

# Self-reliance review of tuberculosis prevention and care activities in the Republic of Moldova

# 6–8 August 2018 Mission Report

Edited by Martin van den Boom, Nikoloz Nasidze and Allira Attwill



#### **ABSTRACT**

Under the framework of a United States Agency for International Development (USAID) Regional Platform project, the WHO Regional Office for Europe is supporting the six Member States of the Eastern Partnership (Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine) to document their self-reliance to domestic financing of TB activities in the context of overall dwindling external donor funding. The aim of this work is to assist countries in documenting their preparedness to move from donor to domestic funding of TB activities and in helping country-level stakeholders to highlight and prioritize transition-focused efforts. As part of this work, two WHO experts visited the Republic of Moldova on 6–8 August 2018 for WHO's fifth in-country discussions and assessment for the project. This report presents an overview of the transition process in the Republic of Moldova, discusses issues related to financial sustainability and the challenges stemming from donor withdrawal

#### **Keywords**

**MOLDOVA** 

**TUBERCULOSIS** 

**TRANSITION** 

**GLOBAL FUND** 

FINANCIAL SUSTAINABILITY

HEALTH SYSTEM STRENGTHENING

Address requests about publications of the WHO Regional Office for Europe to:

**Publications** 

WHO Regional Office for Europe

United Nations City, Marmorvej 51

DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (http://www.euro.who.int/pubrequest).

#### © World Health Organization 2019

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

# **Contents**

ACKNOWLEDGEMENTS	II
ABBREVIATIONS	IV
EXECUTIVE SUMMARY	V
OVERVIEW	1
SCOPE AND PURPOSE OF THE TECHNICAL ASSISTANCE MISSION	1
REPUBLIC OF MOLDOVA: THE SOCIOECONOMIC AND GEOPOLITICAL CONTEXT	2
POLICY AND STRATEGIES RELATING TO TB	2
RECOMMENDATIONS	4
FINANCING AND PLANNING	4
RECOMMENDATIONS	8
MEDICINE AND LABORATORY CONSUMABLES PROCUREMENT	9
RECOMMENDATIONS	11
QUALITY, SAFETY AND STANDARDS	12
RECOMMENDATIONS	12
COMMUNICATIONS AND ADVOCACY	12
SUPERVISION AND MONITORING	13
RECOMMENDATIONS	14
HEALTH SYSTEM STRENGTHENING: SERVICE DELIVERY, LINKS WITH OTHER INTERVENTIONS, AND	
EVIDENCE-BASED TB POLICY AND PRACTICE	
OUTPATIENT SERVICE PROVISION	
COMMUNITY CENTRES	
HOSPITAL-BASED TREATMENT	
PEOPLE-CENTRED MODEL OF TB CARE	
HUMAN RESOURCES	
CCM	
RECOMMENDATIONS	18
TB CARE IN THE PENITENTIARY SYSTEM	18
RECOMMENDATIONS	19
RECOMMENDATIONS AND SUGGESTED ACTIONS	20
REFERENCES	26
ANNEX 1. AGENDA OF MISSION AND LIST OF PEOPLE MET	28

# **Acknowledgements**

This report was prepared by: Dr Martin Van Den Boom (Technical Officer, Joint TB, HIV and viral Hepatitis Programme, Division of Health Emergencies & Communicable Diseases, WHO Regional Office for Europe); Dr Nikoloz Nasidze (WHO consultant); and Ms Allira Attwill (WHO consultant).

The mission consultants, Ms Allira Attwill and Dr Nikoloz Nasidze, are grateful to the WHO Regional Office for Europe's Joint TB, HIV and viral Hepatitis programme for driving preparations for the technical mission, notably Dr Martin van den Boom, and the WHO country office in the Republic of Moldova. Special thanks are given to Dr Stela Gheorghita, National Professional Officer, for organizing the mission, participating in all meetings and providing overall support during the country visit.

Appreciation is also due to: the Deputy Ministry of Health, Labour and Social Protection, Dr Aliona Serbulenko, and ministry staff; the Director of the Institute of Phthisiopneumology, Dr Sofia Alexandru, the Vice-director, Dr Valentina Vilc, and the staff of the Institute; and all colleagues and stakeholders the mission consultants met in the Republic of Moldova.

This project was made possible by funding from the United States Agency for International Development Regional Platform project.

## **Abbreviations**

AFI Act for Involvement (nongovernmental organization)

BCG Bacillus Calmette–Guérin (vaccination)

Bdq bedaquiline

CCM Country Coordination Mechanism

DPI (Ministry of Justice) Department of Penitentiary Institutions

DR-TB drug-resistant tuberculosis

EU European Union

FLD first-line anti-tuberculosis drug

GDF Global Drug Facility

GF Global Fund to Fight AIDS, Tuberculosis and Malaria

GNI gross national income

IPP Institute of Phthisiopneumology "Chiril Draganiuc"

M&E monitoring and evaluation

MDR-TB multidrug-resistant tuberculosis

MHI Law on Mandatory Health Insurance

MoHLSP Ministry of Health, Labour and Social Protection

M/XDR-TB multidrug and extensively drug-resistant tuberculosis

NGO nongovernmental organization

NHIF National Health Insurance Fund
NRL National Reference Laboratory

NTP National Tuberculosis Programme

OOP out-of-pocket (payments)

PAS Centre for Health Policies and Studies

PHC primary health care

RR rifampicin-resistant (tuberculosis)

SIZO pre-trial isolators (in the penitentiary system)

SLD second-line anti-tuberculosis drug

TB tuberculosis

TB-REP Tuberculosis Regional Eastern European and Central Asian Project

UCIMP public institution Coordination, Implementation and Monitoring Unit of Health

**System Projects** 

UHC Universal health coverage

UNDP United Nations Development Programme

USAID United States Agency for International Development

XDR-TB extensively drug-resistant tuberculosis

## **Executive summary**

The WHO Regional Office for Europe is supporting six Eastern Partnership countries to document their preparedness to transition from donor-funded to domestically funded anti-tuberculosis (TB) activities. As part of this work, two consultants travelled to the Republic of Moldova on 6–8 August 2018 for WHO's fifth in-country technical assistance mission for the project.

The Republic of Moldova ranks second-lowest (surpassed only by Ukraine) in the WHO European Region for domestic government spending as a proportion of total health spending. The Republic of Moldova (and Ukraine) therefore rely more on development partners for health funding than all other countries in the Region.

The Government has introduced a state benefit package and expanded health insurance coverage to reduce the burden of health-care costs for citizens. This is a very positive step, but further expansion of universal health care in the country is required to protect individuals from health-care costs.

Key concerns focus on health-system weaknesses associated with the left bank of the Nistru River, Transnistrian region: drug-resistant TB; high costs in the hospital sector and excess hospital capacity; and the lack of a budgeted action plan. These preclude health system and health outcome optimization.

Suggestions to address programmatic and transition-related gaps are summarized in Table ES1.

Table ES1. Suggestions to address programmatic and transition-related gaps

Responsible agency	Suggested actions
Ministry of Health, Labour and Social Protection (MoHLSP)	Define a budgeted action plan with timelines to ensure the remainder of the MDL 114 million required for the National TB Programme's (NTP's) 2016–2020 implementation period is covered
MoHLSP	Develop a TB-specific national health account for the MoHLSP to allow analysis of TB cost categories in greater detail
MoHLSP	Develop and implement a mechanism for redirecting gained financial resources, following TB beds optimization, towards strengthening ambulatory treatment
MoHLSP	Develop a plan for the National Health Insurance Fund (NHIF) to hand over financial responsibility for financing nongovernmental organizations (NGOs) that provide TB-related care
NTP	Report estimated bedaquiline needs for 2019 to the Coordination, Implementation and Monitoring Unit of Health System Projects

Responsible agency	Suggested actions
	(UCIMP) so it can procure these courses of treatment in March 2019 while funding remains
Ministry of Finance (MoF) and Ministry of Justice (MoJ)	Understand the exact size of the gap that will remain after the Global Fund (GF) withdraws and the MoF has assumed 30% of the MoJ's remaining TB funding gap
Institute of Phthisiopneumology (IPP) and GF, in collaboration with WHO	Organize training for TB specialists (doctors, nurses, laboratory technicians) with participation of IPP and National Reference Laboratory staff, and involve specialists working in the penitentiary system
Global Drug Facility, MoHLSP, NTP	Build capacity and provide guidance for all necessary stakeholders (MoHLSP, NTP) on procuring drugs so that quality drugs can be purchased more cost–effectively
MoHLSP, GF	Use all available channels and continue efforts to establish a system for a joint procurement mechanism for TB drugs for patients of the entire country, including the left bank of the Nistru River
MoHLSP, IPP	Develop rational plan of hospital capacity reduction, considering real needs of TB beds and infection control requirements, while in parallel developing a human resources plan to ensure effective implementation of the NTP and the TB Roadmap
MoJ, Department of Penitentiary Institution of MoJ	Update and approve transition plan for TB activities in penitentiary system
GF, MoJ, MoF	Identify alternative forms of funding to support NGOs working with former prisoners with TB to prevent the spread of multi- and extensively drug-resistant TB in the community, given government funding is extremely unlikely

## **Overview**

On 6–8 August 2018, WHO consultants visited Chisinau, the Republic of Moldova, to assess self-reliance regarding financial and programmatic sustainability of tuberculosis (TB) activities in the country and its readiness to transition from a donor-financed to a government-financed programme. This report provides an overview of the mission and its findings.

#### Scope and purpose of the technical assistance mission

Under the framework of a United States Agency for International Development (USAID) Regional Platform project, the WHO Regional Office for Europe is supporting the six Member States of the Eastern Partnership¹ to document their self-reliance and preparedness to transition to government-financed programmes, and the financial sustainability of their TB activities, considering the reduction in support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GF) and other donors. The project reviews the sustainability of donor-financed TB activities, analyses the challenges and potential consequences of the transition, and suggests actions to mitigate challenges and maximize opportunities in the six Eastern Partnership countries. The Republic of Moldova was the fifth Eastern Partnership country visited during the project.

The mission objectives were to:

- discuss sustainability successes and challenges to date with relevant stakeholders;
- explore the triggers and enablers for transition;
- identify the gaps in key transition-related financial, human resources and programmatic data; and
- support the review and subsequent development of tailored strategic plans in countries where these are currently lacking, and review and provide expert opinion on existing plans.

<sup>&</sup>lt;sup>1</sup> Eastern Partnership countries comprise Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine.

# Republic of Moldova: the socioeconomic and geopolitical context

The Republic of Moldova has the lowest gross national income (GNI) and GNI per capita in the WHO European Region. Following independence from the Soviet Union in 1991, the country experienced rapid economic decline and has faced economic challenges since, hampering government efforts to promote health system strengthening, financial sustainability and universal health coverage (UHC).

The economic downturn in the Republic of Moldova led to health system funding shortages, reductions in service provision, increased out-of-pocket (OOP) payments for users, and a rise in tobacco and alcohol use (1). Life expectancy at birth fell from 69 years in 1989 to 66 in 1995, and the health burden from infections (particularly TB) and chronic illness rose (2,3). Adverse economic conditions led to emigration, with the resident population falling from 3.62 million in 2003 to 3.56 million in 2013 (4). In 2006, around 20% of the population lived on less than US\$ 2 a day, though this situation improved quickly following the economic recovery spanning 2009–2011 (5,6).

More recently, the Moldovan economy has been in moderate economic recession in the context of political and economic instability, the global financial crisis, a major domestic banking crisis in November 2014 during which \$1 billion (around 16% of gross domestic product) went missing from three of the country's private banks (Banca de Economii, Banca Sociala and Unibank) (7), drought, reduced external flows and restrictive monetary policy since 2014 to the present.

# Policy and strategies relating to TB

Several important strategic documents on TB care in the Republic of Moldova have been developed and approved by health authorities. The main strategic paper is the *National tuberculosis control programme*, *2016–2020*, which covers the governing priorities for applying innovative strategies to cut the TB burden and was approved by the Government in 2016 (Decree 1160) (8). It is in line with the **Law on TB Control and Prevention** (Law no. 153-XVI of 04.07.2008) and represents a logical continuation of the achievements and experience gained during implementation of the National TB Programme (NTP) for 2011–2015, which was endorsed by the Government in December 2010.

The NTP goal is to reduce the burden of TB, including drug-resistant TB (DR-TB), through universal access to patient-centred strategic interventions and quality TB prevention, diagnosis and treatment services. It has seven specific objectives targeted to achieve the goal.

The previous national programme (for 2011–2015) was implemented with external donor support, with essential co-financing from the GF accounting for 40–50% of the estimated programme implementation costs. The new national programme (2016–2020) estimates a deficit of about 15% for the implementation of actions, while 30% of financial needs are covered from GF sources.

The Ministry of Health, Labour and Social Protection (MoHLSP) issued an order establishing a working group to assess the risk related to transition from donor to domestic funding of TB-related activities. The working group comprised representatives of the MoHLSP, Ministry of Finance, Ministry of Labour, Social Protection and Family, Department of Penitentiary Institutions (DPI) of the Ministry of Justice, WHO, the National Health Insurance Fund (NHIF), the Institute of Phthisiopneumology "Chiril Draganiuc" (IPP) (which developed the *National plan for the introduction of new anti-TB drugs,* approved in January 2017 by the MoHLSP), and other governmental and nongovernmental organizations (NGOs). Assessment of the level and risks of transition was performed using the Curatio International Foundation tool (9).<sup>2</sup>

The working group produced a report on the results of applying the transition risk assessment tool to the TB component of GF resources for combating HIV/AIDS, TB and malaria. This comprehensive document reflects risks related to the transition period to the NTP for 2016–2020 for the entire country, reflecting specific issues related to the left bank of the Nistru River, Transnistrian Region and the prison system, and transition plans for the right bank, left bank and penitentiary sector. The plan accords with the Moldova–European Union (EU) Association agenda, aiming to prepare and support implementation of the Association Agreement on public health with a focus on communicable disease prevention and control, including HIV/AIDS, TB, sexually transmitted infections and hepatitis types B and C (10).

The report (with transition plans) has been approved by the GF's Country Coordination Mechanism (CCM), but not yet by the MoHLSP<sup>3</sup> and other ministries. It is planned to make the report an annex to the NTP for 2016–2020, after approval from all stakeholders.

In compliance with the NTP for 2016–2020, the *Roadmap on modernization of phthisiopneumology services* (referred to hereafter as the TB Roadmap) was developed and approved by the MoHLSP in 2017 (MoHLSP Order #305, 14.04.201). The goal of the TB Roadmap is to achieve greater efficiency in treatment for TB patients through early detection and extension

3

<sup>&</sup>lt;sup>2</sup> The Curatio International Foundation is a not-for-profit NGO with a mission to improve health through better functioning health systems. Their work is underpinned by three core values: hearing needs; building on local strength; and delivering innovative context-specific solutions.

<sup>&</sup>lt;sup>3</sup> In 2017, as part of government reform in the Republic of Moldova, the Ministry of Labour, Social Protection and Family was renamed the Ministry of Health, Labour and Social Protection, absorbing the Ministry of Health and becoming its legal successor (Government Resolution Nr. 594 from 07/26/2017).

of outpatient services. Activities envisaged in the TB Roadmap aim to achieve the following NTP objectives:

- strengthening health system capacity to secure effective TB control;
- developing and applying new instruments and innovative interventions in the field of TB control; and
- strengthening involvement of the community and civil society organizations in TB control through patient-centred approaches.

The IPP is responsible for monitoring the implementation of measures proposed by the TB Roadmap and reports to the MoHLSP on the execution of activities. The Institute, with support from the local NGO, the Centre for Health Policies and Studies (PAS), is developing a national guide to a *People-centred model of TB care*. The document will support smooth implementation of the TB Roadmap in providing affordable and acceptable medical services for the prophylaxis, diagnosis and treatment of TB within an environment that is favourable to patients and family members.

#### Recommendations

The MoHLSP should:

- accelerate approval of the transition plan and coordinate the process from each stakeholder to finalize approval of the document by the Government;
- establish a monitoring system for transition plan implementation and provide partners with information on progress on a regular basis; and
- finalize development of the national guide to the people-centred model of TB care.

# **Financing and planning**

The Government has made significant efforts to improve access to health care and eliminate health disparities among the general population. Despite a considerable proportion of TB programme funding being reliant on the GF, the country's commitment to planning for transition means it is well prepared for the process, though not without important needs and gaps.

The Government embarked in 2004 on health system reforms aimed at reducing excess hospital capacity and developing primary health care (PHC) to improve health outcomes, provide financial protection and achieve financial sustainability. The health sector strategy for 1997–2003 (1) set out plans to develop an efficient, effective, responsive and equitable health system and provided the platform for ongoing reforms (11–13).

Following the 1994 Constitution, which guaranteed a right to health, a state-funded free health service package was introduced in 1999, followed by the Law on Mandatory Health Insurance (MHI) in 2001 and the establishment of the National Health Insurance Company in 2004 (1,3).

In theory, MHI is compulsory for Moldovan citizens and aims to provide complete insurance coverage. People may choose their own insurance, and many do not purchase any policies (1). Some (non-working groups, including students, children, people of pension age and those who are disabled, for instance) receive insurance coverage without payment covered by the Government (1). MHI coverage entitles people to a benefits package of covered services, including selected primary and secondary care services, emergency care and dental services. In 2009, primary care services were extended, free of charge, to all irrespective of insurance status, and services covered by the benefit package were further extended in 2012 (1).

Despite these significant strides towards PHC and attempts to achieve UHC, many drugs attract OOP and informal payments due to limited financing of the benefit package. The national health policy for 2007–2021 (14) was followed by the health-care development strategy for 2008–2017 (14) which, alongside wider health system reform, specifically aimed to expand insurance coverage through financial incentives and mandating an insurance policy when renewing government-issued licenses (1,15).

Economic constraints mean that the country faces challenges in protecting individuals from excessive OOP and informal payments and overall health-care costs, improving population health and securing health system sustainability.

The main source of financing for public spending on health is health insurance contributions paid by employers and employees, which increased during 2013–2015 by 1% every year, reaching 9% (more recent data are not available). A key issue with the financing arrangement is the proportion of the population who are informally employed – 30.9% of the total employed population in 2013 had an informal job (more recent data are not available) and so did not contribute to, and were mostly locked out of, the public health system.

Because of the informal nature of their employment, agricultural workers (notably farmers in rural areas) often are not adequately covered by MHI. Although a social assistance system for poorer people is in place, its breadth and depth are limited.

Transfers from the state budget to the MHI funds provide essential health system financing and programmatic support, as do external funds from donors, including GF. Transfers from external sources increased three times in the years spanning 2009–2015; most of these funds were earmarked for implementation of the MoHLSP project "Modernizing the Health Sector in the Republic of Moldova" through a World Bank loan (16).

Public allocations over the past few years appear to be growing when considered in the national currency, but when converted to US\$, expenditure is seen to have been decreasing due to

exchange rate fluctuations. The Republic of Moldova continues to lag behind the EU average for domestic general government health expenditure (as both a percentage of current health expenditure and per capita). More concerning still is the fact that the former indicator (percentage of current health expenditure) worsened from 48% in 2008 to 45.5% in 2015, and the latter (per capita) fell from US\$ 254.50 in 2014 to US\$ 234.67 in 2015 (more recent data are not available) (17). Of the US\$ 186 per capita spent on health in the country, US\$ 38 per capita is from external sources.

A breakdown of accounts similar to that suggested in the *A system of health accounts 2011* document *(18)* was not available, and the Public Budget Law and medium-term budget framework do not include a special budget line for TB; instead, TB is covered by the global budget for health. The estimated required amount for the implementation of special national programmes in health care is MDL 421 million.

Further distribution by health programme is done by the MoHLSP, depending on the total amount approved by the Ministry of Finance. The share of allocations from national sources in the overall allocation for implementation of the NTP has grown from 63% (2012) to 73% (2015). During the consultants' mission, it became clear that TB prevention programmes are mainly implemented by governmental and nongovernmental sectors and are the programmes most at risk of losing financing following GF withdrawal (this does not include Bacillus Calmette—Guérin (BCG) vaccination, for which coverage is good, with 100% of the budget coming from the national health budget).

The NTP for 2016–2020 specifies the objective of ensuring universal access to treatment through a patient-centred approach, reaching a success rate of at least 85% among new cases of bacteriologically confirmed lung TB and, among rifampicin-resistant (RR)/multidrug-resistant TB (MDR-TB) cases, no less than 75% by 2020. The estimated financial resources to achieve this through the entire implementation period are about MDL 531 million, with an estimated deficit of about MDL 114 million (or 22%). As such, financing already represents a significant risk that could reverse recent successes in TB control.

The current GF grant runs from 2018 to 2020 and is €15 million in total: €7.144 million is allocated to HIV and €8 million to TB (this includes funds for the left bank). National stakeholders and WHO consultants noted that while the Republic of Moldova has a higher proportion of funding reliant on GF than other countries considered in this project, it remains one of those best prepared for transition. GF is the only donor for TB in the country (other than Johnson & Johnson, which donates bedaquiline (Bdq)), with the public institution Coordination, Implementation and Monitoring Unit of Health System Projects (UCIMP) and PAS being the principal recipients.

Penitentiary systems have successfully been shifting towards a domestically-financed model since 2013, when the Ministry of Justice started to procure first-line anti-TB drugs (FLDs). The Ministry also procured some second-line anti-TB drugs (SLDs) in 2015 and purchased two X-ray machines with its own budget, in addition to the X-ray machine and mobile X-ray machine provided by GF (for which GF also provides maintenance). The domestic budget allocation for HIV and TB care to the Ministry of Justice in 2018 was MDL 5 million.

The ministry will become responsible for financing food packages from 2019; the only reason it is not already doing so is because the transition and sustainability plan has not yet been formally approved. The ministry's current budget request being considered by the Ministry of Finance is MDL 17 million: the Ministry of Justice has requested the Ministry of Finance to absorb 30% of the gap that will remain after GF withdrawal, but the size of the gap currently is unknown. The Ministry of Finance has so far agreed to absorb priorities, including treatment and diagnosis, but advocacy and prevention campaigns are not considered priorities.

The cost of the CCM is covered by a separate grant of €50 000 (including €27 000 for the Secretariat), which needs to be taken over by the Government. Given that the country needs to assume responsibility for €15 million of programmatic funding, the CCM cost is relatively very small, but it is vital that the Government is aware of the need to fund this role in addition to €15 million for HIV/TB.

The Government currently is considering consolidating the role of the CCM under the legal framework of Government Decision #825. A key barrier to achieving Government funding of the CCM is the fact that all other (non-TB) coordinators work on a volunteer basis, so it seems unlikely that stakeholders will be able to convince the state to fund TB coordinators and not the others. The role of TB coordinator will therefore almost certainly become voluntary when GF withdraws.

UCIMP receives half of the GF grant and PAS the other. UCIMP's activities are planned in line with the increasing co-financing requirements of domestic funds.

UCIMP supports the following activities:

- cultures for laboratories;
- purchase of SLDs;
- monitoring support via logistics and operations for field visits (transport of sputum samples to laboratories and transport of SLDs from the national programme to service delivery points);
- maintenance of health information system for TB; and
- storage of drugs at the national programme.

Johnson & Johnson donated 104 courses of treatment of Bdq in 2018 and 109 courses are planned for 2019. Zero donations of Bdq are planned for 2020.

UCIMP has asked the NTP to report its Bdq needs for 2019; the allocation can be purchased in March 2019 to establish a stockpile while funding remains, considering storage capacity limitations and expiry dates. Otherwise, Bdq will cost US\$ 400 per course of treatment, and UCIMP will need to find approximately US\$ 40 000 to cover this.

Uniquely, UCIMP is the Principal Recipient of the GF grant and PAS is Principal Recipient of the Tuberculosis Regional Eastern European and Central Asian Project (TB-REP) grant. Consequently, TB work is being taken forward in silos with very specific remits.

Impressively, the NTP plan informs the transition and sustainability plan and the TB Roadmap to implement a people-centred model of care for TB. All three key plans are perfectly aligned and truly reflect the situation observed in the country.

The Republic of Moldova is the only country visited within the scope of this project in which consultants saw a government agency (the NHIF) funding an NGO to provide TB-related care. This is a very positive example of assuming domestic responsibility (doing what it takes to get the job done), even if not ideal or within the NHIF remit in the long term.

#### Recommendations

The Ministry of Finance should:

• improve equity in financing and access to care by reducing OOP payments.

#### The MoHLSP should:

- define a budgeted action plan with timelines to ensure the remainder of the MDL 114 million required for the NTP's 2016–2020 plan is delivered;
- develop a TB-specific national health account for the MoHLSP to allow analysis of TB cost categories in greater detail;
- develop budget lines for the NTP in the medium-term budget framework to complement the above;
- ensure a sustainable financing mechanism from national resources exists to support the CCM;
- develop and implement a mechanism for redirecting gained financial resources, following TB beds optimization, towards strengthening ambulatory treatment;
- develop a plan for the NHIF to hand over financial responsibility for financing NGOs that provide TB-related care;
- report estimated Bdq needs for 2019 to UCIMP so UCIMP can procure these courses of treatment in March 2019 while funding remains; and

• assess the exact size of the gap that will remain after GF withdrawal and the Ministry of Finance has assumed 30% of the Ministry of Justice's remaining TB funding gap.

#### The NTP should:

 report estimated Bdq needs for 2019 to UCIMP, so UCIMP can procure these courses of treatment in March 2019 while funding remains.

The Ministry of Finance and Ministry of Justice should:

• assess the exact size of the gap that will remain after GF withdrawal and the Ministry of Finance has assumed 30% of the Ministry of Justice's remaining TB funding gap.

# Medicine and laboratory consumables procurement

The GF was the only provider of TB drugs in the country from 2005 until 2011. Currently, TB drugs are procured from different sources and by different agencies. FLDs have been fully procured through domestic sources from the national budget since 2011 for both the civilian (MoHLSP) and prison (Ministry of Justice) sectors. The GF remained the only source for SLDs until 2014, when the country started to purchase SLDs partly from domestic sources (MoHLSP for the civilian sector and Ministry of Justice for the prison system). SLDs for treatment of MDR-TB currently are procured from GF (60%) and domestic sources (40%).

Bdq is available in the country through the USAID and Johnson & Johnson donation programme. Clofazimine is not registered in the country, meaning it is not possible to import the re-purposed drug and shortened TB treatment regimens have not yet been introduced.

Drugs to treat the side-effects of anti-TB treatments are also procured from domestic funds, but the Government provides them for inpatients only; patients must therefore make OOP payments once they have moved to outpatient forms of TB treatment.

Table 1 presents the increasing share of domestic funding in procurement of SLDs by years.

Table 1. Number of MDR-TB treatment courses procured under MoHLSP and GF support, 2006–2018

Year			Cohort
2006	100 (round 1)		
2007		200 (GF round	
		1)	
2008		200 (GF round	
		6)	
2009		200 (GF round	150 (GF round 6, phase I) + 500 (GF round 6,
		6)	phase II)

Year	Cohort	
2010	250 (GF round 6) + 500 (GF round 8)	
2011	730 (GF round 8)	
2012	730 (GF round 8)	
2013	670 (GF round 8)	
2014	660 (GF round 8) + 190 (GF saving) + 100	
	MoHLSP	
2015	308 GF + 190 New Funding Mechanism of GF	
	(incl.16 Bdq) + 150 MoHLSP	
2016 <sup>a</sup>	530 GF + 250 MoHLSP	
2017 <sup>a</sup>	480 GF + 250 MoHLSP	
2018 <sup>a</sup>	679GF + 350 MoHLSP	

<sup>&</sup>lt;sup>a</sup> Procurement is no longer treatment-course based, but consumption-based, so it is not possible to establish the exact number of treatment courses.

*Source*: Green Light Committee for the WHO European Region, mission for monitoring the implementation of the national tuberculosis response plan in the Republic of Moldova, 4-8 December 2017.

The laboratory network in the Republic of Moldova is well developed, with a well-performing National Reference Laboratory (NRL) (third-level, one laboratory) in the IPP and a network of reference laboratories (second-level, three laboratories). All smear microscopy laboratories are equipped with GeneXpert MTB/RIF instruments (59 in total) and 60 new microscopes were procured in 2017. All regional and national reference laboratories are equipped with HAIN machines. They perform the MTBDR-plus version 2.0 and MTBDR-sl version 2.0 tests for FLDs and SLDs.

Laboratory consumables for smearing and microscopy examination are procured with domestic funds. The GF covers expenses for GeneXpert and HAIN platforms operations, including calibration of GeneXperts, and consumables for culturing and drug-sensitivity testing.

Procurement of TB drugs and laboratory consumables with GF sources is executed by the GF Principal Recipient, UCIMP.

The national agency responsible for general procurement for government entities was providing drugs and laboratory consumables purchased with domestic funds. Due to a monetary crisis and reforms in the procurement agency in 2017, the MoHLSP applied to the United Nations Development Programme (UNDP) for temporary support on procurement of medicines and laboratory consumables for nine health programmes. Later, the contract with UNDP was changed, and currently UNDP provides support only to TB and HIV programmes. The contract with UNDP also includes capacity-building of national institutions in procurement and storage.

The Centre for Procurement of Medicines and Medical Devices, established in 2016, supplies more than 370 medical facilities and all health programmes (except those for TB, HIV and

immunization) with drugs and necessary equipment. It is not experienced in working with international platforms such as the Global Drug Facility (GDF), which provides an opportunity to procure high-quality drugs at reasonable prices. Legislative issues also impede procurement from international platforms.

IPP is responsible for the forecasting, quantification, storage and distribution of drugs laboratory consumables. An electronic forecasting, quantification and early warning tool, Quan-TB, is used by the IPP to quantify the country's needs.

Drug forecasting and procurement for the left bank of the Nistru River is done by local health authorities with funds allocated by local administrations. The quality of the drugs is often unknown, and quantification is also doubtful. Currently, the expectation is that funds allocated by left bank local authorities for SLDs will be transferred to the central Government and procurement will be executed from the same source.

#### Recommendations

#### The MoHLSP should:

• revise legislation and develop a mechanism for procurement of anti-TB drugs and laboratory consumables from international platforms/manufacturers.

#### It is suggested that the GF consider:

• assisting with the registration of anti-TB drugs that are not yet available in the country.

#### The MoHLSP and NHIF should:

 ensure the budget covers ancillary drugs for all TB patients regardless of patient profile, phase of treatment or model of care.

#### The MoHLSP and GF should:

• use all available channels to continue efforts to establish a joint procurement mechanism for TB drugs for patients of the entire country, including the left bank of the Nistru River.

#### The MoHLSP, GF and UNDP should:

- assess the capacity of the national procurement entity, the Centre for Procurement of Medicines and Medical Devices, to take responsibility for drug provision for TB and HIV programmes; and
- support capacity-building of the Centre where needed, based on assessment results.

## Quality, safety and standards

There are quality concerns around FLDs in the left bank region consequent to the country's inability to control the procurement process, which is unpredictable. The left bank mostly depends on manufacturers in the Russian Federation and Ukraine who can produce non-WHO prequalified medicines of unknown quality. These non-WHO prequalified medicines are purchased from the left bank's own budget. Periodically, the left bank will also purchase its own SLDs. The unpredictable nature of this process affects UCIMP procurement; there may be surplus, depending on demand and supply in the left bank region, but when a deficit occurs, the Republic of Moldova is required to provide drugs from its own supply.

#### Recommendations

The MoHLSP should:

• continue work to establish good relations with the TB Programme Manager of the left bank region to strengthen communication and reduce uncertainty and unpredictability.

# **Communications and advocacy**

Government-run health promotion efforts focused on TB include BCG vaccine promotion programmes and a two-year monitoring of all people under the age of 18 who have come into contact with DR-TB. TB awareness and vaccination media campaigns (on TV and radio) operate all year round.

The IPP engaged with the border police and NGOs to help prevent TB and build TB awareness at Chisinau airport. Other activities seek to secure medical students' involvement in improving understanding about TB in their communities when they return for summer break.

At community level, most preventive efforts are run by nongovernmental and civil society organizations. NGOs work with injecting drug users in activities that are covered by GF and which focus only on HIV. When GF withdraws from providing HIV support, this will have an enormous impact on TB, as there is considerable overlap in preventive services provided for HIV/TB and many methods of preventing HIV also prevent TB.

Migrants remain the least informed about TB, while people in the penitentiary system are the best informed. The education of prisoners should remain a priority: 90% of inmates with HIV also have TB, the vast majority being male injecting drug users from big cities.

It is suggested that the GF should:

- provide resource mobilization and advocacy training to improve the skills of civil society organizations to ensure their advocacy efforts are as effective as possible; and
- identify alternative forms of funding to support NGOs working with former prisoners with TB to prevent the spread of multidrug and extensively drug-resistant TB (M/XDR-TB) in the community, given government funding is extremely unlikely.

## **Supervision and monitoring**

The Republic of Moldova is divided administratively into 32 rayons and three municipalities. The IPP Monitoring and Evaluation (M&E) Unit monitors and supervises TB activities in the rayons, and the rayons supervise primary health-care centres and villages. Each rayon has at least one TB doctor. The M&E Unit has experienced clinicians who provide technical assistance to clinicians in the rayons; the penitentiary system is included as one of the rayons in the supervision rounds. Supervision and monitoring expenses are not reflected in the national budget and are not covered by the NHIF. The GF currently pays for the service provided by the M&E Unit.

As part of the new drugs implementation plan and strengthening of clinical practices, regional drug-resistant TB committees (medical consilium) have been established in Transnistria, and in the Balti and Chisinau municipalities. The southern part of the country and the prison hospital refer their cases to the central DR-TB committee. The established system is to review TB patients every three months for treatment progress, which is a significant improvement in clinical management of patients. Extensively drug-resistant TB (XDR-TB) and pre-XDR-TB cases are reviewed by the central DR-TB committee in the IPP.

The IPP manages the e-program IMES TB information system at national level. IMES TB contains the electronic register that keeps records of and monitors TB cases, including epidemiological reports, data on TB drug records and management, and information on laboratory test results. Maintenance expenses and running costs for the TB information system is provided by the GF.

The left bank of the Nistru River TB Coordinator participates in CCM meetings, and data collected in the region are entered into the common electronic register managed at central level. TB facilities and laboratories in the civilian sector and prisons located in the left bank are not, however, covered by supervision and monitoring visits from central level.

The NRL has official status and is implementing countrywide supervision and quality control of the TB laboratory network. It also coordinates courier services for specimen transportation between laboratories and facilities. NRL does not have separate funding for tasks related to its reference work or courier services from the national budget. NRL reference functions and expenses for specimen transportation are covered by the GF grant. The NRL should be provided with specific funding for its reference function.

#### Recommendations

The ministries of health and finance should:

ensure adequate budgets to enable the continuation of M&E logistics and operations,
 NRL functions, specimen-transportation courier services and uninterrupted functioning of the TB e-information system.

#### The IPP and GF should:

- maintain continuous close collaboration with the TB Coordinator of the left bank of the Nistru River;
- organize training for TB specialists (doctors, nurses and laboratory technicians) with participation of IPP and NRL staff, and be involved in training specialists working in penitentiary system; and
- use all available channels and opportunities to cover TB treatment facilities located in the left bank of the Nistru River with supervision visits.

# Health system strengthening: service delivery, links with other interventions, and evidence-based TB policy and practice

#### **Outpatient service provision**

The Republic of Moldova inherited an extensive Semashko-style health system with numerous facilities and health-care personnel. After years of reforms following the country's independence in 1991, the health system is now organized according to the principles of universal access to basic health services, equity and solidarity in health services, and financing from both the state and individuals through mandatory health insurance mechanisms (1). Medical facilities are provided through primary, secondary and tertiary specializations. They offer the whole spectrum of medical services for individuals and some services for the whole population through key programmes relevant to the control of specific diseases, such as TB, HIV/AIDS, diabetes and vaccine-preventable infections.

Primary care is based on family medicine and is provided by administratively independent family medicine centres and health centres, with family doctor offices and health offices in rural areas. Secondary care, which includes specialized ambulatory care and hospital care, is provided by district and municipal hospitals. There are also providers of emergency care (ambulance

services), which belong to the MoHLSP, in every district. Medical facilities at tertiary level provide specialized and highly specialized medical care for the whole population.

Secondary care at rayon level, including TB services, is provided by district hospitals and specialized ambulatory services. Specialized ambulatory services are often physically located in the district hospital to which they are subordinate. Each rayon (32 in the country) has a TB specialist phthisiopneumologist who coordinates with family doctors in deciding the model of care for TB patients and organizing and monitoring ambulatory treatment of patients in rural areas. Nurses in family doctor offices and health offices are involved in provision of daily treatment for TB patients. Family medicine centres and health centres are involved in treatment provision in cities, towns and rayon centres, along with community centres.

The NHIF has two payment methods for PHC: age-adjusted capitation and performance payment. PHC staff are paid by two TB-related indicators in the performance scheme: proactive detection of the population at risk of TB and finalized TB treatment (Mrs Triin Habicht, economist, unpublished data, 2018).

#### **Community centres**

During 2012/2013, 10 community centres were established under the GF grant within the premises of district TB units. The aim of the centres is to improve patient adherence to treatment and decrease the number of patients lost to follow up. Personnel include one coordinator (normally a TB doctor), treatment supporter (nurse), psychologist and social workers. The community centres' functions are to: make an initial evaluation of the risk of TB patients becoming lost to treatment follow up in future; provide education and psychological support to patients and their families; arrange any relevant social support available in the district; and support advocacy, communication and social mobilization activities in the community.

After comparing data from the places within and outside the community centres, it was decided to extend the number. Currently, 38 are operating in the country with GF support. the Government is planning to take responsibility for funding: the GF will support 33 and 21 centres in 2019 and 2020 respectively.

Covering the total expenses of all community centres in the country through the NHIF might be challenging for the Government. There is a tendency in the country to establish similar services for health programmes with common features; it may be considered more sustainable and cost–effective to merge the functions of existing centres to provide services not only for TB patients, but also for those with different conditions but similar needs.

#### **Hospital-based treatment**

Currently, there are 940 phthisiopneumology beds under the charge of the MoHLSP, but only 700 are operating. Of those, 360 are located in the republican institutions, and 265 and 75

respectively in specialized institutions in Chisinau and Balti municipalities. X/MDR-TB patients are hospitalized only in Chisinau at the IPP, which also provides surgery for TB patients and houses the unit for childhood TB.

The average length of hospitalization of TB patients was 72.6 days in 2016. The indicator has significant variations depending on the type of TB case and the health-care institution; MDR-TB cases have particularly long hospitalization periods, reaching an average of 126.5 days, while the length of hospitalization for TB-sensitive cases with negative microscopy varies between 57 and 65 days, and for those with positive microscopy between 70 and 81 days (MoHLSP Order #305, 14.04.2017).

The number of TB beds available in the civil sector was reduced from 1255 to 940 in 2017. Assessments made by national and international experts on the basis of the number of notified cases and resistance profiles suggest it is necessary to gradually optimize the number of beds.

The NHIF applies different payment methods for inpatient hospital care. Most common is case-based payment with a budget ceiling. Per diem, global-budget and other forms of payments are also applied. TB hospitals/departments are reimbursed based on per diem, which is the same (MDL 479) for all TB patient categories and without any upper limit (Triin Habicht, economist, unpublished data, 2018).

#### People-centred model of TB care

Hospital practice in the current TB medical care system is characterized by two critical features: almost universal hospitalization (including cases with reduced risk of contagiousness) and excessive length of hospitalization. These can be overcome by expanding treatment in outpatient settings, depending on reduction in risks related to outpatient treatment for TB patients and adjustment to current hospitalization practices.

Recently, the Republic of Moldova developed the TB Roadmap, which was approved by the MoHLSP (MoHLSP Order #305, 14.04.2017). Its goal is defined as reaching greater efficiency in TB treatment through early detection and extension of outpatient treatment.

Specific objectives of the TB Roadmap are to:

- reduce the ratio of late detection of TB by 10% by the end of 2018;
- initiate full treatment management in outpatient settings for 60% of new TB-sensitive cases by the end of 2018;
- initiate full treatment management in outpatient settings for 40% of new MDR-TB cases by the end of 2018;
- reduce the duration of hospitalization of new TB-sensitive cases, who require on average up to 30 days of inpatient care, by the end of 2018; and

• reduce the duration of hospitalization of new MDR-TB cases, who require on average up to 90 days of inpatient care, by the end of 2018.

PAS, the Principal Recipient of the GF-financed TB-REP in collaboration with the WHO Regional Office for Europe as one of the subrecipients and technical project lead, is supporting IPP in developing a national guide for a people-centred model of care. The document will focus on TB service providers' tasks in different health facilities to ensure high-quality and timely service provision for all TB patients in acceptable and convenient patient environments.

The World Bank recently conducted research on optimization of investments in countries' TB responses (the Optima Report). The report of the study is not yet finalized.

#### **Human resources**

The high average age of staff, combined with the difficulty of finding young and motivated colleagues, presents a major problem for the NTP in the Republic of Moldova, as it does in many countries. The TB specialty has been merged with pulmonology and undergraduate and postgraduate training is provided in both disciplines. The Republic of Moldova has one medical university and five nursing colleges across the country. The curriculum is constantly updated and changed to move closer to EU standards. The so-called brain-drain of young and qualified staff in Romania and other EU countries has been noted.

Under the NTP and supported by the GF, extensive and regular training has been provided over the years to all TB and primary health-care staff, but training activities currently are reduced.

Implementation of the TB Roadmap means it is likely that fewer TB and MDR-TB patients will stay in hospital. Hospitals should be replaced by effective outpatient services. To support this process, the NTP and MoHLSP should rethink to ensure they have an adequate human resources plan in place.

#### CCM

The CCM is a cross-sectoral body set up at national level that reflects the priorities and commitment of the Republic of Moldova to fight TB, HIV/AIDS and sexually transmitted infections. The head of the CCM in the country is the Minister of Health, Labour and Social Protection. CCM is taking the lead in strategic decisions, coordination of activities among donor and national stakeholders, monitoring of implementation of TB, HIV/AIDS and sexually transmitted infection national programmes, and providing expertise on technical topics. CCM currently is the only platform for including NGOs, patients, communities and other representatives of civil society in decision-making and for communicating advice to decision-makers. Currently, 40% of CCM members are representatives from civil society.

It is important to maintain such a platform with representation from different ministries, agencies and, especially, civil society members to shape decision-making and coordination of TB,

HIV/AIDS and sexually transmitted infection programme activities after the GF era. Health authorities from the left bank of the Nistru River also recognize the CCM and take part in meetings.

#### Recommendations

The MoHLSP and NHIF should:

- revise the existing system of financing TB services for all models care to ensure effective implementation of the TB Roadmap;
- consider merging community centres with similar services for a wide range of patients to establish efficient and cost-effective services;
- consider the Optima Report recommendations, when available, to prioritize finances for activities; and
- consider the scope of functions of the CCM after GF support ends.

The MoHLSP and IPP should:

- develop a rational plan for hospital capacity reduction, reflecting the real need for TB beds and infection control requirements; a human resources plan should be developed in parallel to ensure effective implementation of the NTP and the TB Roadmap;
- finalize development of the national guide for a people-centred model of care; and
- develop a plan for training sessions for PHC and phthisiopneumology staff and consider a budget for these activities.

# TB care in the penitentiary system

The Ministry of Justice is responsible for health care in the penitentiary system, with service delivery under the DPI. Medical staff responsible for health care in the penitentiary system are part of the Ministry of Justice, but discussions on transferring medical services and dedicated staff to the MoLHSP are ongoing.

A transition plan to move from donor to domestic funding for TB activities in the prison system has been developed, but has not yet been approved.

There are 14 penitentiary institutions on the Right Bank of the Dniester: 10 colonies (one for women and one for juveniles) and four pre-trial isolators (SIZOs). Around 7300 inmates were in the penitentiary system by the end of 2017. Two prison hospitals, at Pruncul and Rezina, serve the system. Pruncul Hospital has about 200 TB beds for both TB-sensitive and DT-TB cases. Rezina Medical Facility is used for treatment refusals and palliative care. There are also hospital beds in SIZOs in which detainees can receive general health services, including TB treatment.

TB case-finding is conducted on entry to penitentiary facilities, during annual TB mass screening and also during patient self-referrals. The SIZOs have an X-ray machine and the DPI has a mobile X-ray machine that is used for annual TB mass screening. All penitentiary facilities have a medical unit. TB mass screening is conducted once a year in all prisons on the Right Bank. Inmates of SIZOs are screened at entry and every six months, if their stay exceeds six months.

The penitentiary system has two smear microscopy centres, in Pruncul and Chisinau SIZO. In places where smear microscopy is not available, sputum samples are sent for culture and drug-susceptibility testing to nearby civilian laboratories by courier services. Two GeneXpert MTB/RIF platforms are also installed in the penitentiary system.

FLDs and laboratory consumables for smear microscopy examinations are procured by the Ministry of Justice, and SLDs for DR-TB treatment and consumables for rapid molecular testing are provided by the GF.

Inmates who are still on TB treatment on release from the penitentiary system are followed up by the NTP and a local NGO, Act for Involvement (AFI), which provides support during outpatient treatment in civilian services. AFI activities are supported by the GF. On release, patient information is sent to the DPI, which coordinates information transfer among the penitentiary system, the NTP and AFI.

The department cooperates closely with the IPP, whose staff supervise prison TB activities during monitoring visits. TB laboratories serving prisons are subject to NRL quality control.

Lack of doctors and nurses in some penitentiary facilities is observed, along with low motivation among medical staff.

#### Recommendations

The Ministry of Justice should:

- update and approve the transition plan for TB activities in the penitentiary system;
- revise the payment system for medical personnel in the penitentiary system to increase staff salaries and motivation; and
- gradually take over budget responsibility to ensure uninterrupted supply of drug and laboratory consumables for TB patients in the prison system after GF withdrawal.

The Ministry of Justice, MoHLSP and NHIF should:

cooperate on ensuring funds for follow up of released prisoners while in treatment.

The Ministry of Justice, MoHLSP, IPP and GF should:

• provide training for medical staff working in penitentiary institutions to ensure parity with colleagues involved in TB activities in the civilian sector.

# **Recommendations and suggested actions**

Table 2 summarizes recommended and suggested actions.

Table 2. Recommended and suggested actions

Area	Action	Timeline	Responsible agency
Policy and strategies relating to TB	Accelerate approval of transition plan and coordinate process from each stakeholder to finalize approval of the document by Government	Q1, 2019	MoHLSP
	Establish monitoring system of transition plan implementation and provide partners with information on progress	Q2, 2019	MoHLSP
	Finalize development of national guide on people-centred model of TB care	Q1, 2019	MoHLSP, IPP
Financing and planning	Define a budgeted action plan with timelines to ensure the remainder of the MDL 114 million required for the NTP's 2016–2020 implementation period is covered	Q1, 2019	MoHLSP
	Develop a TB-specific national health account for the MoHLSP to allow analysis of TB cost categories in greater detail	Commence ASAP, have reviewed Q3, 2019	MoHLSP
	Develop budget lines for the NTBCP in the medium-term budget framework to complement the above	Commence ASAP, have reviewed Q3, 2019	MoHLSP
	Ensure a sustainable financing mechanism to support the CCM exists from national resources	Q3, 2019	MoHLSP

Area	Action	Timeline	Responsible agency
	Develop and implement a mechanism for redirecting gained financial resources, following TB beds optimization, towards strengthening ambulatory treatment	Q3, 2019	MoHLSP
	Develop a plan for the NHIF to hand over financial responsibility for financing NGOs that provide TB-related care	Q3, 2019	MoHLSP
	Improve equity in financing and access to care by reducing OOP payments	Ongoing	Ministry of Finance
	Report estimated Bdq needs for 2019 to UCIMP, so UCIMP can procure these courses of treatment in March 2019 while funding remains	Q4, 2018 (ASAP)	NTP
	Assess the exact size of the gap that will remain after GF withdraw and Ministry of Finance has assumed 30% of the Ministry of Justice's remaining TB funding gap	Q2, 2019	Ministry of Finance and Ministry of Justice
Supervision, monitoring and surveillance	<ul> <li>Ensure adequate funds in budget to enable continuation of:</li> <li>M&amp;E logistics and operations;</li> <li>NRL functions;</li> <li>specimen transportation courrier services;</li> <li>uninterrupted functioning of TB e-information system</li> </ul>	According to the transition plan, through 2019/2020	MoHLSP, Ministry of Finance

Area	Action	Timeline	Responsible agency
	Maintain continuous close collaboration with TB Coordinator of left bank of the Nistru River	Ongoing	IPP, GF
	Organize training for TB specialists (doctors, nurses, laboratory technicians) with participation of IPP and NRL staff; involve specialists working in penitentiary system in training	Ongoing	IPP, GF
	Use all available channels and opportunities to cover supervision visits of TB treatment facilities of left bank of the Nistru River	Ongoing	IPP, GF
Medicine procurement	Revise legislation and develop a mechanism for procurement of anti-TB drugs and laboratory consumables from international platforms/manufacturers	Q1, 2019	MoHLSP
	Assist with the registration of anti- TB drugs not yet available in the country	Q1, 2019	GF
	Ensure budget covers ancillary drugs for all TB patients regardless of patient profile, phase of treatment or model of care	Q1, 2019 ongoing	MoHLSP, NHIF
	Use all available channels and continue efforts for establishing system of joint procurement mechanism of TB drugs for patients of entire country, including left bank of the Nistru River	Ongoing	MoHLSP, GF

Area	Action	Timeline	Responsible agency
	Assess capacity of national procurement entity, Centre for Procurement of Medicines and Medical Devices, in taking responsibility of drug provision for TB and HIV programmes	Q1, 2019	MoHLSP, GF, UNDP
	Support capacity-building of the Centre for Procurement, where needed, based on assessment results	Q1, 2019	MoHLSP, GF, UNDP
Quality, safety and standards	Continue work to establish good relations with TB Programme Manager in left bank region to strengthen communication and reduce uncertainty/unpredictability	Ongoing	MoHLSP
Service delivery and linking with other interventions; health system strengthening; and evidence-based policy and practice	Revise existing system of financing TB services for all models care to ensure effective implementation of the TB Roadmap	Q1, 2019	MoHLSP, NHIF
	Consider merging of community centres providing similar services for a wide range of patients to establish efficient and costeffective service	Q1, 2019	MoHLSP, NHIF
	Consider Optima Report recommendations, when available, to prioritize activities to be financed	By availability of the document	MoHLSP, NHIF
	Consider continuation of CCM function after GF support will end, with the same or changed scope of functions	Q1, 2019	MoHLSP, NHIF

Area	Action	Timeline	Responsible agency
	Develop rational plan of hospital capacity reduction, considering real needs of TB beds and infection control requirements; in parallel, develop human resources plan to ensure effective implementation of NTP and the TB Roadmap	Q1, 2019	MoHLSP, IPP
	Finalize development of national guide for people-centred model of care	Q1, 2019	MoHLSP, IPP
	Develop plan for training sessions for PHC and phthisiopneumology staff; consider budget for training activities	Q1, 2019	MoHLSP, IPP
TB care in the penitentiary system	Update and approve transition plan for TB activities in penitentiary system	Q1, 2019	Ministry of Justice, DPI
	Revise payment system for medical personal of penitentiary system to increase salary and motivation of staff	Q1, 2019	Ministry of Justice, DPI
	Gradually take over budget responsibility from GF to ensure uninterrupted drug and laboratory consumables supply for the TB patients in prison system after GF withdrawal	According to transition plan	Ministry of Justice, DPI
	Cooperate with MoHLSP and NHIF to ensure funds for follow up of released prisoners while in treatment	According to transition plan	Ministry of Justice, MoHLSP, NHIF

Area	Action	Timeline	Responsible agency
	Provide training for medical staff working in penitentiary institutions, to be on same line with colleagues involved in TB activities in civilian sector	Q1, 2019	Ministry of Justice, MoHLSP, IPP, GF
Communications and advocacy	Provide resource mobilization and advocacy training to improve the skills of civil society organizations to ensure that their advocacy efforts are as effective as possible	Q2, 2019	GF
	Identify alternative forms of funding to support NGOs working with former prisoners with TB to prevent the spread of M/XDR-TB in the community, given government funding is extremely unlikely	Q2, 2019	GF

## References<sup>4</sup>

- 1. Turcanu G, Domente S, Buga M, Richardson E. Republic of Moldova: health system review. Health Syst Transit. 2012;14:1–151 (http://www.euro.who.int/\_\_data/assets/pdf\_file/0006/178053/HiT-Moldova.pdf?ua=1).
- 2. European Health for All database (HFA–DB) [online database]. Copenhagen: WHO Regional Office for Europe; 2018 (http://data.euro.who.int/hfadb/).
- 3. Atun R, Richardson E, Shishkin S, Kacevicius G, Ciocanu M, Sava V. Republic of Moldova: health system review. Health Syst Transit. 2008;10:1–140.
- 4. StatBank [online database]. Chisinau: National Bureau of Statistics of the Republic of Moldova; 2018 (http://www.statistica.md/).
- Migration and remittances data [online database]. Washington (DC): World Bank; 2018 (http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data).
- 6. Poverty report Republic of Moldova 2010–2011. Chisinau: Ministry of Economy of the Republic of Moldova; 2012 (https://mei.gov.md/sites/default/files/poverty-report-republic-of-moldova-2010-2011.pdf).
- 7. Moldovan businessman jailed for role in \$1 billion bank fraud. Reuters. 20 April 2017 (https://www.reuters.com/article/moldova-banking-platon/moldovan-businessman-jailed-for-role-in-1-billion-bank-fraud-idUSL8N1HS3T0).
- 8. Постановление Nr. 1160 от 20.10.2016 об утверждении Национальной программы по контролю туберкулеза на 2016–2020 годы [Resolution Nr. 1160 of 10/20/2016 on approval of the National TB Control Programme for 2016–2020]. Chisinau: Government of the Republic of Moldova; 2016
  - (http://lex.justice.md/viewdoc.php?action=view&view=doc&id=367268&lang=2) (in Russian).
- 9. Curatio International Foundation [website]. Tbilisi: Curatio International Foundation; 2018 (http://curatiofoundation.org/aboutus/).
- 10. Association Agenda between the European Union and the Republic of Moldova. Brussels: European Union; 2014 (http://eeas.europa.eu/archives/docs/moldova/pdf/eu-moldova-association-agenda-26\_06\_en.pdf).
- 11. Atun R. What are the advantages and disadvantages of restructuring a health care system to be more focused on primary care services? Copenhagen: WHO Regional Office for Europe; 2004 (http://www.euro.who.int/\_\_data/assets/pdf\_file/0004/74704/E82997.pdf).
- 12. Starfield B. Is primary care essential? Lancet 1994;344:1129–33. doi:10.1016/S0140-6736(94)90634-3.
- 13. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. Milbank Q. 2005;83:457–502. doi:10.1111/j.1468-0009.2005.00409.x.
- 14. Hone T, Habicht J, Domete S, Atun R. Expansion of health insurance in Moldova and associated improvements in access and reductions in direct payments. J Glob Health 2016;6(2);020702 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5112006/#R15).
- 15. Vian T, Feeley FG, Domente S, Negruta A, Matei A, Habicht J. Barriers to universal health coverage in Republic of Moldova: a policy analysis of formal and informal out-of-pocket payments. BMC Health Serv Res. 2015;15:319. doi:10.1186/s12913-015-0984-z.
- 16. Cât se cheltuie pentru ocrotirea sănătății în Republica Moldova? [How much is spent for health care in the Republic of Moldova?]. In: Centrul Analitic Independent EXPERT-GRUP [website]. Chisinau: Centrul Analitic Independent EXPERT-GRUP; 2016 (https://www.expert-

<sup>&</sup>lt;sup>4</sup> All weblinks accessed 26 August 2018.

- grup.org/ro/activitate/comunicate-de-presa/item/1335-c%C3%A2t-se-cheltuie-pentru-ocrotirea-s%C4%83n%C4%83t%C4%83%C8%9Bii-%C3%AEn-republica-moldova).
- 17. Domestic general government health expenditure per capita, PPP (current international \$) [online database]. Washington (DC): World Bank; 2018 (https://data.worldbank.org/indicator/SH.XPD.GHED.PP.CD?locations=MD).
- 18. Organisation for Economic Co-operation and Development, Eurostat, World Health Organization. A system of health accounts 2011. Revised edition. Paris: OECD Publishing; 2017 (http://www.oecd.org/publications/a-system-of-health-accounts-2011-9789264270985-en.htm).

## Annex 1. Agenda of mission and list of people met

#### 6 August 2018

#### **WHO** country office

Dr Stella Gheorghita, National Professional Officer

#### Ministry of Health, Labour and Social Protection

Mrs Daniela Demiscan, Head of Public Health Department responsible for Monitoring and Evaluation of National TB Programme

Mr Valeriu Goncear, Head of Unit of Medical and Social Human Resource Management

Mrs Lilia Gantea, Head of Unit for Planning of Health and Social Insurance

Mr Gudumac Anatolie, Head of Unit of Finance and Administration

#### Institute of Phthisiopneumology "Chiril Draganiuc" (IPP)

Dr Sofia Alexandru, Director

Dr Valentina Vilc, Deputy Director, Coordinator of National Tuberculosis Programme

Dr Ana Donica, Deputy Director, Clinical Case Management,

Dr Andrey Corlateanu, Head of the Monitoring and Evaluation Unit

Dr Diana Condratchii, phtisiopneumologist

Dr Valeriu Crudu, Head of the Laboratory

#### **7 August 2018**

#### **Department of Penitentiary Institutions of Ministry of Justice**

Mr Andreai Corlateanu, Department on Monitoring and Evaluation, IPP

Mrs Irina Barbiros, Head of the Medical Department

Mrs Nelea Caras, Head Specialist, Medical Department

Mr Vladimir Cojocaru, Head of the Department of Penitentiary Institutions

Mrs Olga Ciorba, Head of the Department on Economy and Financing

#### **Country Coordinating Mechanism Secretariat**

Dr Silvia Stratulat, Secretary

# Coordination, Implementation and Monitoring Unit, Principal Recipient of the Global Fund grant

Mr Nicolae Jelamschi, Executive Director

Mrs Victoria Petrica, TB grant coordinator

#### 8 August 2018

#### **National Health Insurance Company**

Mr Dumitru Parfentiev, General Director

Mr Daniel Stici, Deputy Director

Mr Ghenadie Danascan, Head of the Department on Contracting

Mrs Doina-Maria Rotaru, Head of Unit, Department on Contracting

Mr Sergiu Negritu, Head of the Department on Economy and Financing

Mrs Diana Noroc, Head of the Unit Nord, Department on Monitoring and Evaluation

#### **United Nations Development Programme**

Mr Dorin Rotaru, Head of Operations

# Ministry of Health, Labour and Social Protection debriefing, presentation of key findings and recommendations:

Dr Aliona Serbulenco, Secretary of State

Mrs Daniela Demiscan, Head of Public Health Department responsible for Monitoring and Evaluation of National TB Programme

# Centre for Centralized Public Procurement in Health, Ministry of Health, Labour and Social Protection

Mr Ivan Antoci, Director

Mrs Nadezhda Osoianu, Monitoring and Contract Execution Department

# The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

#### **Member States**

Albania

Andorra

Armenia

Austria

Azerbaijan

Belarus

Belgium

Bosnia and Herzegovina

Bulgaria

Croatia

Cyprus

Czechia Denma<u>rk</u>

Estonia

Finland

France

Georgia

Germany

Greece

Hungary

Iceland

Ireland Israel

Italy

Kazakhstan

Kyrgyzstan

Latvia

Lithuania

Luxembourg

Malta

Monaco

Montenegro

Netherlands

Norway Poland

Portugal

Republic of Moldova

Romania

Russian Federation

Russian Fed San Marino

Serbia

Slovakia

Slovenia

Spain Sweden

Switzerland

Tajikistan

The former Yugoslav Republic of Macedonia

Turkey

Turkmenistan

Ukraine

United Kingdom

Uzbekistan

## World Health Organization Regional Office for Europe

UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark

Tel: +45 45 33 70 00 Fax: +45 45 33 70 01

Email: eurocontact@who.int Website: www.euro.who.int