff trained in modern diagnostic techniques
- 1000 MDR/XDR TB patients treated correctly and completely with quality medicines (prequalified by the World Health Organization), procured through the Global Drug Facility (GDF)
- 2500 MDR/XDR TB patients, including persons from the Roma community, supported in the ambulatory treatment, with medicines administered with direct observation (DOT) and social support (incentives) to maintain the treatment adherence
- 10,000 persons from 50 poor rural communities informed about the TB transmission, prevention and symptoms and access to primary health care
- 20,000 brochures and 100,000 flyers with information about TB distributed to patients, vulnerable groups and general population
- 600 professionals from the national TB network trained in drug management, infection control and TB surveillance

- 960 doctors, nurses and administrative staff trained in TB infection control. 70 community workers (health mediators and community nurses) trained in DOT and education-prevention in the area of TB
- 2000 UV lamps procured for the TB facilities
- 315 computers procured for the TB facilities and the national electronic data-base updated

The project benefits of technical assistance from the World Health Organization, in the area of laboratory standardization, data collection and revision of the policies in the area of tuberculosis.

## **Rapid diagnosis of MDR/XDR TB. Fitting out 8 laboratories with modern equipment and staff training**

Today, the advanced diagnostic methods allow the detection of resistant tuberculosis in only 2 to 48 hours, compared to more than three months in the case of traditional methods. Three months of uncertain diagnostic and improper treatment means a high risk for the patient to develop even higher resistance to medicines. Rapid diagnosis, complete and quality medication are vital for a patient with resistant tuberculosis.

Within the project, a network for MDR rapid diagnostic shall be established, because one of the problems Romania is facing at present is the underdiagnosis of the MDR and XDR TB cases. Due to the lack of modern diagnostic techniques, only 600 MDR/XDR TB cases are detected each year in our country, while the World Health Organization estimates the number of cases of resistant tuberculosis which Romania should diagnose each year to be around 800-1000.

**“Rapid diagnosis of tuberculosis resistant to treatment and accurate identification of the antibiotics to which is sensible have a crucial importance for the patient and for the entire system of prevention, treatment and control of tuberculosis in Romania. We cannot speak either of treatment success rate or of prevention, as long as we cannot determine rapidly and precisely a diagnostic. And the laboratories in Romania were a long time critical regarding this aspect. The conventional testing methods postpone the diagnostic for several months, and the time is really precious, in terms of adequate medication. We hope that with this project to increase the therapeutic success rate, because in the drug-sensitive tuberculosis we have one of the highest success rates (over 85%), while in the resistant tuberculosis the success rate is low. By all means, the tuberculosis prevention, treatment and control start with a rapid and precise diagnostic.”**

Dr. Gilda Popescu, NPTPSC Coordinator.

**8 reference laboratories** in Bucharest, Cluj, Bacău, Braşov, Constanţa, Craiova, Iaşi and Timişoara shall be equipped with high-end devices for early diagnostic of MDR/XDR TB, while the laboratory staff shall be trained in using modern diagnostic methods. The types and quantity of equipment were determined by the experts of the National Tuberculosis Control Program, based on a needs analysis and the recommendations of WHO/GLC.

Modern laboratory equipment for rapid diagnostic of TB (3 MGIT, 8 GeneXpert, 2 LPA and 3 VersaTREK machines), as well as the necessary supplies for the

genetic tests, culture and drug sensitivity test, 10 LED microscopes and 44 safety hoods shall be procured through the project.

**“The new equipment reduces the diagnosis delay for the multidrug resistant tuberculosis from over three months to less than one week, thus breaking the cycle of the disease transmission in the community and preventing the premature death of the patients while waiting for a diagnostic. With this project, the Romanian Angel Appeal Foundation shall continue to provide the National Program for TB Prevention, Surveillance and Control the entire support in procuring the laboratory equipment and supplies for the rapid diagnostic of tuberculosis, motivated by the fact that this effort shall translate undoubtedly in saved lives.”**

Dr. Silvia Asandi, General Manager of RAA Foundation.

## **Medicines for the correct and complete treatment of 1000 patients with MDR/XDR TB**

1000 patients with resistant and extensively resistant tuberculosis are treated through the project, receiving second line anti-TB drugs, for a correct, complete and quality treatment.

The drugs are prequalified by WHO and procured by the Romanian Angel Appeal Foundation through the Global Drug Facility (GDF) mechanism. The experts of the National Program for TB Prevention, Surveillance and Control work closely with the specialists of the Romanian Angel Appeal Foundation for estimating the quantity and types of medicines necessary for the

correct, complete and continuous treatment of the patients, as well as in different stages of the process of medicines distribution to the patients.

**“It’s a project with an extremely alert rhythm of implementation. The procurement, through the Global Drug Facility mechanism, of the medicines for the treatment of the patients with multidrug and extensively resistant tuberculosis and ensuring an efficient medicines distribution chain are essential and we cannot give up on quality, when the patients’ life depends on us.”**

Dr. Silvia Asandi, General Manager of RAA Foundation

600 pulmonology doctors benefit of training in drug management, control and surveillance of the tuberculosis infection. The training of the doctors is organised by the Centre for Health Policies and Services Foundation, with technical assistance from “Marius Nasta” Institute.

**“I received a second chance to life! When I found out that I can have treatment for this terrible disease, I knew that I had the chance to get back my life before the ordeal, that I can return to my wife and children without endangering them; that we can be again a family.”** L.C., 42 years old.

**“People don’t really know about tuberculosis. They point their finger at you as if you’d spread a rare disease, as if you’re guilty of having this disease. Alas, how I felt when I found out the diagnostic: not tuberculosis, but MDR! If they told me “cancer”, I would still have had some hope. But MDR... I found out there are no medicines for my disease and I didn’t know**

**what to do, because I take care of two children and I am alone Since I was included in this new program, I receive treatment and I cannot explain how it feels to hang on the hope you’ll get the chance to be cured.”**

A-M. B., 45 years old.

**„After two months of treatment for tuberculosis, they told me that I actually had MDR and that the disease didn’t respond to the medicines I took, and the hospital didn’t have the medicines I needed. It was terrible. The thought that I shall be gone and my folks would end up homeless was consuming me. But now I can take the treatment. It’s difficult and I feel very sick after taking the pills. But I take them and go on, because I need my life near the family”** M.G., 39 years old.

## **Directly observed treatment (DOT), social support, education and prevention regarding tuberculosis**

In 50 poor rural communities, including Roma population, selected with the support of the Ministry of Health and The Public Health Institute based on the incidence, default rate and treatment success rate, there are ensured DOT (directly observed treatment) and counselling in order to increase treatment adherence for 1000 patients with tuberculosis.

10,000 persons from the selected communities participate at information, education and communication sessions regarding tuberculosis, which include training about transmission, prevention, symptoms, treatment, and the importance of going to the doctor.

To ensure these services, 70 Roma mediators and community nurses are trained in DOT and in tuberculosis prevention.

At the same time, 1,500 patients with resistant tuberculosis from the entire country, in the ambulatory treatment phase, are helped by the medical staff of the TB dispensaries, with DOT and distribution of social tickets, in order to increase the treatment adherence.

**“The treatment of tuberculosis and especially of resistant tuberculosis is difficult to follow until completed without constant support from the professionals and the community. The adverse reactions of the medication can be very powerful and difficult to surpass without psychological support and ancillary medicines to fight the sickness. Since the worst affected group is the poor population, so often among these persons there are no resources for healthy and nourishing food, ancillary medicines or even daily transportation to the dispensary, in order to receive the anti-TB treatment, in the ambulatory phase. This is the reason for which a well-established DOT system, completed by specialty counselling and social tickets is more than necessary to increase the treatment adherence.”**

Dr. Dana Fărcașanu, Executive Chairperson of the Centre for Health Policies and Services Foundation.

## **Updated national electronic system for TB data collection**

The national electronic database for TB was implemented in Romania in 2006, with financial support from the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria. Bu the economical crisis

from the last years didn't make possible the update off the software and the replacement of the computers in the TB facilities responsible with the introduction of data from national level. Meanwhile, WHO updated the requirements regarding the TB country reporting, together with the case definitions and rapid diagnostic methods, so that the existing software needs a consistent revision.

A specialized company, sub-contracted through the project, develops and implements the updated version of the software for the national database. The TB facilities which register the cases in the territory are equipped with 315 computers procured through the project, and the software is installed and tested on these.

## **Increase the capacity of the Technical Assistance and Management Unit of the National Program for Tuberculosis Prevention, Surveillance and Control**

The team of the Technical Assistance and Management Unit shall benefit of training, so that the National Tuberculosis Prevention, Surveillance and Control Program can have a better capacity to attract funding and for project management. The professionals benefitting of information are part of the medical and management staff of the “Marius Nasta” Pulmonology Institute, in Bucharest.

**“We are glad to share our expertise of more than 20 years in the area of health projects management with non-reimbursable funding. It is very important that the team of the Technical Assistance and Management Unit to gain knowledge and abilities in the area of project management, as well as in that of accessing European funding, in order to ensure the sustainability of the project and implementation of the National Strategy for Tuberculosis Control 2015 – 2020.”**

Dr. Silvia Asandi, General Manager of the Romanian Angel Appeal Foundation.

## **Information at national level regarding tuberculosis**

Information material regarding tuberculosis and resistant tuberculosis, for the TB patients as well as for the general population are developed within the project, after a prior evaluation of the information needs of each category. The same time, the DOT supporters are trained in using the materials as communication materials towards patients and affected communities.

**“Most people are too little informed about tuberculosis. Most are still associating it with poverty and poor living condition, consider it a disease of the past century and think of it as eradicated. People lack basic information about the fact that anybody can become ill with tuberculosis, no matter the education, social or material status, or about the TB symptoms and what should be done in case they have one or more of its symptoms. In Romania there is a certain**

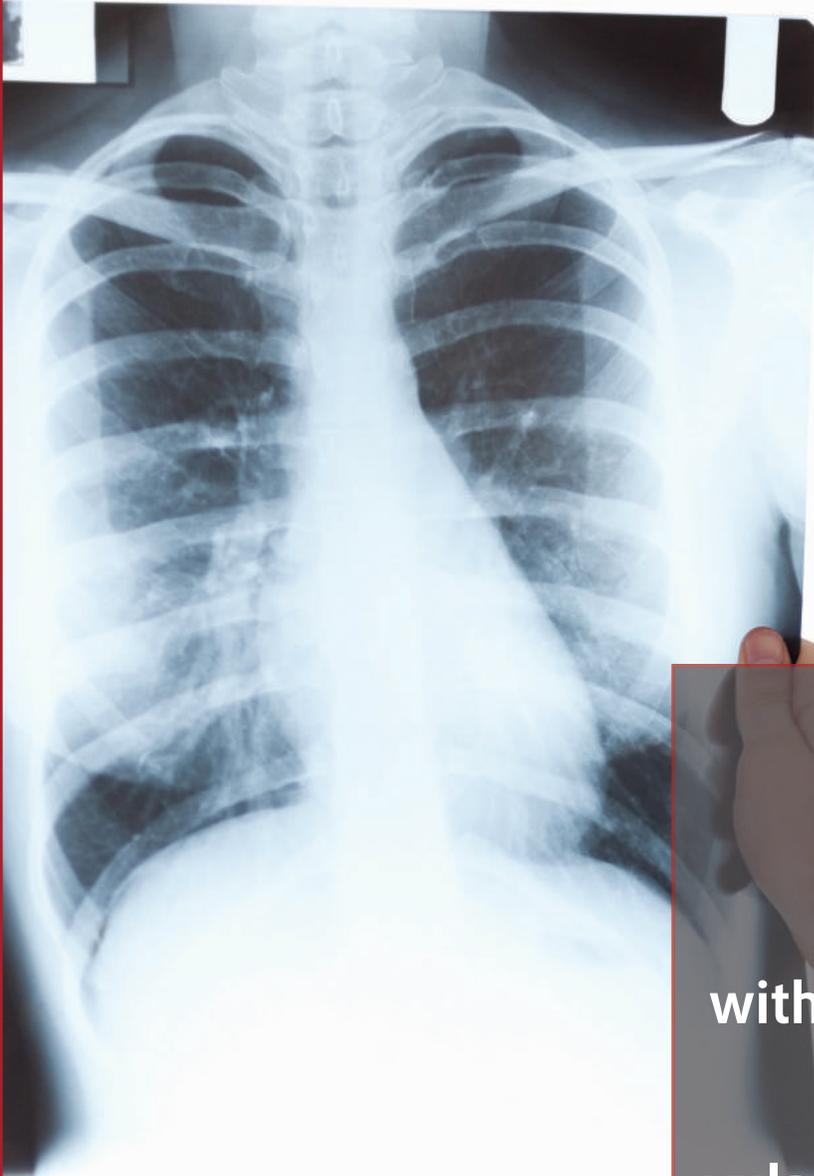
**need of information regarding tuberculosis, to which we hope to better respond with this project.”**

Mona Drage, Executive Chairperson of LHL International Tuberculosis Foundation

## **Communication to the decision makers and general public**

Institutions, public authorities, decision makers, general public receive= information regarding the status of the activities development, through the Quarterly Newsletter, bilingual and the dedicated web page. Interviews with specialists, as well as articles based on testimonials of patients with tuberculosis are included in the information materials, to show the real benefits of the access to modern diagnostic methods, quality medicines, DOTS and incentives, for the persons affected by tuberculosis but also for the medical staff engaged in treating the disease.

[www.control-tb.marius-nasta.ro](http://www.control-tb.marius-nasta.ro)



**The project aims  
to consolidate the  
tuberculosis  
control in Romania  
with focus on resistant  
TB  
and poor and  
vulnerable populations**

Material developed within the project  
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