CASE STUDY AND LESSONS LEARNT

Strengthening implementation mechanisms for national tuberculosis control programme in Turkmenistan to achieve Sustainable Development Goals and End TB Strategy targets at the country level

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ABSTRACT

Background: Implementation of the 2030 Agenda for Sustainable Development and the Sustainable development Goals (SDGs) requires a robust monitoring framework to be established in each country. This paper presents the National TB Programme (NTP) in Turkmenistan as a health programme well prepared to monitor the achievement of the SDGs targets and indicators.

Approach: Turkmenistan was one of the first countries in the world to adopt the SDGs. The country nationalized 148 of the 169 global SDG targets and 197 of the 231 global indicators. In 2017, the United Nations agencies operating in the country supported Turkmenistan in conducting several mainstreaming, acceleration, and policy support strategy (MAPS) missions, and Rapid Integrated Assessment (RIA) of the existing national, regional and sectoral programmes, strategies, action plans and laws for compliance with the SDG targets, including the availability of implementation mechanisms. Overall, 20 documents were available for RIA in Turkmenistan including 16 mid- and long-term national development plans and relevant sectoral strategies, and four legislative acts. The maximum score that can be awarded to a policy document is 27 based on nine RIA criteria. The National Programme for the Prevention and Control of Tuberculosis in Turkmenistan for the years 2016–2020 received

a score of 21 (77.8%), which is the highest of all reviewed documents. The National Programme included the main mechanisms required for SDG monitoring: a work plan, responsible parties, a set of reporting indicators and specific targets, priorities, budget estimates and frameworks. The health strategies other than those for TB lacked at least one component, such as a budget or measurable indicators/targets.

Lessons learned: The high score received by the NTP is due to several factors, the most significant of which are the Government's high prioritization of TB control, the strong coordinating role of the Ministry of Health, and the leadership and high level of motivation of NTP staff. It is important to mention that building a robust monitoring framework requires time — the NTP has more than two decades of experience in implementing strategies and measuring progress on specific indicators and targets aligned with international standards.

Conclusion: Although the National Programme for the Prevention and Control of Tuberculosis for 2016–2020 is specific to TB control, other sectors can build on the experience of the NTP and develop similar mechanisms for measuring progress made on specialized policies and strategies.

Keywords: SDG, NATIONAL TB PROGRAMME, END TB, TUBERCULOSIS

BACKGROUND

In 2016, the Millennium Development Goals (MDGs) were succeeded by a substantially broader agenda – the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs), which emphasize equity, the links between sectors, and the centrality of country monitoring and review (1, 2). The United Nations will monitor the implementation of the SDGs

through the established monitoring systems at the national, regional and global levels, as well as through thematic groups.

SDG 3 – the consolidated goal on health – covers all major health topics, such as reproductive, maternal, newborn and child health, infectious diseases, noncommunicable diseases (NCDs), mental health, road traffic injuries, universal health coverage, environmental health and the strengthening of health



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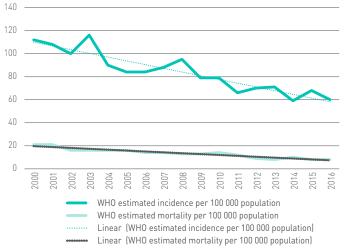
systems. Health is a key aspect of the SDGs on nutrition, water, sanitation, air quality and violence, while other SDGs focus on determinants of health such as education and poverty (2). Thirteen targets have been set for SDG 3, two of which (3.3 and 3.8) relate to the control of tuberculosis (TB) through monitoring the incidence of TB and the coverage of TB treatment as one of the "tracer indicators" for universal health coverage (3).

This paper presents an overview of how the existing monitoring framework of the National TB Programme (NTP) in Turkmenistan and its documented best-case performance already supports the implementation of the national SDGs through a thematic health group, and how the Government can build on the NTP to augment other national health programmes in order to measure the distance to the SDG 3 targets.

LOCAL CONTEXT

Turkmenistan is a Central Asian country bordered by Afghanistan, Islamic Republic of Iran, Kazakhstan and Uzbekistan. In 2016, the population of the country was estimated at 5.6 million, while the life expectancy at birth was 67.8 years (4). The World Bank classifies Turkmenistan as an upper-middle-income country with a gross domestic product of US\$ 36.18 billion and a gross national income of US\$ 6670 in 2016. Over recent years, many positive changes in TB have been observed in Turkmenistan. WHO estimated that the incidence of TB per 100 000 population declined by nearly 50% from 112 in 2000 to 60 in 2016 (annual percentage change 2.7%), while the estimated mortality declined by 64% – from 21 in 2000 to 7.6 in 2016 (on average 3.8% per year) – as presented in Fig. 1.

FIG. 1: THE DYNAMICS OF WHO-ESTIMATED TB INCIDENCE AND MORTALITY IN TURKMENISTAN, 2000–2016



Source: Global Tuberculosis Report. World Health Organization, 2017 (3)

The TB case detection rate improved from 48% in 2007 to 80% in 2015 (3), while the NTP achieved a steady decrease in TB incidence and mortality rates. The treatment success rate of sensitive TB cases has been stable in recent years, accounting for 87% of the 2015 cohort. Coverage of drug susceptibility testing increased from 28% in 2011 to about 79% in 2016 (5), while testing for susceptibility to second-line TB drugs started in 2015, with proper quality assurance from the supranational reference laboratory. The coverage of second-line treatment has increased considerably from 0% in 2012 to 90% in 2015 based on the estimated number of people with TB symptoms referred for screening. To date, 1500 multidrug-resistant TB (MDR-TB) patients have been treated (5). The treatment success rate for MDR-TB is 53% (2013 cohort), which is below the target of 75%, but is similar to the average rate in the WHO European Region and in 18 high-priority countries (5, 6). Like elsewhere in Europe, the low success rate has largely been due to deaths, treatment failure and loss to follow up. The NTP is working on improving the treatment outcomes through, for example continuing to provide support to MDR-TB patients and monitoring the safety of MDR-TB treatment. In 2017, with support from the Global Fund to fight AIDS, TB and Malaria, the NTP started treating extensively drug-resistant TB (XDR-TB) with new WHOrecommended drugs.

Despite these achievements, the high level of drug-resistant TB remains a challenge. According to the 2012 nationwide Drug Resistance Survey (DRS), the prevalence of MDR-TB among new TB cases was 13.9%, while it was 37.6% among re-treated cases (7). Data on the burden of XDR-TB are not yet available, but it has been estimated that about 15% of MDR-TB cases will develop into XDR-TB. More precise estimates on XDR-TB will be available in early 2019 once the second nationwide DRS has been completed. The burden of drug-resistant TB is gradually increasing due to prevalent (backlog) cases not covered by diagnostics and treatment in previous years.

The second challenge is that, as an upper-middle-income country, Turkmenistan became ineligible to receive funding for TB from the Global Fund in 2016, which means that support from the Global Fund will cease in 2021. However, the Government funds 94% of the NTP budget and, therefore, due to this low dependence on external funding, the risk of the NTP transitioning to full domestic financing is moderate to low (8). The Government of Turkmenistan proactively took over the supply of TB reagents and medicines as early as 2016. In 2017, in recognition of the country's efforts to ensure an uninterrupted supply of quality-assured TB supplies, the National TB Programme was awarded the Stop TB Partnership and Global Drug Facility award for leadership in efficient order planning.

At the same time, the NTP needs to address several complex issues related to the core mechanisms for building resilient and sustainable systems for health. To assist the NTP with the transition process, Turkmenistan will receive the Global Fund's transitional grant for one allocation period (2018–2021). The transitional grant will fund the activities prioritized by the National TB Transition Plan for 2018–2021, and the National Programme for the Prevention and Control of Tuberculosis in Turkmenistan in 2016–2020, and will be in line with the Global Fund's sustainability, transition and co-financing policy.

APPROACH

Turkmenistan was one of the first countries in the world to adopt the SDGs. The country nationalized 148 of the 169 global SDG targets and 197 of the 231 global indicators. The adopted SDGs, targets and indicators have been integrated into the Presidential Programme for 2017–2021 and the respective sector plans.

In 2017, the United Nations agencies operating in the country supported Turkmenistan in conducting several mainstreaming, acceleration, and policy support strategy (MAPS) missions and Rapid Integrated Assessment (RIA) of the existing national, regional and sectoral programmes, strategies, action plans and laws for compliance with the SDG targets, including the availability of implementation mechanisms.

MAPS is a tool that helps to translate the SDGs into national and subnational plans and budgets, raising public awareness and establishing practices for monitoring and reporting (mainstreaming – the 'M' of MAPS); identifying country-specific actions that will accelerate progress across several SDGs (acceleration – the 'A' of MAPS), and; providing thematic policy support (the 'PS' of MAPS) (9). In 2017, Turkmenistan was one of the first five countries in Europe and the Commonwealth of Independent States to host a MAPS mission, which provided practical solutions to accelerate implementation of the 2030 Agenda in the country.

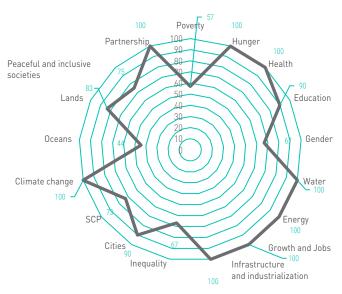
RIA helps countries determine their readiness to implement the SDGs. The RIA methodology has been described elsewhere (10). In brief, the assessment is applied in four consecutive stages. In the initial stage, the SDGs and targets are mapped against national/subnational priorities. The second stage involves identifying the options for a cross-sectoral approach to sustainable development through balancing economic, social and environmental dimensions. The third step assesses the existing monitoring capacity at the country level. A country's

SDG profile, which is developed in the final stage, provides an overview of the readiness of a country to mainstream the SDGs.

In Turkmenistan, the National Strategic Development Plan and/ or related sector strategies have fully or partially integrated the SDGs: 148 targets have been adopted by the Government of Turkmenistan out of 169 global targets, including 121 adopted without modification and 27 with modification. Of the 148 adopted targets, 84% (124) have been integrated into national strategic documents. Turkmenistan committed to reporting on the SDGs through a set of 188 indicators out of a global total of 241: 117 indicators were adopted unmodified, 47 were modified, while 24 were formulated at the national level.

In the health sector, 12 out of 13 global objectives were adopted, and all 12 have been integrated into national strategies (Fig. 2). Progress towards SDG 3 will be monitored by 16 indicators, which were adopted out of a total of 26 globally recommended indicators.

FIG. 2: PERCENTAGE OF SDG TARGETS INTEGRATED INTO SECTORAL STRATEGIES



Source: Rapid Integrated Assessment for Turkmenistan: Contributions to Turkmenistan's Roadmap to attain the Sustainable Gevelopment Goals (11)

Overall, 20 documents were available for RIA in Turkmenistan, which included 16 mid- and long-term national development plans and relevant sectoral strategies, and four legislative acts. The maximum score that can be awarded to a policy document is 27 based on nine RIA criteria (Table 1).

The National Programme for the Prevention and Control of Tuberculosis in Turkmenistan for the years 2016–2020 received a score of 77.8%, which is the highest of all reviewed documents

No.	Criteria	Evaluation score
1	Presence of implementation plan for event/objective	No - 0, Yes - 3
2	Presence of institutions responsible for implementation	No - 0, General responsibility - 1, Presence of each event/objective - 3
3	Presence of list of indicators	No - 0, Yes, for some - 1, Yes, for all - 3
4	Presence of objective quantitative indicators (results), their achievement	No - 0, Yes, for some - 1, Yes, for all - 3
5	Scale of the programme	National - 1, regional - 2, sectoral - 3
6	Presence of priorities/accelerators	No - 0, Yes - 3
7	Programme implementation period	2018-2020 = 1, 2021-2025 = 2, 2026-2030 = 3
8	Presence of investment volumes	No - 0, General volume - 1, Volumes for activities/objectives - 3
9	Number of integrated SDG objectives	Less than 10 = 1, 10-20 = 2, more than 20 = 3
	Total	minimum = 0, maximum = 27

(11). The National Programme included the main mechanisms required for SDG monitoring: a work plan, responsible parties, set of reporting indicators and specific targets, priorities, budget estimates and frameworks. The health strategies other than those for TB lacked at least one component, such as a budget or measurable indicators/targets. The NCD programme was ranked second due to the absence of an estimation of the funding needed. The 16 reviewed mid- and long-term national development plans and relevant sector strategies had the following common implementation weaknesses: nine out of 16 documents (56%) did not have a list of indicators for measuring progress; 11 (69%) lacked specific quantifiable targets; and 11 (69%) lacked investment estimates. Most strategic documents were developed by the line ministries and departments without considering international standards/templates.

Four of the reviewed documents were related to the health sector: the National Programme for the Prevention and Control of Tuberculosis, the National Programme for NCDs, the State Programme for Health Care Sector Development in Turkmenistan for 2012–2016, and the National Programme for the Prevention of HIV, STIs and Viral Hepatitis in Turkmenistan. Table 2 summarizes the scores for these four health programmes.

The 2016–2020 TB programme is supplemented by a detailed budget. The estimated financial needs for the 2016–2020 programme are approximately US\$ 123 million, of which the Government will provide about 85%, the Global Fund 9%, other donors 1%, while only 5–7% may remain unfunded. With support from the Global Fund's transitional TB grant, the NTP activities will be domestically funded by mid-2021.

TABLE 2: SUMMARY OF RIA EVALUATION OF HEALTH-RELATED STRATEGIC DOCUMENTS Programme Presence of list of indicators Presence of implementation Programme implementation Number of integrated SDG Scale of the programme Presence of institutions Presence of investment quantitative indicators Presence of objective Presence of priorities/ **Total** score 3 3 3 3 1 3 3 1 1 21 **Tuberculosis** 77.8 3 2 3 NCDs 3 3 3 0 1 1 19 70.4 3 0 2 3 2 3 State programme 3 Ω \cap 16 59.3 on health HIV/STDs 3 3 1 0 2 3 0 2 1 15 55.6

At the same time, the National Programme for the Prevention and Control of Tuberculosis in Turkmenistan for the years 2016–2020 could have scored more highly if it had provided more details on its contribution to the achievement of other SDGs, as the programme currently seems to be health-specific. Obviously, control of TB provides solutions to broader socioeconomic challenges, for example, those measured by SDGs 1, 2, 7, 8, 10 and 11 (3). An additional observation is that the TB strategy could have been more gender sensitive: although the TB data were collected and analysed by sex-disaggregation, the NTP could provide improved service delivery if a differentiated approach was adopted based on qualitative data on the unique needs of women. The reviewed programme has a much shorter time frame than the 2030 Agenda, so the NTP has the opportunity to address these issues when developing the 2021–2025 programme.

DEVELOPMENTS OF NATIONAL TB PROGRAMME SINCE 1998

The National Programme for the Prevention and Control of Tuberculosis in Turkmenistan for 2016-2020 is the third programme cycle of TB care services in Turkmenistan. During the first few years after the introduction of directly observed treatment, short course (DOTS) in 1998, TB control was regulated by short-term legislative documents. The first National Programme for the Prevention and Control of Tuberculosis in Turkmenistan (for 2005–2009) was developed as the Government recognized the need to strengthen the policy framework for TB control. This programme, which was endorsed by the Cabinet of Ministers, was the first strategic plan for a specific health programme in Turkmenistan. Furthermore, in response to the adoption of the WHO Stop TB Strategy (2006) and the launch of the Plan to Stop TB in 18 High-priority Countries in the WHO European Region (2007–2015), the Ministry of Health and Medical Industry developed the National Strategy for the Prevention and Control of Tuberculosis in Turkmenistan for the Period 2008-2015. Following the achievement of the national MDGs related to the control of TB, the country developed the current post-2015 TB programme covering the period 2016–2020, which is fully aligned with the Tuberculosis Action Plan for the WHO European Region (2016-2020) and Health 2020. All the above-mentioned national TB plans were developed with WHO technical support and were aligned with WHO's strategic goals for the European Region.

In 2012, the Ministry of Health and Medical Industry abolished a few interim legislative acts on TB and approved a comprehensive order, No. 109, on improving TB control measures. The order has 17 separate annexes detailing each component, e.g. organization of TB services, TB case detection, TB case definition, treatment, drug management, MDR-TB and others. The order is currently being updated with WHO support in order to reflect recent developments.

The main achievement of the NTP is the integration of TB services into primary health care (PHC) activities. The integration process started as early as 1995 with the health reforms introduced by the first State Health Programme 1995-2000. As TB prevention and case detection are the responsibility of PHC and due to a recent change in TB and MDR-TB treatment to the ambulatory model of care, the services for prevention, detection, treatment provision and follow-up are also available at PHC facilities. The coverage of DOTS became universal in 2007 through the integration of diagnosis and treatment of TB with 61 microscopy centres and 95 TB treatment facilities at PHC. Detection and treatment of TB at the PHC facility is supervised by the TB specialist. Integration with PHC contributed to increased coverage of TB care, as the services were made more accessible to the population, which is in line with the overall objective of granting universal access to TB services for all.

In addition to integration with PHC, the NTP is distinguished by engaging with other ministries, civil society and international partners. Control of TB in prisons is regulated by a joint work plan, which has been produced annually by the Ministry of Health and Medical Industry and the Ministry of the Interior since 2010. The NTP is in the process of reviewing order No. 109 so that it includes a separate annex on TB care in penal institutions. As for other ministries and state bodies, the Ministry of Economy and Finance develops the budget proposals, including expenditure on TB services, and submits them to the Cabinet of Ministers for approval, while the Ministry of Social Protection, the Ministry of Defence and governmental agencies (for example, the State Border Service of Turkmenistan) are engaged in TB control in their respective fields. The NTP is the only health programme that engages with civil society organizations (notably the National Red Crescent Society) in the implementation of the nationwide patient support programme.

Although Turkmenistan largely relies on domestic financing for TB care, the introduction and implementation of the DOTS strategy, the Stop TB Strategy and the current End TB Strategy are supported by international and bilateral agencies, partners and donors such as the Global Fund and WHO. Since 2010, the country has been receiving TB grants from the Global Fund, which has helped in the introduction of quality management of MDR-TB and XDR-TB programmes. Donor funding enabled technical support to be provided to the work of WHO experts

in various TB areas, which resulted in notable improvements in NTP performance.

The Ministry of Health is committed to coordinating TB care between national and international partners. The duties of the NTP Coordinator are assigned to the Deputy Minister of Health and Medical Industry of Turkmenistan. The Minister of Health and Medical Industry chairs the Country Coordination Mechanism for Tuberculosis, which is an intersectoral unit that oversees the technical implementation of the NTP and the strengthening of horizontal governance. A unique feature of the TB Country Coordination Mechanism is that people affected by TB are represented by two ex-TB patients.

In 2010, the NTP became the first national health programme to develop national monitoring and evaluating (M&E) guidelines. Besides a detailed description of the M&E methodology, the guidelines include practical checklists for monitoring specific TB programme components, such as laboratory performance, case detection at the PHC facility level, case management in TB facilities, TB drug management and TB reporting. Each checklist includes instructions on how to collect data and calculate progress on the indicators. Following the introduction of the programmatic management of MDR-TB in 2013, the NTP also developed an M&E framework for this component.

The NTP established monitoring teams at the central and regional levels, with team specialists receiving training in the M&E methodology. Monitoring visits are conducted every quarter, the findings of which are discussed with the respective managers (PHC manager, regional department of health, Ministry of Health). The Ministry of Health holds quarterly meetings on TB-related matters. Concerning evaluation, WHO conducted a comprehensive review of the NTP in 2010 and 2015 and the recommendations made helped to frame the work plan and budget of the Global Fund's TB grants, and fed into the current National Programme for the Prevention and Control of Tuberculosis for 2016–2020. The next evaluation will be in 2019 and will develop the strategy for 2021–2025.

During implementation of the MDG agenda, the NTP developed mechanisms for the effective monitoring of progress and improved the quality of data. In line with the global End TB Strategy, the National Programme for the Prevention and Control of Tuberculosis for 2016–2020 includes the following targets, which are to be met by 2020:

- TB mortality rate: 2.4 per 100 000
- TB incidence rate: 56 per 100 000

- MDR-TB treatment success rate: 75%
- case notification rate for MDR-TB: over 90%

Overall, the National Programme for the Prevention and Control of Tuberculosis for 2016–2020 will be monitored by 25 indicators (at the impact, outcome and output levels) with specific annual targets. Of the 25 indicators, data are regularly collected for nine, four require a drug resistance survey (DRS), while data are available through administrative documents for the remaining 12. The NTP monitoring and evaluation framework is presented in Annex 1.

Despite these achievements, TB data for Turkmenistan are not readily available to the international community. As the availability of data is not a challenge specific to TB, the Ministry of Health and the State Statistics Committee are working on this issue within a broader partnership framework between the Government of Turkmenistan and the United Nations agencies for the period 2016–2020, with the aim of releasing data in accordance with international standards.

LESSONS LEARNED

Turkmenistan is committed to reporting on 148 of 169 global SDG targets. Of the 148 adopted targets objectives, 84% (124) have been integrated into national strategic documents. Progress will be measured by 188 indicators. National implementation mechanisms are available for 33% of the 188 indicators (11). For the remainder, there is no or insufficient national information available. Besides a measurement framework, achieving the SDGs requires a comprehensive approach, which includes clearly assigned responsible parties, investment, accelerators, etc. An RIA of 16 mid- and long-term national development plans and sector strategies showed that most of them lack implementation mechanisms, such as monitoring frameworks and estimates regarding investment.

In this regard, the National Programme for the Prevention and Control of Tuberculosis for 2016–2020 may provide guidance for other health and non-health programmes in terms of measuring progress towards the SDG targets. Although the programme is specific to TB control, other sectors can build on the experience of the NTP and develop similar mechanisms for measuring progress made on specialized policies and strategies.

The high score that the NTP received for mechanisms required for SDG monitoring is one of its achievements. The overall success of the NTP is due to several key factors, the most significant of which are the Government's high prioritization of TB control, the strong coordinating role of the Ministry of Health, and the leadership and high level of motivation of NTP staff. Historically, TB control has attracted a high level of political commitment at the global, regional and national levels and has been one of the Government's priorities, which has meant that it has received adequate funding. These factors must be considered by other sectors.

The partnership with international and bilateral agencies such as WHO, the Global Fund, the United Nations Development Programme and the United States Agency for International Development have greatly contributed to the success of the NTP. Reforming and strengthening the NTP was not based on a single-issue approach, but on a systems development approach, which focused on the capacity of the health system. For example, since 2010, for the Global Fund TB grant, strengthening the health system included human resources for health, health financing, monitoring and evaluation, drug management, training events for health managers and PHC specialists, etc.

The development of TB strategic documents in all programme cycles was evidence-based: the activities were planned once TB epidemiology trends and the WHO-recommended best practice interventions had been analysed. The current programme was also guided by the findings of the national DRS, which helped to project the number of drug-resistant cases.

The TB programme has more than two decades of experience in implementing the strategies and measuring progress on specific indicators and targets. The national system of monitoring TB is also aligned with global and regional standards to allow for the international comparability of data. WHO has established a set of standard TB indicators, which other health programmes currently lack (12).

The lessons learned from the model NTP for other health and/or non-health sectors in the country are that building a robust strategic document requires strong support from the Government, adequate funding, partnerships with international and national stakeholders, and measurement standards to develop the national monitoring frameworks. The success of the NTP should encourage other sectors to work towards operationalizing the 2030 Agenda.

Without a robust monitoring system, the SDGs will indeed stand for "senseless, dreamy, garbled" as it will not be possible to objectively assess progress or identify the sources of funding (13). However, the SDGs have been adopted, and individual countries

should start the journey by building on existing mechanisms to measure and attain the goals.

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ANNEX 1. MONITORING AND EVALUATION FRAMEWORK FOR THE NATIONAL PROGRAMME FOR THE PREVENTION AND CONTROL OF TUBERCULOSIS FOR 2016–2020 IN TURKMENISTAN

Nō	Indicator	Baseline			Targets					
		value	year	source	2016	2017	2018	2019	2020	
1	TB case notification, all cases, per 100 000	59	2014	Routine TB reporting and recording	70.4	70.3	69.5	68.8	67.0	
2	TB case notification, new and relapse cases, per 100 000	48.6	2014	Routine TB reporting and recording	55.9	55.6	54.8	54.2	52.8	
3	TB mortality rate, per 100 000	4.1	2014	Routine TB reporting and recording	3.4	3.2	2.9	2.7	2.4	
4	MDR-TB prevalence among new cases, %	13.9	2013	Routine TB reporting and recording	15%	15%	15%	15%	15%	
5	MDR-TB prevalence among re-treated cases, %	37.6%	2013	Drug Resistance Survey	45%	44%	43%	42%	41%	
6	Treatment success rate, new TB cases with bacteriological confirmation, %	83.8%	2013	Routine TB reporting and recording	85%	88%	90%	90%	90%	
7	Final treatment success rate, rifampicin- resistant TB (RR-TB) / MDR-TB / XDR-TB, %	n/a		Routine TB reporting and recording	60%	67%	70%	72%	75%	
8	Percentage of laboratories conducting drug susceptibility testing (DST) that pass External Quality Assurance	97.0%	2014	Administrative reports	95%	95%	95%	95%	95%	
9	Percentage of registered new patients with pulmonary tuberculosis with bacteriological confirmation, identified by rapid diagnostic testing, approved by WHO: GenXpert-technology	n/a		Administrative reports	7%	8%	9%	10%	10%	
10	Percentage of notified cases bacteriologically confirmed	n/a		Administrative reports	85%	90%	95%	95%	95%	
11	Percentage of previously treated TB patients receiving drug resistance testing (bacteriologically positive cases only)	n/a		Administrative reports	100%	100%	100%	100%	100%	
12	Percentage of DST for second-line anti-TB drugs of all registered MDR-TB patients	n/a		Administrative reports	60%	95%	95%	95%	95%	
13	Percentage of MDR-TB cases that are also XDR-TB	n/a		DRS	10%	10%	10%	10%	10%	

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Nº	Indicator	Baseline			Targets				
		value	year	source	2016	2017	2018	2019	2020
14	Coverage of patients with RR-TB / MDR-TB / XDR-TB, treatment with second- and third-line anti-TB drugs according to international standards, %	20.8	2014	Routine TB reporting and recording	90%	90%	90%	90%	90%
15	Interim treatment success rate, RR-TB / MDR-TB / XDR-TB, %	n/a		Routine TRB R&R	67%	70%	73%	75%	77%
16	Percentage of prisoners tested for TB	n/a		Administrative reports	100%	100%	100%	100%	100%
17	Percentage of released prisoners continuing anti-tuberculosis treatment in the civilian sector	n/a		Administrative reports	100%	100%	100%	100%	100%
18	Stock-out of anti-TB drugs in medical institutions	0	2014	Administrative reports	0	0	0	0	0
19	Percentage of annual need for TB medicine (including second line) covered by the funding	n/a		Administrative reports	100%	100%	100%	100%	100%
20	Percentage of TB cases tested for HIV, for which the test result is registered in TB register, out of total number of notified TB cases	98%	2014	Routine TRB R&R	100%	100%	100%	100%	100%
21	Percentage of TB patients with known HIV status	n/a		routine TRB R&R	0%	0%	0%	0%	0%
22	Percentage of HIV-positive registered TB patients given antiretroviral therapy during TB treatment	n/a		administrative reports	100%	100%	100%	100%	100%
23	Percentage of HIV-positive patients who were screened for TB in HIV care or treatment settings	n/a		routine TRB R&R	100%	100%	100%	100%	100%
24	Percentage of registered TB patients (all forms) who received a full course of anti-TB treatment in outpatient settings	25.5%	2014	Administrative reports	30%	35%	40%	45%	50%
25	Annual domestic funding for TB of total Government expenditure on health, %	n/a		Administrative reports	n/a	n/a	n/a	n/a	n/a