Review of tuberculosis prevention and care self-reliance in selected countries of the WHO European Region transitioning from Global Fund to Fight AIDS, Tuberculosis and Malaria to domestically financed tuberculosis-related activities
Abstract

The WHO Regional Office for Europe, with the financial support from the United States Agency for International Development regional platform project and the Ministry of Health of Germany, has supported a selection of countries to review and document their preparedness for self-reliance in tuberculosis (TB)-related activities in light of reduced development partner support. The Regional Office’s support is in line with the Health 2020 European health policy and seeks to align strategic direction at country level with that of the WHO European Region and recommend priority activities to be carried out by stakeholders.

The Roadmap to Implement the Tuberculosis Action Plan for the WHO European Region 2016–2020 outlines such activities, along with the need for continuous and sustainable financing to support countries in identifying and minimizing the potential gaps emerging as a result of development partner contribution scale-down. Activities generally seek to address the lack of sustainable human resources and sound health financing mechanisms, which exacerbate challenges in TB (particularly multidrug and extensively drug-resistant TB) prevention, control and care. Specialized human resources to manage cases of drug-resistant TB in children and adults, deliver adequate services for case detection and scale-up diagnostic and laboratory capacities are particularly required.

This synopsis describes the transition process in Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine, some sustainability issues, the challenges caused by the scaling down and eventual cessation of development partner contributions TB-related activities, and recommendations on how countries can overcome transition-related difficulties and ensure sustainability.

Keywords

ARMENIA, AZERBAIJAN, BELARUS, GEORGIA, MOLDOVA, UKRAINE, 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 2018

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.
Contributors

Authors

Ms Allira Attwill
Health Economist, consultant, Joint Tuberculosis, HIV and Viral Hepatitis programme, Division of Health Emergencies and Communicable Diseases, WHO Regional Office for Europe

Dr Nikoloz Nasidze
Consultant, Joint Tuberculosis, HIV and Viral Hepatitis programme, Division of Health Emergencies and Communicable Diseases, WHO Regional Office for Europe

Dr Martin van den Boom
Technical Officer, Joint Tuberculosis, HIV and Viral Hepatitis programme, Division of Health Emergencies and Communicable Diseases, WHO Regional Office for Europe

Dr Masoud Dara
Coordinator, Communicable Diseases and Programme Manager, Joint Tuberculosis, HIV and Viral Hepatitis Programme, Division of Health Emergencies and Communicable Diseases, WHO Regional Office for Europe

Acknowledgements

Technical feedback or input in preparation of this document was given by Dr Sevim Ahmedov (United States Agency for International Development); and Dr Ihor Perehinets and Mr Szabolcs Szigeti (WHO Country Office in Hungary).
Abbreviations

CCM  Country Coordinating Mechanism
CSO  civil society organization
FLD  first-line antituberculosis drug
GDF  Global Drug Facility
GDP  gross domestic product
GGE  general government expenditure
GGHE  general government health expenditure
GNI  gross national income
MDR-TB  multidrug-resistant tuberculosis
M/XDR-TB  multidrug- and extensively drug-resistant tuberculosis
NGO  nongovernmental organization
NSP  National Strategic Plan
NTP  National Tuberculosis Programme
OOP  out of pocket
PATH  Program for Appropriate Technology in Health
PHC  primary health care
SLD  second-line antituberculosis drug
TB  tuberculosis
TB-REP  Tuberculosis Regional Eastern European and Central Asian Project
THE  total health expenditure
TSP  transition and sustainability plan
UN  United Nations
USAID  United States Agency for International Development
XDR-TB  extensively drug-resistant tuberculosis
Executive summary

The WHO Regional Office for Europe is supporting and guiding countries to ensure sustainable funding their TB prevention and care. Through a specific project, the Regional Office studied and documented preparedness for self-reliance in TB-related activities of selected countries in light of reduced support from the Global Fund to Fight AIDS, Tuberculosis and Malaria and other development partners. The Regional Office’s support is in line with the Health 2020 European health policy and seeks to align strategic direction at country level with that of the WHO European Region and to recommend priority activities to be carried out by stakeholders.

With funding from the USAID regional platform project and the Ministry of Health of Germany, a self-reliance review of tuberculosis (TB) prevention and care activities was conducted by the WHO Regional Office for Europe to support Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine to document their preparedness for assuming financial and programmatic accountability for TB-related activities in light of reduced development partner support (mainly from the Global Fund).

Multidrug-resistant TB (MDR-TB) and extensively drug-resistant TB (XDR-TB; together known as M/XDR-TB) represent an ongoing threat to the success of national TB programmes (NTPs) in all six countries, and are therefore considered a priority. Currency devaluation or depreciation is reducing the ability of health ministries, finance ministries and NTPs to plan and budget accurately and to procure the necessary quantities of drugs and medical equipment on the international market. In fact, in some countries, it is the fiscal situation that poses the greatest risk to sustainable financing for TB activities. The potential loss of access to international purchasing platforms such as the Global Drug Facility (GDF) is a significant problem that should be rectified.

The reduction in development partner funding is being met by an increase (or at least the intention to increase) domestic funding for TB in all countries except for Armenia. Earmarked budgets are lacking to support monitoring and supervisory visits (currently funded by the Global Fund). Efforts directed towards policy and strategy should focus on ensuring a realistic transition and sustainability plan (TSP) is developed and followed to minimize disruptions to TB programme activities during Global Fund contribution scale-down.

A requirement for WHO prequalification ensures minimum drug quality standards in most countries, although revision of procurement law/legislation is needed in all countries except for Azerbaijan, who already has experience of second line drugs procurement since 2014, and where regulations allow drug procurement from international platform. Drugs of substandard quality may cause development of M/XDR-TB, and the resultant costs could undermine the TB programme activities and sustainability efforts.

First-line anti-TB drugs (FLDs) are procured by domestic funds (except in Armenia, where the Global Fund also procures second-line anti-TB drugs (SLDs)); SLDs are procured wholly by the government budget in Belarus and Azerbaijan (for the civilian sector) and partly in Georgia, the Republic of Moldova and Ukraine. New and repurposed anti-TB drugs, including those for XDR-TB and pre-
XDR-TB patients are provided by the Global Fund and the United States Agency for International Development (USAID)/Johnson & Johnson joint donation programme. Countries reviewed now face a steep increase in co-financing requirements as development partners scale-down their support.

Recent health system reforms are ongoing in all selected countries: they are shifting towards broader access, integrated care and a primary health-care (PHC) model. Key challenges include the relatively rapid rate of reform required to switch from the Semashko system to a PHC-based system; an ageing health-care workforce; and unequal distribution and inadequate planning of training, monitoring and supervision and capacity-building for health-care workers.

Penitentiary institutions are under different ministries in the studied countries, although the health ministry has the policy-making, supervisory and monitoring roles in all countries. Unless the nongovernmental organizations (NGOs) that help ex-prisoners to reintegrate into civilian life are supported after Global Fund contribution scale-down, TB is highly likely to be transmitted to the civilian community through staff, visitors and inadequately treated former inmates.

The Country Coordinating Mechanism (CCM) is the only platform for including civil society organizations (CSOs) in decision-making processes, with the exception of Ukraine, where civil society is particularly strong and actively involved in decision-making processes via alternative means. Countries that choose not to institutionalize the CCM are recommended to create another platform with an appropriate remit to facilitate the inclusion of CSOs and to address coordination issues in health policy decision-making.
1. Introduction

Under the framework of a USAID regional platform project, the WHO Regional Office for Europe supported the six Eastern Europe countries\(^2\) to document their preparedness for self-reliance in their TB-related activities in light of reduced support from Global Fund and other development partners.

The project reviewed the sustainability of development partner-financed TB-related activities, analyzed gaps and potential consequences of transition, and suggested actions to mitigate challenges and maximize opportunities in the selected countries.

The objectives of country visits were to:

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

This project was made possible by funding from the USAID regional platform project and the Ministry of Health of Germany.\(^3\) The Regional Office is grateful to national authorities, TB staff, key partners, WHO Country Office staff and in the countries visited for their inputs, insights and support.

This document provides a synopsis and highlights information gaps and areas that require additional efforts but were beyond scope of the current project. This synopsis was presented to the reviewed countries via a videoconference in January 2019. Key results were presented in person at the Interregional workshop in preparation for transitioning towards domestic financing in TB, HIV and Malaria programmes to be held on 17–19 October 2018 in Tbilisi, Georgia.

The purpose of this publication is to reflect the much-needed consideration of indicators from different United Nations (UN) organizations, ministries and development partners, including ministries of health, finance, justice and the interior, the Global Fund, the International Committee of the Red Cross, the Program for Appropriate Technology in Health (PATH), the United Nations Development Programme, USAID, WHO and the World Bank. In doing so, it allows to capture cross-cutting variables in pursuit of capturing a realistic picture of current and emergent gaps in sustainable funding for TB related activities.

\(^{2}\) are Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine.

\(^{3}\) USAID provided financial support for the work conducted in Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova, and the German health Ministry (full name) supported the work in Ukraine.
1.1 Background

This work was conducted in the context of UN global and regional frameworks and documents, including those outlined below.

1. The WHO Regional Committee for Europe approved Health 2020 (1) in 2012 to provide a framework for government and society to pursue health and well-being. Health 2020 presents the WHO European Region’s social and economic imperatives for action, and supports continued strong efforts to combat communicable diseases. Of particular relevance, Health 2020, reflecting the high rate of TB drug resistance, noted that universal access to TB diagnosis, treatment and care, effective diagnosis and treatment of people with MDR-TB represented a “best buy” as evidence-based and cost-effective interventions to combat communicable diseases.

The Tuberculosis Action Plan for the WHO European Region 2016–2020 (2), with its supporting resolution (Annex 1), is in line with Health 2020 (1), and was endorsed at the 65th session of the WHO Regional Committee for Europe in September 2015 in Vilnius, Lithuania (2).

In 2016, the WHO Regional Office for Europe published the Roadmap to Implement the Tuberculosis Action Plan for the WHO European Region 2016–2020 (4). The Roadmap sets a regional goal and targets for the care and control of TB and drug-resistant TB from 2016 to 2020 by defining strategic directions, and describes activities to be carried out by stakeholders.

The Roadmap highlights that overreliance on development partner funds in a number of high-priority countries continues to lead to insufficient (and even decreasing) domestic funding. To address this, the Roadmap seeks to support sustainable arrangements for funding using national resources to ensure uninterrupted access to TB services as countries transition from development partner to domestically financed TB activities. Specifically, the Roadmap states that plans should be developed to increase domestic funding and shared responsibility schemes for TB prevention, control and care in countries receiving financial and/or programmatic development partner support.

2. In September 2015, the UN adopted the 2030 Agenda for Sustainable Development (5), which includes 17 Sustainable Development Goals (SDGs) and 169 targets. SDG 3 (Good health and well-being) specifically commits to ending the epidemics of AIDS, TB, malaria and other communicable diseases by 2030. The aim is to achieve universal health coverage and provide access to safe and affordable medicines and vaccines for all.

In the framework of the UN SDG’s Issue-based Coalition on Health and Well-being for All at All Ages in Europe and Central Asia, the WHO Regional Office for Europe led a consultative process to identify shared principles and key actionable areas within and beyond the health sector to address HIV, TB and viral hepatitis in Europe and central Asia (6). This resulted in the United Nations Common Position on Ending HIV, TB and Viral Hepatitis through Intersectoral Collaboration (7), which also informs this work.
In addition to the frameworks outlined above, a catalyst for this project and the need for WHO support has been driven by the scale-down of contributions from development partners – especially the Global Fund – from countries in the WHO European Region that are observing increasing financial capacity (in the form of gross national income (GNI) per capita). This is prompting a transition from development partner to domestically funded TB programmes.

In the transition from development partner to domestically funded national health programmes, a development partner transfers the responsibility for the financial, managerial and/or technical support of a programme to domestic stakeholders – usually the government. The current landscape in the WHO European Region is characterized by constrained development partner budgets, competition for funds and possible development partner fatigue. However, many low- and middle-income countries in the Region have observed economic growth and growing fiscal capacity in recent years, providing impetus for increasing pressure on governments in the Region to transition towards domestically funded national programmes and design new, efficient models of health services delivery. Partly under the framework of a USAID regional platform project and partly through German funding, the WHO Regional Office for Europe sought to assess self-reliance in selected countries (Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine) transitioning from Global Fund financing of TB-related activities. This document provides a framework to review self-reliance in TB activities in the selected countries during and after the transition from development partner funding.

In 1987, the UN Brundtland Commission defined sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (8). In similar contexts, where countries are transitioning from development partner to domestically funded programmes, WHO has broadly defined sustainability as the likelihood that a programme will continue to function effectively after development partner support comes to an end (7).

In New York, on 26 September 2018, the UN General Assembly held its first high-level meeting on TB to accelerate efforts in ending TB and reaching all affected people with prevention and care. It endorsed a political declaration to accelerate progress towards End TB targets which was adopted by the General Assembly on 10 October 2018 (Resolution document A/73/L.4) (19).

Importantly, the Global Fund defines transition as the mechanism by which a country, or a country component (i.e. a single disease such as TB, HIV or malaria), moves towards fully funding and implementing its health programmes independently of Global Fund support while sustaining the gains and scaling them up as appropriate (9).

The analysis that follows is important because countries must be able to sustain and scale up programmes to achieve a permanent impact in the fight against TB and move towards achievement of universal health coverage following development partner withdrawal. Further, countries that can afford to assume greater domestic responsibility for NTPs should do so to allow development partners to reallocate funding to those countries in greatest need – but if the gains are to be long term, then countries must be supported throughout this transition.

The transition from development partner financing to domestically funded national health programmes is a continuous process in which a development partner transfers responsibility for the financial, managerial and/or technical support of a programme to domestic stakeholders – usually the national government. This review found general issues in the WHO European Region related to constrained development partner budgets, and transition-related challenges. Meanwhile, many low-
and middle-income countries in the Region have observed economic growth and growing fiscal capacity in recent years, providing impetus for increasing pressure on governments in the Region to transition towards domestically funded national health programmes and design new, efficient models for health service delivery.

According to a recent publication from the Stop TB Partnership, countries must have effective, adequate transition plans (10). Early and thorough planning helps to avoid interruption of those services currently provided with Global Fund support by addressing the challenges and bottlenecks in transition. Such observed or anticipated challenges and bottlenecks include mechanisms for the procurement of critical commodities; lack of preparedness of public services, along with legislative or regulatory changes that prevent CSOs from being contracted; and addressing unmet needs pertaining to the HIV, malaria and TB prevention, treatment and care.

Processes that should be considered for inclusion in transition plans are: transparency predictability, including a realistic preparation time for transition; involvement of all stakeholders; feasibility of transition plans; and technical assistance and guidance during transition. These processes are among those considered in the Tuberculosis Regional Eastern European and Central Asian Project (TB-REP), which promotes efficient models of care, and are assessed in this self-reliance review of TB prevention and care activities in selected countries. The WHO document, Health systems strengthening in the context of Health 2020 (1), also outlines key considerations and tools to help stakeholders understand which components of health insurance benefit packages must be prioritized in order to support appropriate access to effective services in the context of finite resources, including during transition (11).

1.2 Methodology

The WHO Regional Office for Europe developed guidance on taking a strategic approach to this review (rationale shown in Fig. 1). The resulting methodology was based on empirical evidence and geared to understanding current and nascent gaps and highlighting these to assist countries transitioning from development partner financed to domestically financed TB programmes.

The methodology used for data collection and analysis was informed by desk research by two WHO consultants using publicly available resources and building on methods employed in previous similar efforts.4

From this research, indicators were selected for analysis and the methodology was presented to WHO for discussion and feedback in June 2017. Following recommendations, the methodology was revised and sent to experts from key stakeholder organizations (including the Global Fund and WHO) for the first formal round of peer review.

4 These include appraisals of transition preparedness from Gavi-funded to domestically funded national immunization programmes in countries in the WHO European Region.
Following the integration of peer feedback, the same WHO consultants conducted two in-country missions (in Armenia and Georgia). A second-round of peer review then took place to assess the information gathered and consider whether the review methodology needed adjusting. At this stage, it became evident that some indicators were beyond the scope of the current mission and/or information was unavailable at time of the mission and deemed unattainable by in-country stakeholders; therefore, these indicators were removed from the review methodology. The remaining four countries were visited (Azerbaijan, Belarus, the Republic of Moldova and Ukraine). Each in-country mission was followed up with a detailed report of the findings, with gaps highlighted and steps suggested for addressing them. These reports were shared with key in-country stakeholders (e.g. WHO Country Office, Head of NTP).

WHO then conducted a cross-country analysis to highlight commonalities and discrepancies among the countries and prepared the synopsis report.
2. Key findings

This section presents the key high-level findings of the cross-country analysis (commonalities and discrepancies) according to the major categories of indicators reviewed: socioeconomic and geopolitical context; policy and strategies; financing and planning; quality, safety and standards; medicine and laboratory consumables procurement; supervision and monitoring; health system strengthening; service delivery; links with other interventions; evidence-based TB policy and practices; TB care in penitentiary system and continuum of care of released prisoners with TB; and communications and advocacy.

2.1 Socioeconomic and geopolitical context

The Eastern Partnership is governed by the European Commission as part of the European Neighbourhood and Partnership Instrument. The selected countries of the Eastern Partnership share an interest in developing to a sufficient extent to enable them to join the European Union. This provides a significant incentive to demonstrate progress towards targets set by the WHO Regional Office for Europe and the European Commission, such as those outlined in the Tuberculosis Action Plan for the WHO European Region 2016–2020 (12). The selected countries differ in terms of population growth relative to gross domestic product (GDP) growth, an indicator of domestic financing capacity. Low or negative population growth combined with high GDP growth (particularly in Armenia and Georgia; Fig. 2) should facilitate increased domestic financing (whether these resources would be allocated to health is an issue of prioritization rather than capacity, particularly in the context of competing priorities). According to World Bank data, Belarus, the Republic of Moldova and Ukraine5 are experiencing a decline in GDP growth (13); further, in the Republic of Moldova and Ukraine, the decline in GDP growth far outweighs the decline in population growth, whereas in Belarus, the situation is exacerbated by positive (albeit low) population growth. Azerbaijan is the only country in which the positive GDP growth is proportionate to the population growth (at 1.1% for both).

---

5 Ukraine’s GDP forecasts fluctuate significantly. In 2018, GDP is expected to grow by 3.1% amid 9.5% inflation (December to December) according to an updated consensus forecast released by Ukraine’s Ministry of Economic Development and Trade on 24 September 2018.
A higher GNI per capita results in a higher disposable income at the individual level, which can be spent on various services, including health. All countries reviewed except for Armenia experienced a decline in GNI per capita between 2016 and 2017 (data for 2017 shown in Fig. 3), mainly due to a fall in oil price, instability in the Russian Federation, and currency devaluation and depreciation, particularly in countries of the former Soviet Union.

However, higher GNI per capita does not necessarily mean a higher disposable income for all citizens. Although Azerbaijan had the second-highest GNI per capita in 2016, the degree of equality in the distribution of wealth was the second lowest among the selected countries (in terms of Gini Index7; shown in Table 1); therefore, many citizens are unable to pay out-of-pocket (OOP) expenses for their health care.

---

6 Currency depreciation occurs when the forces of supply and demand cause the value of a currency to drop. In contrast, devaluation occurs only in countries that do not allow their exchange rates to float: the governments of these countries control the official value of their currency.

7 A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.
Table 1. Socioeconomic indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Armenia</th>
<th>Azerbaijan</th>
<th>Belarus</th>
<th>Georgia</th>
<th>Republic of Moldova</th>
<th>Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population, 2017 (×1000)</td>
<td>3018</td>
<td>9649</td>
<td>9490</td>
<td>3717</td>
<td>3554</td>
<td>45 154</td>
</tr>
<tr>
<td>Population growth, 2015 (annual %)</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Age dependency ratio(^a), 2015</td>
<td>45</td>
<td>41</td>
<td>46</td>
<td>52</td>
<td>36</td>
<td>47</td>
</tr>
<tr>
<td>GNI(^b) (millions)</td>
<td>11 714</td>
<td>40 203</td>
<td>50 223</td>
<td>14 081</td>
<td>7754</td>
<td>101 458</td>
</tr>
<tr>
<td>GNI per capita(^c)</td>
<td>4000</td>
<td>4080</td>
<td>5280</td>
<td>3790</td>
<td>2180</td>
<td>2388</td>
</tr>
<tr>
<td>GDP</td>
<td>11 537</td>
<td>40 748</td>
<td>54 442</td>
<td>15 159</td>
<td>8128</td>
<td>112 154</td>
</tr>
<tr>
<td>GDP growth (%)</td>
<td>3</td>
<td>1</td>
<td>-4</td>
<td>3</td>
<td>-1</td>
<td>-10</td>
</tr>
<tr>
<td>Income category, 2017(^b)</td>
<td>U-LMIC</td>
<td>UMIC</td>
<td>UMIC</td>
<td>UMIC</td>
<td>L-LMIC</td>
<td>U-LMIC</td>
</tr>
<tr>
<td>Gini Index, 2016</td>
<td>33</td>
<td>34</td>
<td>27</td>
<td>37</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>HDI, 2015</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>HDI rank</td>
<td>84</td>
<td>78</td>
<td>52</td>
<td>70</td>
<td>107</td>
<td>84</td>
</tr>
<tr>
<td>HDI status</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
</tbody>
</table>

GDP: gross domestic product; HDI: Human Development Index; L-LMIC: lower-lower-middle-income country; U-LMIC: upper-lower-middle-income country; UMIC: upper-middle-income country.

\(^a\) Age dependency ratio is the ratio of dependents (people younger than 15 years or older than 64 years) to the working-age population (those aged 15–64 years). Data are shown as the proportion of dependents per 100 working-age population.

\(^b\) World Bank Atlas method.

\(^c\) World Bank income classifications group countries into five categories: low-income countries, lower-middle-income countries, middle-income countries, upper-middle-income countries and high-income countries. Global Fund classification further divides lower-middle-income countries into two groups, lower and upper, based on the midpoint of the GNI per capita range in lower-middle-income countries. This division does not affect eligibility but is relevant to Global Fund co-financing requirements, as described in the Sustainability, Transition and Co-financing Policy (in Annex 1 of GF/B35/04 – Revision 1) (9).


Ukraine's GNI and GNI per capita appear as an anomaly in Fig. 3. This is due (in part) to the fact that the country has by far the largest population (the denominator –nearly five times that of the next-largest country – Belarus) and a relatively low GNI (numerator), the latter of which reflects ongoing negative GDP growth of −9.9%, fuelled by conflict and subsequent volatile trade relations with the Russian Federation.
The biggest socioeconomic-related issue for sustainability facing the selected countries is currency devaluation or depreciation, which reduces their ability to plan and budget accurately and to procure the necessary quantities of drugs and medical equipment on the international market which operates using the US Dollar. Further, socioeconomic status and living conditions are risk factors for TB infection. Therefore, a significant decline in GDP and GNI, or exacerbated inequitable wealth distribution or political instability (leading to conflict in the region) has the potential to reverse the progress already made and sustainability during and after Global Fund withdrawal.

2.2 Policy and strategies

As outlined in Table 2, Armenia, Azerbaijan, Georgia and the Republic of Moldova have national strategic plans (NSPs) covering the main priorities in TB prevention, treatment and care for the 2016–2020 period. In Belarus, the Plan on MDR/XDR-TB prevention and control in the Republic of Belarus, 2016–2020 forms part of the country’s overarching health strategy, Peoples health and demographic security of Republic of Belarus for 2016-2020 (15). In Ukraine, The National Social Programme against TB 2018-2021, the equivalent of an NSP, was approved by the Cabinet of Ministers in 2017.

The NSPs of Azerbaijan and Georgia include sections on sustainability and transition from development partner to domestic TB funding. Belarus, Georgia, the Republic of Moldova and Ukraine have developed additional strategic documents for transition and sustainability. Notably, the Moldovan NSP contains separate sections on transition for the left bank of the Dniester River (Transnistria) and the penitentiary system.

Regarding sustainability, Armenia does not currently have a TSP in place, and Ukraine’s Strategy for Sustainable Response is acting as a ‘TSP-like document’. Armenia is therefore at an increased risk of unexpected or unpredicted programmatic and financial issues arising in TB-related activities during and after the Global Fund’s contribution scale-down and eventual withdrawal. Thus, efforts are needed to ensure a TSP is developed that reflects resource- and capacity-related realities (e.g.)
economic, human resource, technical) to minimize disruptions to NTP activities. The TSP should be sufficiently detailed to enable the identification of existing, emerging or potential financial and programmatic gaps.

Table 2. Availability of strategic documents in the selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>NSP</th>
<th>Update d NSP</th>
<th>TSP</th>
<th>Transition plan endorsed</th>
<th>TB law</th>
<th>Other strategic documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>Y (2016–2020)</td>
<td>–</td>
<td>N</td>
<td>Y</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Republic of Moldova</td>
<td>Y (2016–2020)</td>
<td>–</td>
<td>Y</td>
<td>Approved by the CCM, but not yet endorsed by relevant ministries; report is planned to be annexed to NSP</td>
<td>Y</td>
<td>Report on results of applying the risk assessment tool on transition from Global Fund resources for combating HIV/AIDS, TB and malaria (for the TB component); Roadmap on modernization of phthisiopneumology services</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Y (2018–2021)</td>
<td>Y</td>
<td>Y (Strategy for Sustainable Response)(^8)</td>
<td>Y</td>
<td>–</td>
<td>Concept to reform health-care funding; Law on Funding of Health Care; National Health Reform Strategy, 2015–</td>
</tr>
</tbody>
</table>

\(^8\) In Ukraine, multiple transition plans run in parallel through the Ministry of Justice and Ministry of Health – but the intention of both ministries is to align. It is important to ensure that the Ministry of Justice’s plan does indeed align with the Ministry of Health’s plan upon completion.

N: no; Y: yes.
2.3 Financing and planning

Starting with the global financial crisis in 2008 and exacerbated by the ongoing recession in the region (including the economic decline in the Russian Federation and Ukraine since 2015–2016), currency devaluation and depreciation have occurred in all selected countries. Of particular note, the Ukrainian currency (the hryvnia) reached its lowest ever value, at an exchange rate of 34 hryvnia to the Euro and of 4.99 hryvnia to 10 Russian roubles in January 2018.

The implications of exchange rate fluctuations are reduced purchasing power on the international market for all imports: a reduction in government funds available for distribution across all priorities (including health) would lead to a reduced capacity to purchase drugs, medical devices and consumables on international platforms. Tables 3 and 4 show changes in general government health expenditure (GGHE; as a percentage of total health expenditure (THE) and as a percentage of general government expenditure (GGE)) over the period from onset of the global financial crisis (2008) until 2015 (the most recent and complete World Bank data available at time of publication). These changes are most positive in Georgia (where GGHE as a percentage of THE rose from 18.42% to 38.79% and GGHE as a percentage of GGE rose from 4.89% to 10.48%), and most negative in Armenia (GGHE as % of THE fell from 34.41 to 15.91% and GGHE as a % of GGE from 6.73% to 6.12%). All other countries experienced generally negative trends in these indicators, which is a major concern in light of the concomitant scale-down of contributions from development partners.

Recent trends aside, in most of the selected countries the reduction in development partner funding is being met by an intention to increase domestic funding for TB-related activities. However, in Armenia the Global Fund’s contribution scale-down will be exacerbated by the concurrent reduction in the government's allocation to the health budget, which will almost certainly impact funding for TB services. Currently, there is no funding gap for TB services in Armenia: 55% are paid for domestically and 45% by Global Fund. However, a significant gap is very likely to occur when Global Fund withdrawal begins in 2019. In Ukraine, the GGHE (as a percentage of GGE) fell during 2013–2014. The situation worsened as conflict with the Russian Federation escalated and the GNI fell (Fig. 3), forcing the reprioritization of government funds away from health. This aside, Ukraine’s pending Annual Government Action Plan outlines health as a priority and TB as a priority within health.

The problem is further exacerbated by a possible loss of access to international purchasing platforms (e.g. the GDF platform), when the Global Fund withdraws, which would further reduce the countries’ ability (particularly those with very small market size and thus market power) to buy medical supplies at the best price. However, even if countries are no longer eligible for Global Fund grants, they can continue to use the GDF procurement mechanism to ensure the quality of TB medicines when domestic legislation permits. Both governments and NGOs, in collaboration with the respective health ministry, can apply for GDF assistance. Countries simply submit an application that includes information on their anti-TB drug needs, their NTP strategy, and a description of the procurement and supply chain management. Consequently, post-2015 budget allocations must be revisited to ensure they are realistic and do not jeopardize sustainability, and procurement laws should enable the use of pooled procurement platforms such as GDF.

Table 5 shows a breakdown of health expenditure for each country according to World Bank 2015 data (the most recent and complete data available at time of publication). Azerbaijan has the highest health expenditure per capita ($368) among the selected countries, but the second lowest government spending as a percentage of THE (20%). As a result, the country is second only to Armenia in terms
of OOP expenses, although the situation in Armenia largely reflects the uptake of voluntary health insurance, whereby the population benefits from pre-pooling of both finances and risk. This is not the case in Azerbaijan.

Earmarked budgets for TB services and activities vary (shown in Table 6). Importantly, none of the countries reported earmarked budgets to support ongoing monitoring and supervisory visits, the costs of which (beyond health-care worker salaries, which are funded domestically) are currently funded by the Global Fund. All countries expressed concern over the technical and programmatic gaps that are at risk of appearing if monitoring and supervisory visits cease.
Table 3. Annual changes in GGHE, Armenia, Azerbaijan and Belarus, 2008–2015

| Year | Armenia | | | Azerbaijan | | | | Belarus | | |
|------|---------|--------|------|------------|......|......|--------|---------|--------|--------|--------|--------|--------|
|      | GGHE (%THE) | Value | Change (%) | GGHE (%GGE) | Value | Change (%) | GGHE (%THE) | Value | Change (%) | GGHE (%GGE) | Value | Change (%) | GGHE (%THE) | Value | Change (%) |
| 2008 | 34.41   | –      | –      | 6.73   | –      | –      | 20.32   | –      | –      | 3.06   | –      | –      | 65.78   | –      | –      |
| 2009 | 38.61   | 12.2   | 6.34   | 5.8    | 24.49  | 20.5   | 4.45   | 15.4   | 65.58  | –0.3   | 6.73   | 9.8     | 75.94  | 15.8   | 41.0   |
| 2010 | 32.07   | –16.9  | 6.44   | 1.6    | 23.43  | –4.3   | 4.15   | –6.7   | 75.94  | 15.8   | 4.49   | 9.49    | 9.25   | 9.25   | –2.5   |
| 2011 | 44.08   | 37.4   | 6.67   | 3.6    | 25.68  | 9.6    | 4.16   | 0.2    | 68.53  | –9.8   | 9.25   | –2.5    | 66.83  | –2.5   | 9.15   | –0.1   |
| 2012 | 22.96   | –47.9  | 6.87   | 3.0    | 25.76  | 0.3    | 4.13   | –0.7   | 66.83  | –2.5   | 9.15   | –0.1    | 9.49   | 9.49   | 9.49   | –4.5   |
| 2013 | 17.86   | –22.2  | 6.21   | 9.6    | 25.52  | 0.8    | 4.16   | 0.7    | 64.02  | –4.2   | 8.74   | –4.5    | 8.74   | 8.68   | –0.7   | 8.68   |
| 2014 | 21.38   | 19.7   | 6.28   | 1.1    | 23.19  | 0.9    | 4.13   | –0.7   | 64.13  | 0.0    | 8.68   | 0.0     | 8.68   | 8.68   | –0.7   | 8.68   |
| 2015 | 15.91   | –25.6  | 6.12   | –2.5   | 20.22  | –12.8  | 4.13   | 0.0    | 62.37  | –2.7   | 8.48   | 2.3     | 8.68   | 8.68   | 2.3    | 8.68   |

Table 4. Annual changes in GGHE, Georgia, Republic of Moldova and Ukraine, 2008–2015

| Year | Georgia | | | | Republic of Moldova | | | | | Ukraine | | |
|------|---------|---------|---------|---------|---------------------|---------|---------|---------|---------|---------------------|---------|
|      | GGHE (%THE) | GGHE (%GGE) | Value | Change (%) | Value | Change (%) | Value | Change (%) | Value | Change (%) | Value | Change (%) | Value | Change (%) |
| 2009 | 21.09 | 14.5 | 5.79 | 18.4 | 42.65 | –11.1 | 12.88 | 1.3 | 58.24 | 0.3 | 11.42 | 15.9 |
| 2010 | 21.26 | 0.8 | 6.14 | 6.0 | 45.86 | 7.5 | 13.62 | 5.7 | 58.02 | –0.4 | 10.53 | –7.8 |
| 2011 | 17.57 | –17.4 | 5.07 | –17.4 | 46.67 | 1.8 | 13.04 | –4.3 | 54.89 | –5.4 | 10.68 | 1.4 |
| 2012 | 18.53 | 5.5 | 5.25 | 3.5 | 48.53 | 4.0 | 13.18 | 1.1 | 55.24 | 0.6 | 10.67 | –0.1 |
| 2013 | 22.89 | 23.5 | 6.66 | 26.9 | 46.71 | –3.8 | 12.50 | –5.2 | 54.09 | –2.1 | 10.87 | 1.9 |
| 2014 | 27.65 | 20.8 | 7.79 | 17.0 | 49.34 | 5.6 | 12.76 | 2.1 | 47.18 | –12.8 | 8.79 | –19.1 |
| 2015 | 38.79 | 40.3 | 10.48 | 34.5 | 45.54 | –7.7 | 12.21 | –4.3 | 46.41 | –1.6 | 8.33 | –5.2 |

*Source: World Bank, 2018 (14).*
Table 5. Health expenditure, 2015

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Year</th>
<th>ARM</th>
<th>AZE</th>
<th>BLR</th>
<th>GEO</th>
<th>MDA</th>
<th>UKR</th>
<th>EU Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government health expenditure (% current health expenditure)</td>
<td>2015</td>
<td>16</td>
<td>20</td>
<td>62</td>
<td>39</td>
<td>46</td>
<td>46</td>
<td>79</td>
</tr>
<tr>
<td>Health expenditure per capita (current US$)</td>
<td>2015</td>
<td>366</td>
<td>368</td>
<td>352</td>
<td>281</td>
<td>186</td>
<td>125</td>
<td>3184</td>
</tr>
<tr>
<td>Health expenditure, total (% GDP)</td>
<td>2015</td>
<td>10</td>
<td>7</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>OOP health expenditure (% current health expenditure)</td>
<td>2015</td>
<td>82</td>
<td>79</td>
<td>35</td>
<td>57</td>
<td>46</td>
<td>48</td>
<td>15</td>
</tr>
<tr>
<td>Domestic private health expenditure (% current health expenditure)</td>
<td>2015</td>
<td>83</td>
<td>79</td>
<td>37</td>
<td>59</td>
<td>47</td>
<td>51</td>
<td>21</td>
</tr>
<tr>
<td>External health expenditure per capita, PPP (current international $)</td>
<td>2015</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>18</td>
<td>38</td>
<td>11</td>
<td>NA</td>
</tr>
</tbody>
</table>

ARM: Armenia; Avg: average; AZE: Azerbaijan; BLR: Belarus; GEO: Georgia; MDA: Republic of Moldova; NA: not available; PPP: purchasing power parity; UKR: Ukraine.

---

Table 6. Budget allocation to TB, 2016

<table>
<thead>
<tr>
<th>Indicator</th>
<th>ARM</th>
<th>AZE</th>
<th>BLR</th>
<th>GEO</th>
<th>MDA</th>
<th>UKR</th>
</tr>
</thead>
<tbody>
<tr>
<td>National TB budget, US$, millions</td>
<td>5.7</td>
<td>6.25</td>
<td>15</td>
<td>17</td>
<td>18</td>
<td>31</td>
</tr>
<tr>
<td>Domestically funded, %</td>
<td>55</td>
<td>15</td>
<td>57</td>
<td>42</td>
<td>50</td>
<td>34</td>
</tr>
<tr>
<td>Funded by international development partner, %</td>
<td>45</td>
<td>80</td>
<td>15</td>
<td>44</td>
<td>48</td>
<td>44</td>
</tr>
<tr>
<td>Unfunded, %</td>
<td>0</td>
<td>5</td>
<td>28</td>
<td>14</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Unfunded, US$</td>
<td>0</td>
<td>0.3125</td>
<td>4.2</td>
<td>2.38</td>
<td>0.36</td>
<td>6.82</td>
</tr>
<tr>
<td>Unfunded + international, %</td>
<td>45</td>
<td>85</td>
<td>43</td>
<td>58</td>
<td>50</td>
<td>66</td>
</tr>
<tr>
<td>Total unfunded + donor funded (US$, millions)</td>
<td>2.565</td>
<td>5.3125</td>
<td>6.45</td>
<td>9.86</td>
<td>9</td>
<td>20.46</td>
</tr>
</tbody>
</table>

Further, Table 6 shows significant variation among national TB budgets⁹, which is to be expected, given the variation in TB burden in each country. For example, Ukraine:

- has the largest national TB budget ($18 million; reflecting the population size, burden of disease and complex case load);

---

⁹ Figures relate to national TB Budgets, and not NTP budgets. The former considers TB-related activities covered outside the NTP, for example, in National Immunization Programmes and HIV programmes.
• has the second-highest proportion of unfunded services (22%), but the highest overall in crude terms ($6.82 million);
• relies on international development partners for 44% of its NTP budget;
• has the second lowest GNI per capita (behind the Republic of Moldova); and
• has some political instability and therefore an increased risk of health system weaknesses that may leave the country more vulnerable to supply chain or other issues, and subsequently, a shortage of anti-TB drugs, particularly imported anti-M/XDR-TB drugs, and particularly in non-government controlled areas.

The variation in national TB budgets also has implications for the impact and opportunity cost (for both development partners and governments) of increasing or decreasing the allocation of funds to countries, and between competing interests (e.g. TB versus diabetes, and health versus defence, respectively). This reinforces the point that the sustainable of TB-related activities in the selected countries does not rely on affordability alone, but requires prioritization of health within GGE and of TB within health.

From a sustainability perspective, the potential loss of access to international purchasing platforms such as GDF is a significant problem, which should be rectified. Financing and planning of activities that prioritize M/XDR-TB should form a major component of sustainability efforts, since M/XDR-TB demands additional health-care resources and is associated with poorer health outcomes and higher infection rates.

Governments and their partners want to achieve the best outcomes in response to the TB epidemic. Budgetary constraints and poor prioritization limit the feasibility of sustainably providing all services for TB prevention, detection and treatment. Focused public health responses and efficient programme delivery are essential to ensure that programmes are sustainable with the available funding. Health system optimization and efficiency gains are vital to achieving the best outcomes possible and for allowing freed-up resources to be reinvested into the health budget.

2.4 Quality, safety and standards

All selected countries face significant risks in a rapid transition to domestic procurement of drugs and diagnostics. They therefore require significant assistance to mitigate the potential harm caused by changing policies and procedures for the domestic procurement of affordable and quality medicines and diagnostics.

The key risks stem from a potential loss of access to the Global Fund procurement platform after the transition to domestic funding and extend to losing access to guaranteed and consistent pricing for anti-TB drugs – which could reduce the volume and quality of drugs procured. In turn, this could increase TB incidence and the development of resistance and worsen patient treatment outcomes. Most of the reviewed countries (the most notable exception being Ukraine, which has invested significant efforts in a United Nations Development Programme partnership to strengthen capacity of a newly-established national central procurement agency) do not have sufficient market power to interest multiple suppliers in competing to supply their market with anti-TB drugs and consumables. Therefore, market forces are likely to result in these countries paying higher prices after the transition to domestic funding.
Further, WHO prequalification is used as a mechanism to ensure minimum quality standards in most countries. However, Belarus has a particular interest in procuring from domestic manufacturers but, while these sources adhere to good manufacturing practices, they have not been WHO prequalified. Quality concerns have been documented (described in section 2.5). In Azerbaijan, the most important issue related to quality, safety and standards is not a lack of regulation but rather that the existing regulations may serve as a barrier to importing anti-M/XDR-TB drugs (or at least those not yet registered in Azerbaijan). This could become an issue if the winning tender is for drugs that have not been registered or WHO prequalified prior to Global Fund withdrawal.

Most issues associated with quality, safety and standards relate to the fact that drugs of substandard quality promulgate M/XDR-TB, the costs and consequences of which could undermine NTP progress and sustainability efforts.

2.5 Medicine and laboratory consumables procurement

As outlined in Table 7, FLDs in the selected countries are procured by domestic funds, except in Armenia, where these are still purchased by the Global Fund. SLDs are procured wholly by the government budget in Belarus and partly so in Georgia and the Republic of Moldova. New and repurposed anti-TB drugs are provided by Global Fund and a USAID/Johnson & Johnson joint donation programme.

Most countries need to revise their procurement law/legislation (Table 8) to ensure the provision of high-quality drugs to TB patients. Belarus is the only country that is producing FLDs and SLDs, and these locally produced drugs are the predominant source for the local market; however, the quality of these drugs does not meet the Global Fund's Quality Assurance Policy for Pharmaceutical Products.

In most countries, where there is not a central procurement agency, there are a maximum of two entities procuring anti-TB drugs, the health ministry and the justice ministry. Currently in Ukraine there are four entities procuring anti-TB drugs, the health ministry, the justice ministry, the defense ministry and the Academy of Medical Sciences, which reduces clarity over official national supply levels.

The sustainability of TB programmes that remain reliant on development partners for procurement support until the later stages of transition might be challenged if, at the point of transition, unexpected gaps in technical, financial, manufacturing or regulatory capacity are highlighted without adequate time to adjust the country's approach.
Table 7. Procurement sources for anti-TB drugs and laboratory consumables, by category

<table>
<thead>
<tr>
<th>Country</th>
<th>FLDs</th>
<th>SLDs</th>
<th>New and repurposed drugs</th>
<th>Drugs for side-effects</th>
<th>Laboratory consumables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azerbaijan</td>
<td>Domestic</td>
<td>Global Fund</td>
<td>Global Fund, USAID, MSF,</td>
<td>Domestic</td>
<td>Global Fund, domestic</td>
</tr>
<tr>
<td>Belarus</td>
<td>Domestic</td>
<td>Domestic</td>
<td>Global Fund, USAID, NA</td>
<td>Domestic</td>
<td>Global Fund</td>
</tr>
<tr>
<td>Georgia</td>
<td>Domestic</td>
<td>Domestic (25%)</td>
<td>Global Fund, USAID, NA</td>
<td>Domestic</td>
<td>Global Fund</td>
</tr>
<tr>
<td>Republic of Moldova</td>
<td>Domestic</td>
<td>Global Fund</td>
<td>Global Fund, USAID/Johnson</td>
<td>Domestic</td>
<td>Global Fund (GeneXpert)</td>
</tr>
<tr>
<td>Ukraine (multiple</td>
<td>Domestic</td>
<td>Domestic/Global</td>
<td>Johnson &amp; Johnson</td>
<td>Domestic</td>
<td>Global Fund, domestic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fund (for</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>southeaster</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>occupied</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>territories)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MSF: Médecins Sans Frontières.

Table 8. National procurement: regulations, capacity and locally produced drugs

<table>
<thead>
<tr>
<th>Country</th>
<th>Regulations allow drug procurement from international platform</th>
<th>Experience/capacity for procuring drugs from GDF and/or another international platform</th>
<th>Anti-TB drugs (FLD, SLD) produced in the country</th>
<th>Local manufacturers have met the Global Fund's QA Policya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia</td>
<td>Revision needed</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Armenia</td>
<td>Revision needed</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Belarus</td>
<td>Revision needed</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Republic of Moldova</td>
<td>Revision needed</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Law on Procurement, expires December 2018</td>
<td>Currently procuring non-essential items to improve capacity</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

aQuality Assurance Policy for Pharmaceutical Products.

2.6 Supervision and monitoring

Table 9 shows elements of supervision and monitoring activities, indicating that in all selected countries, regular supervisory visits are conducted by the responsible NTP units. These NTP units are also responsible for the surveillance of TB epidemics in all countries, except for Georgia (where
surveillance is performed by the National Center for Disease Control and Public Health). In all six countries, the Global Fund continues to provide financial support for supervision and monitoring visits by covering transportation and per diem costs for staff, and in Armenia, Global Fund support also extends to staff salaries.

An electronic database is functioning in all selected countries. Azerbaijan and Georgia are running systems that combine paper-based and e-system reporting, while Belarus has a comprehensive e-surveillance system, including drug safety monitoring and all other modules. The QuanTB tool is used for drug forecasting in all selected countries. Expansion of e-databases in Azerbaijan and Georgia is planned with Global Fund support. In particular, Ukraine requires support to strengthen e-reporting at warehouses level to increase the transparency of drug supplies.

Salaries of database administrators and operators are paid by the respective governments, while the running costs for e-database operation and maintenance are covered to varying degrees by the Global Fund in all selected countries. Azerbaijan represents a good example of an e-database being successfully linked and compatible with the Electronic Integrated Disease Surveillance System.

Supervision and monitoring visits, along with remuneration of staff who implement these activities, are an important but often underestimated aspect of NTP sustainability. Gaps in these activities and/or their financing could reduce the success and accuracy of TB screening and diagnosis activities, which could in turn impact case reporting, treatment choices and M/XDR-TB rates, thus preventing an accurate understanding of the TB epidemiological profile and diminishing the programmatic and policy response.

Table 9. Supervision and monitoring activities

<table>
<thead>
<tr>
<th>Country</th>
<th>Responsible unit</th>
<th>Regular supervisory visits at all levels</th>
<th>Supervision visits – expenses covered</th>
<th>Database and financial support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>National Tuberculosis Control Centre</td>
<td>Yes</td>
<td>Global Fund</td>
<td>TB e-database system; Global Fund supported</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Scientific-Research Institute of Lung Diseases</td>
<td>Yes</td>
<td>Global Fund, government</td>
<td>Electronic Integrated Disease Surveillance System, e-TB Manager (missing drug and laboratory components); combined surveillance system; supported by the Global Fund</td>
</tr>
<tr>
<td>Belarus</td>
<td>Republican Scientific and Practical Centre for Pulmonology and Tuberculosis</td>
<td>Yes</td>
<td>Global Fund, government</td>
<td>Comprehensive e-TB surveillance system; government and the Global Fund</td>
</tr>
<tr>
<td>Georgia</td>
<td>National Center for Tuberculosis and Lung Disease; National Center for Disease Control and Public Health</td>
<td>Yes</td>
<td>Global Fund, government</td>
<td>Combined surveillance (electronic, paper-based); e-database expansion is planned with Global Fund support</td>
</tr>
</tbody>
</table>
Republic of Moldova
Institute of Phthisiopneumology "Chiril Draganiuc"
Yes
Global Fund
National level e-programme (IMES TB) contains electronic register, including data on anti-TB drugs and laboratory consumables

Ukraine
Centre for Public Health, Global Fund projects, PATH
Yes, by Global Fund and USAID supported projects due to limited capacity of Central Procurement Hub
Global Fund, Government
eTB Manager (not yet linked to E-Health system); Supported by Government

2.7 Evidence-based TB policy and practice

Georgia is implementing a pilot project on TB-specific, results-based financing for medical staff. The project is also exploring ways to link Georgia's vertical NTP with a PHC-based system.

Azerbaijan is making considerable efforts to implement evidence-based TB care. Here, a mandatory health insurance pilot project in the cities of Mingachevir and Yevlakh started in 2017. Additionally, WHO implemented the TB-REP (17), with the aim to optimize TB services, also focusing on these two pilot sites. Further, TB-REP aims to implement people-centred TB services by promoting ambulatory and home-based models of care, with adequate financing for service providers. As a first step, a Knowledge, Attitude and Practice study was conducted to identify obstacles and needs for transitioning from inpatient to outpatient TB treatment. The Global Fund also plans to pilot results-based financing of TB service provision in PHC.

Belarus piloted a new model of care in the Mogilev region in 2014 with WHO assistance. The pilot project resulted in the closure of five hospital beds (1.2% of the total number in the region), corresponding to a decrease of 169.9 million Belarusian roubles in the annual hospital costs of services (meals, laundry) and staff salaries (0.25 doctor position, 1.25 nurse position, two assistant nurse positions), which generated financial incentives for providers of ambulatory services.

In addition, the World Bank conducted the study, Optimizing investments in Belarus' TB response, commonly known as the Optima study (18). The optimized budget presented in the Optima study report supports switching from mass screening to active case-finding, an ambulatory model of care and new treatment regimens.

Based on the lessons learned from the Mogilev pilot and Optima study, and with support from the WHO-implemented TB-REP, health authorities recently started a new pilot in Brest region, supported by the Global Fund. The plan is to reduce the number of TB beds in the region by 30%, with the intention of shortening the length of hospital stay and promoting an ambulatory model of care from the first day of treatment.

In Ukraine, PATH launched a pilot project funded by USAID in the form of a scientific study involving bedaquiline (unregistered in Ukraine until November 2018), as a way of supporting bedaquiline uptake in the country prior to registration.
Prior to implementation of health-care reform in Ukraine, the Global Fund ran four pilots of a system based on pay-for-outcome. It showed that financial incentives do result in physicians increasing the rates of diagnosis and treatment of TB patients. USAID will run a further pilot project linking a TB bonus payment to TB patients in addition to the per capita payment intended under the country’s new per capita-based financing mechanism. This will be scaled up to all oblasts in 2020. The emergent results from the pilot should be rapidly considered and applied for the 2020 nationwide roll-out.

Efficiencies in programme delivery and across all aspects of the health system are essential to ensure that programmes can do more with the available funding. By increasing the availability of scarce health system resources, efficiency gains provide a vital source of new funding that can be reinvested into the health system to support long-term sustainability and self-sufficiency. The lessons from pilot projects and the recommendations of robust, externally commissioned reports (e.g. the Optima study) provide an evidence-based approach to improving health system efficiency. Health system strengthening is paramount to NTP sustainability. A lack of effective and efficient systems to support a people-centred approach throughout the entire continuum of care will limit the return on investments in TB (in terms of health outcomes per health dollar spent).

Health systems have undergone recent reforms in all selected countries. The countries are widening access to TB services by integrating health services, and PHC is considered a key component of TB detection and treatment administration. However, considerable challenges remain.

There is no shortage of physicians in the selected countries, but problems of staff distribution exist, especially outside urban centres. Training and retraining activities for TB and PHC staff were previously funded by the Global Fund; currently, development partner funding for training sessions is reduced in all countries. Therefore, clear planning is needed for human resources development and capacity-building.

Governance and evaluation of TB services are established through NTPs, and funds for nationwide activities by central agencies are allocated by the Global Fund. The role of policy-makers and stewardship of the agencies should be acknowledged and endorsed by governments. Fair funding should be considered in the TB budget to ensure the accomplishment of countrywide activities of leading TB agencies in all selected countries; a gradual change of funding source has to be considered in all TSPs.

Advanced systems for monitoring TB epidemics are used and documented by e-information programmes in all selected countries. However, compatibility of TB database with existing e-health systems (or those in the process of development) should be ensured in all selected countries.

2.8 TB care in the penitentiary system

Penitentiary institutions are under different ministries in different countries (outlined in Table 10). Provision of health services, including TB services, are the responsibility of the Medical Department of the Ministry of Justice (in Armenia, Azerbaijan, the Republic of Moldova); the Ministry of Correction (Georgia); or Ministry of Interior (Belarus). However, in all countries the health ministry retains the policy-making, supervisory and monitoring roles.

in Armenia and Georgia, anti-TB drugs and laboratory consumables for use in prisons are provided via a centralized system. In Azerbaijan, Belarus, Moldova and Ukraine, forecasting for drugs and laboratory consumables is performed by the medical departments of the relevant ministries, with procurement remaining separate; the Global Fund provides treatment for pre-XDR-TB and XDR-TB patients in these countries. In Azerbaijan, Belarus, the Republic of Moldova and Ukraine, ex-prisoners who have been released from penitentiary institutions but remain on TB treatment are
followed up by NGOs: Support to Health (in Azerbaijan), the National Red Cross (in Belarus), Act for Involvement (in the Republic of Moldova) and Network 100% of life” in Ukraine - the particular activities of which are financed by Global Fund (in Ukraine, Network 100% Life is also a sub-recipient of a Public Health Centre tender).

Prisons act as a TB reservoir, transmitting the disease into the civilian community via staff, visitors and inadequately treated former inmates. As such, the success and sustainability of TB programmes is unlikely to be achieved without full implementation and optimal performance of TB-related activities in penitentiary systems.

### Table 10. TB-related activities in the penitentiary system

<table>
<thead>
<tr>
<th>Country</th>
<th>Ministry responsible</th>
<th>Procurement(^b) for patients in prisons</th>
<th>Supervisory/monitoring visits</th>
<th>Global Fund-supported TB-related activities in prisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia</td>
<td>Ministry of Corrections</td>
<td>Centralized, provided from NTP, as for regions</td>
<td>Conducted by NTP</td>
<td>Extra payment to medical staff for entry screening –</td>
</tr>
<tr>
<td>Armenia</td>
<td>Ministry of Justice</td>
<td>Centralized, provided from NTP, as for regions</td>
<td>Conducted by NTP</td>
<td>Follow-up of ex-prisoners still on TB treatment (through an NGO)</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Ministry of Justice</td>
<td>Provided by the Ministry of Justice; New and repurposed anti-TB drugs are provided by the Global Fund</td>
<td>Conducted by NTP</td>
<td>Follow-up of ex-prisoners still on TB treatment (through National Red Cross)</td>
</tr>
<tr>
<td>Belarus</td>
<td>Ministry of Internal Affairs</td>
<td>New and repurposed anti-TB drugs, and rapid molecular testing consumables are provided by the Global Fund</td>
<td>Conducted by NTP</td>
<td>–</td>
</tr>
<tr>
<td>Republic of Moldova</td>
<td>Ministry of Justice</td>
<td>FLD and consumables procured by the Ministry of Justice; SLDs and drugs for DR-TB and consumables for rapid molecular testing provided by the Global Fund</td>
<td>Conducted by staff of the Institute of Phthisiopneumology &quot;Chiril Draganiuc&quot;</td>
<td>Follow-up of ex-prisoners still on TB treatment by the NTP and the local NGO, Act for Involvement, supported by the Global Fund</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Ministry of Justice</td>
<td>Ministry of Justice New TB drugs, consumables for laboratories (100%), SLD (5%) are provided by the Global Fund</td>
<td>Public Heath Centre</td>
<td>Follow-up of ex-prisoners still on TB treatment; refurbishment of treatment facility</td>
</tr>
</tbody>
</table>

DR-TB: drug-resistant TB.
\(^a\) For the penitentiary system.
\(^b\) Of anti-TB drugs and laboratory consumables.
2.9 Communications and advocacy

CCMs did not exist prior to entry of the Global Fund, at which point the establishment of such mechanisms became a requirement of the grants.

In most countries, the CCM has become the only platform for including CSOs in decision-making (Ukraine is the exception, where the locally-based Stop TB Partnership, headed by Vice Prime Minister Pavlo Rozenko, also provides a multistakeholder platform of 47 stakeholders). The programmes and activities delivered by NGOs often include provision of mobile outreach (e.g. nurses delivering anti-MDR-TB drugs to patients who are otherwise unable to access health services), psychosocial support, food packages, public awareness and anti-stigma campaigns that aim to increase testing. The Red Crescent Society is the most important NGO in most countries reviewed, with the exceptions being Ukraine and the Republic of Moldova where other, local, NGOs are more active.

Sustainability of TB programmes requires multiple stakeholders to continue working towards their shared goals after Global Fund withdrawal. For this reason, stakeholders and their efforts must continue to be coordinated and focused, and CCMs provide an integral platform for coordinating such efforts. For those countries choosing not to institutionalize the CCM and where another such platform does not already exist, another platform (possibly with a remit extending to all communicable disease programmes) should be created.
3. Discussion

3.1 Analysis of underlying causes of key findings

The common challenges are as follows.

- Countries continue to face serious challenges due to underfunding and/or lack of earmarked, sustainable funding, as well as lack of adequate pooling and equitable allocation of financial resources to health services in general, and to TB specifically.
- TB service delivery remains inefficient in all selected countries, and the transition to a PHC-based model has not been optimized. In some countries (particularly evident in Belarus and Ukraine), the inpatient-based model contributes to financing inefficiencies and poorer health outcomes.
- Government expenditure on health care remains insufficient, although TB is seen as a priority within health budgets in all selected countries.
- Over the last five years, financial contributions from other external development partners to TB prevention and care have been insignificant compared with the Global Fund, and few nongovernmental domestic opportunities exist for sharing responsibility for financing and implementing NTPs.
- Lack of TB-specific budget lines in most countries hinders their ability to analyse cost categories, which in turn restricts the potential for identifying inefficiencies and the possibility of budgetary changes and redistribution.
- Political instability challenges policy-makers and budget-setters, and can obscure the epidemiological picture of TB, leading to challenges for TB service delivery, along with procurement and supply and logistics-related gaps.
- Legislative health policy changes often take a long time to draft and implement. Thus, TSPs may not be implemented if they have not been ratified by the relevant national authority, and the updating of TB laws (where required), earmarking of budgets and protection of people living with TB may not be achieved in a timely manner.

3.2 General recommendations

3.2.1 Supervision and monitoring

- Ensure that NTP supervisory visits continue after Global Fund withdrawal by building them into the NSP.
- Calculate and consider expenses related to monitoring and supervisory visits (e.g. per diem, transportation, vehicle maintenance) in the transition plan; ensure that a functioning TB e-surveillance system continues with domestic funding after development partner support ends.

3.2.2 Medicines procurement

- Revise procurement law and other regulations to remove barriers to providing quality-assured medicines and laboratory consumables.
- Formally agree to ensure that countries do not lose access to the Global Fund procurement platform after the transition.
- Build the capacity of national staff in procurement and supply chain management to avoid interruption in the provision of drugs and laboratory consumables.
3.2.3 Evidence-based TB policy and practice

- Monitor pilot projects and implement cost-effective and affordable practices to ensure the provision of high-quality, people-centred services to TB patients.
- Accelerate the introduction and implementation of a people-centred model of TB care (versus routine hospitalization).
- Consider fair, innovative financing models for all TB service providers, including PHC services.

3.2.4 Health system strengthening

- Consider human resources in the TSP; develop a capacity-building/training plan for TB and PHC staff.
- Consider providing adequate funding for leading TB agencies (e.g. the NTP) for countrywide activities.
- Plan activities related to TB/HIV coinfection in consultation with HIV programmes.
- Ensure that e-TB surveillance systems are compatible with national e-health programmes.

3.2.5 TB care in the penitentiary system

- Consider including prison TB treatment and care activities in the TSP.

3.2.6 Sustainability

- Update NSP to ensure it is robust and costed, and that implementation is in line with recent data, economic and budgetary realities through the meaningful engagement of all stakeholders.
- Implement the latest guidance from technical partners regarding what the government will need to fund in the future.
- Implement health financing strategies to progressively increase domestic financing for health in general and for TB specifically.
- Increase domestic investment in the national TB response.

3.3 Suggested strategic response

The following objectives and strategies are intended to support countries to develop strategic plans that make best use of their strengths, address their financial and programmatic gaps, and consider the resources (both human and financial) at their disposal in the lead-up to Global Fund withdrawal. This is also represented as activity-style slides intended to support group work in Annex 2.

The more objectives and strategies each country chooses to pursue, the more actions and therefore resources, will be required for implementation. As such, countries are recommended to choose a maximum of three objectives and 12 strategies. Countries will then be best placed to decide, relative to their national contexts and structural nuances, which actions should be selected and who within their network of staff and stakeholders should implement each of them.
3.3.1 Objectives and strategies

1. By the end of 2018, the NSP should reflect the WHO Tuberculosis Action Plan for the WHO European Region 2016–2020 (2) by:
   a. **updating** the NSP to include details of activities and costs;
   b. **developing** a TSP to guide the country towards full ownership of its TB-related activities – ensure TSP alignment with NSP;
   c. **revising** the TB-related activities and resources planned in key strategic documents relative to the updated budgets;
   d. **developing** new, budgeted action plans to address the remaining years of Global Fund support in alignment with updated domestic and development partner support for the same period;
   e. **developing** or use a roadmap for optimization of TB service delivery to ensure a people-centred approach; and
   f. **developing and implementing** a plan of activities to strengthen the capacity of staff engaged in TB prevention and care – an optimized human resources plan could be reflected in either the NSP or an existing strategic document that needs updating;

2. By December 2018, all relevant stakeholders (finance ministry, health ministry, Ministry of Justice, Global Fund) should be aware of the budgetary realities and transition plan documents should reflect these so that stakeholders can plan for the transition to domestic funding and prioritize the highest value activities accordingly:
   a. **engaging** the finance ministry, health ministry and NTP in dialogue to ensure that budget allocations and priorities are aligned, sustainable and realistic;
   b. **increasing** efforts to establish more robust and/or sustainable budget allocations and priorities;
   c. **revising** the TB-related activities and resources planned in key strategic documents in line with updated budgets;
   d. **developing** new, budgeted action plans to address the remaining years of Global Fund support in alignment with updated domestic and development partners support for same period; and
   e. **considering** the transition-related challenges for TB-related activities in prisons;

3. By 20XX\(^{10}\), TSPs and their associated efforts should form an integral part of and be inextricably linked to national policy, including NSPs, by:
   a. **creating** a sense of urgency to prioritize the issue of TB, especially MDR-TB, within governments to address unmet needs related to TB prevention and treatment;
   b. **gaining commitment** from all necessary stakeholders to ensure the NTP informs and links to the TSP and, when available, to roadmaps to implement a people-centred model of TB care; and

---

\(^{10}\) Corresponding to the date of the next TSP review for each country. All other incidences of ‘20XX’ refer to a date to be defined by each country given their own review timelines and other considerations (resources, capacity, timing of reports and other vital inputs).
c. **educating** key government stakeholders on the importance of sustainability and the risks (especially those related to MDR-TB) associated with gaps in TB-related activities;

4. By 20XX, ensure that demonstrable progress has been made towards achieving WHO Regional Office for Europe and global targets for TB, and that the transition to domestic funding of TB-related activities supports, rather than hinders, this progress by:
   a. **implementing** social protection, poverty alleviation and actions on other determinants of TB, such as migration and prisons;
   b. **building** political commitment to secure adequate resources for TB prevention, diagnosis, treatment and management in both civilian and penitentiary settings;
   c. **making full use** of all available development partner support (while it remains) to maximize efforts towards health systems strengthening;
   d. **engaging** all key stakeholders (especially the finance ministry, health ministry and NTP) in round table discussions to ensure alignment of their approaches to transition to ensure that they support, rather than hinder, progress towards targets; and
   e. **updating** regulatory frameworks to ensure the best available case-based surveillance and registration methods are used, along with the rational use of high-quality medicines (including pharmacovigilance efforts);

5. By 20XX, an ongoing and stable platform for the coordinated involvement of all key TB stakeholders, (including CSOs and advocacy groups) should have been established and used to drive positive policy developments in TB, by:
   a. **advocating** key government agencies to support community systems and civil society engagement; and
   b. **forming** an advocacy coalition among key TB stakeholders, including the CCM, Ministry of Justice, health ministry, and TB specialists and academics to demonstrate to government (i.e. the finance ministry) the value of a coordinated TB approach incorporating CSOs and NGOs;

6. By 20XX, a mechanism should be in place to ensure that regular supervision and monitoring of routine NTP activities continues at all levels after Global Fund withdrawal by:
   a. **gaining the commitment** of the key decision-maker (i.e. health ministry) that sufficient funding/budget for monitoring and evaluation, drug management and the other operational activities performed by NTP specialized units will continue;
   b. **calculating** and considering expenses related to monitoring and supervisory visits (e.g. per diem, transportation, vehicle maintenance) in the transition plan;
   c. **monitoring** TSP implementation via clearly defined responsible entities in the country; and
   d. **building** supervisory visits into the NSP to ensure they continue after Global Fund withdrawal;

7. By 20XX, procurement methods should ensure that the government pays the best price possible for the highest quality TB medicines and consumables by:
   a. **revising** the procurement law and other regulations to remove barriers to providing quality-assured medicines and laboratory consumables;
   b. **formally agreeing** to ensure that countries do not lose access to the Global Fund procurement platform after the transition;
   c. **encouraging** a requirement within procurement law for WHO-prequalified medicines; and
d. **encouraging** domestic manufacturers to become WHO prequalified;

8. By 20XX, TB policy and practice should be evidence-based and reflect the regional experiences and lessons learned from by:
   a. monitoring pilot projects and implementing cost-effective and affordable practices to ensure high-quality, people-centred service provision to TB patients;

9. By 20XX, sustainability considerations should be embedded into the NTP design by:
   a. developing a robust and costed NSP through the meaningful engagement of all stakeholders;
   b. implementing the latest guidance from technical partners on what the government will need to finance in the future;
   c. implementing health financing strategies to progressively increase domestic financing for health in general and TB specifically; and
   d. increasing domestic investments for the national TB response.

3.4 Limitations and recommendations for further research and investments

The main limitation is the lack of available and/or reliable data. The initial list of indicators for review proved overly ambitious due to a lack of data and data granularity or to a decision that the indicator did not add significant value to the project or was too subjective (in the case of political will). As such, the scope of the review was reduced after the first two in-country visits.

Indicators initially intended for inclusion and reporting, but eliminated prior to cross-country analysis, were:

- TB-related DALYs;
- history of TB-related epidemics;
- expenditure on health care by financing schemes and functions of care (e.g. screening, diagnostic, treatment);
- Global Fund spending on health as a percentage of THE;
- Global Fund spending on health as a percentage of the total development partner spending on health;
- the total contribution to TB services by year (over 5–10 years) by:
  o the government;
  o the Global Fund;
  o USAID; and
  o other development partners;
- TB patient cost by model of care:
  o ambulatory;
  o community; and
  o hospital;
- TB patient cost (or expenditure) by:
  o direct medical costs (split into four parts: public, private, development partner, Global Fund);
  o indirect medical costs (split into four parts: public, private, development partner, Global Fund);
  o societal costs (e.g. lost productivity); and
- pharmaceutical expenditure only (split into four parts: public, private, development partner, Global Fund);
  - movement within/between income category (predicted movement will also form the analysis);
  and
  - political will.

In some countries (Belarus, Azerbaijan, the Republic of Moldova), there was a paucity of data and/or lack of budget data granularity, which made it impossible to calculate the size and nature of the gaps that might emerge after the Global Fund withdraws.

Financial gaps proved impossible to quantify in some countries (Azerbaijan, Belarus and, to a lesser extent, Ukraine) due to a lack of data granularity, lack of earmarked budgets and/or a lack of technical capacity to support the collection and analysis of detailed budgetary data. While this was a limitation of this project, it represents a greater and more urgent limitation for the relevant countries to address so that they can monitor and plan budgets appropriately.

Another limitation related to self-reported data and differing stakeholder opinions. The nature of in-country visits (i.e. meeting/interview-based and involving various stakeholder perspectives) meant that different or contradictory figures and views were sometimes reported. For example, in Armenia, there is currently no funding gap for TB services: 55% are paid for by the Government of Armenia and 45% by the Global Fund. However, a significant gap is very likely to appear when the Global Fund begins withdrawing in 2019. During this mission, different agencies gave different estimates of the funding reduction, ranging from 6–8% (finance ministry estimate) to 20% (NTP estimate).

Further, the inherently political nature of this work also meant that multiple rounds of revisions were often required to achieve multistakeholder acceptance. This sometimes resulted in important considerations being overlooked.

Therefore, this review highlighted the need for future research, investment and technical capacity-building, with the latter being particularly needed in the areas of TB budget setting, TB budget analysis and the creation and management of systems that support detailed TB budget reporting (line item level).
4. Conclusions

4.1 Policies and strategies

All selected countries all have well-developed TB NSPs (or NTPs) reflecting their TB priorities. Strategic plans are endorsed by the government or health ministry of the countries, which is a sign of political commitment to the TB response. Strategic plans cover the 2016–2020 period, but it is important to have a mid-term review of their implementation. All selected countries consider it important to have a transition period from funding by Global Fund and other development partners, especially after Global Fund withdrawal. TSPs need to be consistent with national TB strategies. However, not every country has finalized the development of its transition plan and no country has approved it. Thus, the process of developing transition plans and the coordinated approval of such by the different stakeholders need to be accelerated.

4.2 Financing and planning

All selected countries have experienced currency devaluation or depreciation following the 2008 global financial crisis and the regional recession commencing in 2015–2016. As a result, reduced government funds have been available for distribution across all priorities, including health. This is a major concern in light of concomitant development partner withdrawal and loss of access to international purchasing platforms. In all countries except for Armenia, a portion of their NTPs will remain unfunded following Global Fund withdrawal. Therefore, these countries must make plans to ensure NTP sustainability to minimize the risk of reversing the progress already made towards achieving WHO TB targets.

4.3 Procurement of medicines and laboratory consumables

The vast majority of development partner funding is spent on procuring anti-TB drugs and laboratory consumables. Uninterrupted provision of high-quality anti-TB drugs and laboratory consumables is ensured during the transition period by close collaboration between the Global Fund's principal recipient, NTP and health ministry in each country. All countries need to revise legislation on medicine procurement to identify and remove barriers to procuring drugs from international platforms. The capacity of national procurement entities should be assessed and strengthened, where needed, to ensure their continuing operation after Global Fund withdrawal. Domestic funds must be provided to extend the coverage of TB patients with new anti-TB drugs, which are currently procured through the USAID/Johnson & Johnson joint donation programme.
4.4 Supervision and monitoring
All selected countries have a comprehensive system of supervision and monitoring of TB patients that involves e-registration and surveillance systems, although to various extents and with different levels of service provision. Expenses for supervisory visits and logistics spending, as well as the maintenance/running cost of electronic databases, should be considered in the domestic budgets for the TB response. Effective systems for monitoring implementation of the transition plan should be established and frequently revised and updated. The published results of monitoring and evaluating the TB strategic plans and transition plans of each country will support health authorities in all selected countries, as well as national and international stakeholders. CCMs can play an important role in this.

4.5 Communications and advocacy
The Country Coordinating Mechanism (CCM) is the only platform for including civil society organizations (CSOs) in decision-making processes, with the exception of Ukraine, where civil society is particularly strong and actively involved in decision-making processes via alternative means. It is vital that this platform remains to ensure alignment and coordination among the different stakeholders involved in TB-related activities.

4.6 TB care in penitentiary system
TB-related activities in penitentiary systems are implemented according to national protocols and supervised by NTP monitoring teams. It is important to ensure that the same high-quality anti-TB drugs are used in the prison system as in the civilian sector. TB treatment continuation and follow-up of released prisoners still on TB treatment is an important activity, which is currently performed by CSOs, supported by the Global Fund. Penitentiary institutions, along with their respective ministries, the health ministry and the NTP, should jointly ensure that follow-up of released prisoners continues. TB-related activities in prisons should be considered in the transition plans being developed by all selected countries.

4.7 Health system strengthening, evidence-based TB policy and practice
All selected countries are in the process of defining and establishing PHC systems through reforms and pilot projects. The WHO TB-REP is supporting the process by establishing a people-centred model of TB care, optimizing the number of TB beds, suggesting innovative ways of financing TB services (including in PHC), and empowering TB patients and family members. The World Bank has conducted an Optima study in several countries to define financing priorities in TB care and achieve maximum spending efficacy. The results of pilot projects and Optima studies should be analysed, and successful activities should be expanded throughout all selected countries.
References


   (EUR/RC65/17 Rev.1; http://www.euro.who.int/__data/assets/pdf_file/0007/283804/65wd17e_Rev1_TBActionPlan_150588
   _withCover.pdf, 5 December 2018).

3. WHO Regional Committee for Europe resolution EUR/RC65/13 on priorities for health system strengthening
   in the European Region 2015–2020: walking the talk on people centredness. Copenhagen: WHO Regional Office for Europe; 2015
   (http://www.euro.who.int/__data/assets/pdf_file/0003/282963/65wd13e_HealthSystemsStrengthening

4. Roadmap to implement the tuberculosis action plan for the WHO European Region 2016–2020. Copenhagen: WHO Regional Office for Europe; 2016


   Geneva: World Health Organization; 2018


Resolution

Tuberculosis action plan for the
WHO European Region 2016–2020

The Regional Committee,

Having considered the Tuberculosis action plan for the WHO European Region 2016–2020 (document EUR/RC65/17 Rev.1);

Recognizing the importance of tackling tuberculosis within the framework of Health 2020,¹ the WHO European policy framework, to improve the health and well-being of populations and to reduce health inequalities;

Noting the commitment of the WHO European Region to respond urgently to the threat tuberculosis poses to public health and among those Member States that participated, through the Berlin Declaration on Tuberculosis, adopted by the WHO European Ministerial Forum – All Against Tuberculosis in 2007, and the Eastern Partnership Ministerial Conference on Tuberculosis and Multidrug-resistant Tuberculosis; and to end tuberculosis in the European Region through the Joint Riga Declaration on Tuberculosis and its Multidrug-resistance in 2015;

Recalling World Health Assembly resolution WHA62.15 on prevention and control of multidrug-resistant and extensively drug-resistant tuberculosis (M/XDR-TB)

as part of the transition to universal health coverage, and the 2009 Beijing “Call for Action” on tuberculosis control and patient care;

Recalling resolution EUR/RC61/R7, which adopted the Consolidated Action Plan to Prevent and Combat Multidrug- and Extensively Drug-Resistant Tuberculosis in the WHO European Region, 2011–2015 as a strategic framework for action by Member States in the European Region;

Recalling resolutions EUR/RC61/R6 and WHA68.7 on antibiotic resistance as policies to prevent and mitigate antimicrobial resistance, which also contribute to the prevention and control of M/XDR-TB;

Acknowledging that most of the milestones for Member States, the Secretariat and partners to scale up a comprehensive response to prevent and control tuberculosis and M/XDR-TB under the Consolidated Action Plan have been achieved, including significant increases in case detection and treatment coverage, and that Millennium Development Goal 6 on reversing tuberculosis incidence has been reached;

Concerned that despite this progress, there is continuing primary transmission of MDR-TB and decreasing treatment success rates among M/XDR-TB patients in several Member States;

Concerned over an increasing prevalence of HIV among tuberculosis cases and a growing inequality highlighted by the divergent epidemiological picture of tuberculosis across the Region and within countries, particularly among vulnerable groups, and aware that tuberculosis and MDR-TB are also cross-border health threats due to increased mobility of the population;

Recognizing the need for increased political commitment to ensure efficient and evidence-based tuberculosis prevention and expanded access to new models of care, new drugs and tools, as well as social approaches and strategies for tuberculosis management in the context of health systems strengthening;
Noting that the post-2015 global End TB Strategy for ending the global tuberculosis epidemic by 2035, endorsed by resolution WHA67.1, calls for regional support in the implementation of the Strategy; and acknowledging alignment of the Tuberculosis action plan for the WHO European Region 2016–2020 with the global End TB Strategy;

Understanding that this resolution covers the period from 2016–2020 and thereby succeeds resolution EUR/RC61/R7, which endorsed the Consolidated Action Plan from 2011–2015;

1. ADOPTS the Tuberculosis action plan for the WHO European Region 2016–2020 and its targets;
2. URGES Member States:\(^2\)
   (a) to align, as appropriate, their national health strategies and/or national tuberculosis and M/XDR-TB response with the Tuberculosis action plan for the WHO European Region 2016–2020 and to closely monitor and evaluate implementation as outlined in the action plan;
   (b) to facilitate equitable access to early diagnosis and effective treatment until completion for all forms of tuberculosis including rational and adequate use of new drugs;
   (c) to identify and address health systems challenges related to the prevention and care of all forms of tuberculosis, particularly to integrate tuberculosis services into the primary health care level and to scale-up patient-centred care initiatives and approaches and improve access to tuberculosis prevention and care for hard-to-reach and vulnerable populations;
   (d) to address social determinants of tuberculosis, the prevention of insurmountable costs to patients and their households due to tuberculosis, and the provision of social support to patients, including multisectoral and civil society collaboration as appropriate;

\(^2\) And regional economic integration organizations, where applicable
(e) to adopt sustainable financial mechanisms and strengthen human resources capacity for tuberculosis prevention and care, particularly in countries with decreasing external funding, and to move from external financing to self-financing; working with all relevant actors, including ministries of health and finance, parliaments, intergovernmental and non-State actors, to secure the long-term sustainability of programmes, including services for hard-to-reach and vulnerable populations, from domestic resources;

3. REQUESTS the Regional Director:

(a) to support Member States in the implementation of the Tuberculosis action plan for the WHO European Region 2016–2020 by providing leadership, strategic direction and technical support to Member States, upon request;

(b) to continue working in partnership with international, intergovernmental and non-State actors;

(c) to monitor implementation and report to the Regional Committee at its 68th and 70th sessions in 2018 and 2020, respectively, on implementation of the Tuberculosis action plan for the WHO European Region 2016–2020.

Reference

Annex 2. Strategic response plan building templates for country-level completion

<table>
<thead>
<tr>
<th>STRATEGY 1.1</th>
<th>STRATEGY 1.2</th>
<th>STRATEGY 1.3</th>
<th>STRATEGY 1.4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBJECTIVE 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• By ____, _____ NSP reflects WHO’s Tuberculosis action plan for the WHO European Region 2016–2020</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACTION FOR 1.1</th>
<th>ACTION FOR 1.2</th>
<th>ACTION FOR 1.3</th>
<th>ACTION FOR 1.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update NSP NSP to include details of activities and costs</td>
<td>Develop a TSP 2 to guide the country towards full ownership of its TB-related activities – ensure TSP alignment with NSP</td>
<td>Revise TB related activities and resources planned in key strategic documents relative to the updated budgets</td>
<td>Develop budgeted action plans to address the remaining years of Global Fund support in alignment with updated domestic and donor support for the same period</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STRATEGY 1.5</th>
<th>STRATEGY 1.6</th>
<th>STRATEGY 1.7</th>
<th>STRATEGY 1.8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBJECTIVE 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• By ____, _____ NSP reflects WHO’s Tuberculosis action plan for the WHO European Region 2016–2020</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACTION FOR 1.5</th>
<th>ACTION FOR 1.6</th>
<th>ACTION FOR 1.7</th>
<th>ACTION FOR 1.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop or use roadmap on optimization of TB service delivery ensuring people-centered approach</td>
<td>Develop and implement a plan of activities to strengthen capacity of staff engaged in TB prevention and care – an optimized human resources plan could be reflected in NSP or strategic document being updated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Objective 2

- **By ______, all relevant stakeholders (MsF, MoH, MoL, Global Fund) are aware of budgetary realities and transition and sustainability documents reflect these, so stakeholders can plan for transition to domestic funding and prioritise highest value activities accordingly.**

<table>
<thead>
<tr>
<th>STRATEGY 2.1</th>
<th>STRATEGY 2.2</th>
<th>STRATEGY 2.3</th>
<th>STRATEGY 2.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage MoH, MoL, and NTP in dialogues to ensure budget allocations and priorities are aligned, sustainable and realistic.</td>
<td>Ramp-up efforts to establish more robust and/or sustainable budget allocations and priorities.</td>
<td>Revise TB activities and resources planned in key strategic documents relative to updated budgets.</td>
<td>Develop new, budgeting action plans to address remaining areas of Global Fund support that align with updated domestic and donor support for same period.</td>
</tr>
</tbody>
</table>

### Objective 2

- **By ______, all relevant stakeholders (MsF, MoH, MoL, Global Fund) are aware of budgetary realities and transition and sustainability documents reflect these, so stakeholders can plan for transition to domestic funding and prioritise highest value activities accordingly.**

<table>
<thead>
<tr>
<th>STRATEGY 2.5</th>
<th>STRATEGY 2.6</th>
<th>STRATEGY 2.7</th>
<th>STRATEGY 2.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider transition-related challenges for TB activities in Prisara.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Objective 4

- By [Year], demonstrable progress has been made towards achieving WHO/EURO and global targets for TB, and transition to domestic funding of TB activities supports, rather than hinders, this progress.

<table>
<thead>
<tr>
<th>Strategy 4.1</th>
<th>Strategy 4.2</th>
<th>Strategy 4.3</th>
<th>Strategy 4.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement social protection, poverty alleviation and actions on other determinants of TB, such as migration and prisons</td>
<td>Build political commitment to secure adequate resources for TB prevention, diagnosis, treatment and management in both civilian and penalitary settings</td>
<td>Leverage all available donor support while it is available to maximize health systems strengthening efforts</td>
<td>Engage all key stakeholders (M&amp;F, M&amp;H, and NITR) in roundtable dialogues to ensure alignment of approaches to transition that support rather than hinder progress towards targets</td>
</tr>
</tbody>
</table>

### Actions for 4.1

<table>
<thead>
<tr>
<th>ACTIONS FOR 4.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
</tr>
<tr>
<td>[ ]</td>
</tr>
</tbody>
</table>

### Actions for 4.2

<table>
<thead>
<tr>
<th>ACTIONS FOR 4.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
</tr>
</tbody>
</table>

### Actions for 4.3

<table>
<thead>
<tr>
<th>ACTIONS FOR 4.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
</tr>
</tbody>
</table>

### Actions for 4.4

<table>
<thead>
<tr>
<th>ACTIONS FOR 4.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
</tr>
</tbody>
</table>

---

### Objective 3

- By [Year], transition and sustainability plans and their associated efforts form an integral part of, and are inextricably linked with national policy, including national strategic plans. [Date reflects country’s next review of TSP]

<table>
<thead>
<tr>
<th>Strategy 3.1</th>
<th>Strategy 3.2</th>
<th>Strategy 3.3</th>
<th>Strategy 3.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a sense of urgency to prioritize TB (especially MDR-TB) within government to address unmet needs of TB prevention and treatment</td>
<td>Gain commitment from necessary stakeholders to ensure NTP informs and links to TSP, and, when available, roadmaps to implement a people-centred mode of care for TB</td>
<td>Educate key government stakeholders on importance of sustainability and risks (especially those related to MDR-TB) associated with gaps in TB activities</td>
<td></td>
</tr>
</tbody>
</table>

### Actions for 3.1

<table>
<thead>
<tr>
<th>ACTIONS FOR 3.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
</tr>
</tbody>
</table>

### Actions for 3.2

<table>
<thead>
<tr>
<th>ACTIONS FOR 3.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
</tr>
</tbody>
</table>

### Actions for 3.3

<table>
<thead>
<tr>
<th>ACTIONS FOR 3.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
</tr>
</tbody>
</table>

### Actions for 3.4

<table>
<thead>
<tr>
<th>ACTIONS FOR 3.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
</tr>
</tbody>
</table>
### OBJECTIVE 4

- By ______, demonstrable progress has been made towards achieving WHO-EURO and global targets for TB, and transition to domestic funding of TB activities supports, rather than hinders, this progress.

<table>
<thead>
<tr>
<th>STRATEGY 4.5</th>
<th>STRATEGY 4.6</th>
<th>STRATEGY 4.7</th>
<th>STRATEGY 4.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update regulatory frameworks to ensure one of best available case-based surveillance &amp; registration, and rational use of high quality medicines &amp; pharmaceuticals efforts</td>
<td>ACTIONS FOR 4.5</td>
<td>ACTIONS FOR 4.6</td>
<td>ACTIONS FOR 4.7</td>
</tr>
</tbody>
</table>

### OBJECTIVE 5

- By ______, an ongoing and stable platform for the coordinated involvement of civil society and advocacy groups has been established and is leveraged to drive positive policy developments on TB.

<table>
<thead>
<tr>
<th>STRATEGY 5.1</th>
<th>STRATEGY 5.2</th>
<th>STRATEGY 5.3</th>
<th>STRATEGY 5.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advocate to key government agencies to support community systems and civil society engagement</td>
<td>ACTIONS FOR 5.1</td>
<td>ACTIONS FOR 5.2</td>
<td>ACTIONS FOR 5.3</td>
</tr>
</tbody>
</table>
# Objective 7

- By ____, ____ procurement methods ensure government pays the best price possible for the highest quality TB medicines and consumables

<table>
<thead>
<tr>
<th>STRATEGY 7.1</th>
<th>STRATEGY 7.2</th>
<th>STRATEGY 7.3</th>
<th>STRATEGY 7.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revise procurement law and other regulations to remove barriers to providing quality assured medicines and consumables</td>
<td>Formally agree to ensure that countries do not lose access to Global Fund’s procurement platform after the transition</td>
<td>Encourage requirement within procurement law for WHO prequalified medicines</td>
<td>Encourage domestic manufacturers to become WHO prequalified</td>
</tr>
</tbody>
</table>

## Actions for 7.1

<table>
<thead>
<tr>
<th>ACTIONS FOR 7.1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

## Actions for 7.2

<table>
<thead>
<tr>
<th>ACTIONS FOR 7.2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

## Actions for 7.3

<table>
<thead>
<tr>
<th>ACTIONS FOR 7.3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

## Actions for 7.4

<table>
<thead>
<tr>
<th>ACTIONS FOR 7.4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

# Objective 8

- By ____, ____ TB policy and practice is evidence-based and reflects lessons from regional experience

<table>
<thead>
<tr>
<th>STRATEGY 7.1</th>
<th>STRATEGY 7.2</th>
<th>STRATEGY 7.3</th>
<th>STRATEGY 7.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor pilot projects and implement cost-effective and affordable practices to ensure high quality and people-centered service provision to TB patients</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Actions for 7.1

<table>
<thead>
<tr>
<th>ACTIONS FOR 7.1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

## Actions for 7.2

<table>
<thead>
<tr>
<th>ACTIONS FOR 7.2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

## Actions for 7.3

<table>
<thead>
<tr>
<th>ACTIONS FOR 7.3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

## Actions for 7.4

<table>
<thead>
<tr>
<th>ACTIONS FOR 7.4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
### OBJECTIVE 9

- By _____, sustainability considerations are embedded into TB programme design

<table>
<thead>
<tr>
<th>STRATEGY 9.1</th>
<th>STRATEGY 9.2</th>
<th>STRATEGY 9.3</th>
<th>STRATEGY 9.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a robust and costing National Strategic Plan, developed with the meaningful engagement of all stakeholders</td>
<td>Implement the latest guidance from technical partners, with the view of what the government will need to take up in the future</td>
<td>Implement health financing strategies to progressively increase domestic financing for health and for TB specifically</td>
<td>Increase domestic investments for the national TB response</td>
</tr>
</tbody>
</table>

### OBJECTIVE 6

- By _____, a mechanism is in place to ensure and support regular supervision and monitoring of routine TB program activities continues after Global Fund withdrawal, at all levels.

<table>
<thead>
<tr>
<th>STRATEGY 6.1</th>
<th>STRATEGY 6.2</th>
<th>STRATEGY 6.3</th>
<th>STRATEGY 6.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain commitment from key decision-maker (Minh) that sufficient funding for M&amp;E, drug management and other operational activities, performed by NTP’s specialized units will continue.</td>
<td>Calculate and consider expenses related to monitoring and supervision visits (per diem, transportation, vehicle maintenance etc.) in transition plans.</td>
<td>Monitor transition and sustainability plan implementation via clearly defined responsible entities in the country.</td>
<td>Build supervisory visits into the NBP to ensure they continue after Global Fund withdrawal.</td>
</tr>
</tbody>
</table>
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
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
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