Southern African Development Community: Tuberculosis Report 2017

2019 SADC Tuberculosis Report

Version 2

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Contents

Abbreviations

ACSM	Advocacy, Communications and Social Mobilization
AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
CPT	Co-trimoxazole Preventive Therapy
DOT	Directly Observed Therapy
DOTS	Directly Observed Therapy, Short-course
DRC	Democratic Republic of Congo
DR-TB	Drug Resistant Tuberculosis
DRS	Drug Resistance Surveillance or Survey
DST	Drug Susceptibility Testing
FLD	First Line Drugs
HIV	Human Immunodeficiency Virus
IPT	Isoniazid Preventive Therapy
MDG	Millennium Development Goal
MDR-TB	Multidrug Resistant Tuberculosis
MS	Member State(s)
NTP	National Tuberculosis Control Programme or equivalent
Rif	Rifampicin
RR	Rifampicin Resistant
SADC	Southern Africa Development Community
SBCC	Social and Behavioural Change Communication
SDG	Sustainable Development Goals
SLD	Second Line Drugs
(S)NRL	(Supra) National Reference Laboratory
TB	Tuberculosis
TSR	Treatment Success Rate
URT	United Republic of Tanzania
WHO	World Health Organization
WRD	WHO-recommended rapid diagnostic
XDR-TB	Extensively Drug Resistant TB

Executive summary

1. Introduction

The Southern African Development Community (SADC) annual Tuberculosis (TB) Report provides the Ministers of Health of the Community, the Secretariat and the partners with an overview of the state of the disease and progress on TB control in the Region. This report is the second SADC TB Report since the introduction of the global END TB Strategy. The framing of the report is guided by the END TB Strategy which prioritises Top 10 indicators to track the performance of TB programmes.

The report is based on 2018 data provided by national TB programmes of the SADC Member States. This data has been analysed against the top 10 TB indicators among others to show the TB burden within SADC and progress made towards the 2025 targets.

2. Findings

The key findings of this analysis are as follows:

(i)   Performance against the top 10 TB indicators varies among Member States with some countries being on track towards achievement of the targets set for 2025 while others require to increase their efforts. The table below providers the performance of SADC region towards achievement of the 2025 targets for the top 10 indicators at a glance.

	Top 10 Indicators	Target 2025	No. of member states reporting	Highest results	Lowest result
1	TB treatment coverage	≥ 90%	14	100	50
2	Treatment Success Rate Susceptible TB	≥ 90%	15	90	56
	Treatment Success Rate MDR-TB	≥ 90%	12	100	50
3	% of TB-affected households that experience catastrophic costs due to TB	0%	1	80	
4	% of new and relapse TB patients tested using WRD at the time of diagnosis	≥ 90%	11	100	7
5	LTBI treatment coverage HIV	≥ 90%	8	87	17
	LTBI treatment coverage < 5 years		10	100	9
6	Contact investigation coverage	≥ 90%	3	100	37
7	DST coverage for TB patients	100%	7	100	20
8	Treatment coverage, new TB drugs	≥ 90%	1	66	
9	Documentation of HIV status among TB patients	100%	14	100	22
10	Case fatality ratio (CFR)	≤5%	12	17	0,05

(ii)   TB incidence rates have been declining since 2015 in most countries while incidence has stagnated in few (20%) of the countries

(iii) TB case notification (all forms) shows varying trends: almost half of the Member States have a declining trend and another half shows an increasing trend in TB case notification since 2015. Overall TB case notification in the SADC region has been increasing since 2015.

(iv) Member States have sustained high coverage of TB/HIV collaboration since 2015. Two countries have met the 100% coverage target while the other countries have over 90% coverage of TB patients with HIV who are started on ART.

(v) Member states have made significate improvement in the reduction of TB mortality. Almost all Member States achieved the 15% reduction in TB mortality between 2015 and 2018 except one country.

(vi) The SADC region has a disproportionately high DR-TB burden in the WHO AFRO region. SADC accounts for 77% of confirmed RR/MDR-TB and 76% of the gap in treatment of MDR-TB in the AFRO region.

(vii) Most (73%) of the SADC Member States have the expected range for childhood TB (5% to 15% of all TB cases). Only 13% (two countries) are below this range.

(viii) Financing of the national TB programmes is a key aspect of sustainability of the results achieved by Member States. However, 33% (5 out of 15) of the Member States have over 40% funding gap for their programmes while 53% of the Member States provide less than 30% domestic funding for their TB programmes.

3. Recommendations

The recommended improvements for the TB response in the SADC region are as follows:

(i) Accelerate the establishment of a monitoring and evaluation systems and surveillance for TB at regional level. Member States should improve the M&E systems to attain 100% reporting rate on the top 10 TB indicators. This will also enable Member States to prepare for the first evaluation of progress towards international commitments which will be undertaken in 3 years.

(ii) Increase domestic funding for national TB programmes: Some SADC Member States have attained middle income status and may not continue to qualify for funding from external sources. External funding is also generally declining and most of national programmes have a funding gap. Member States should increase domestic funding to scale up and sustain results achieved by national TB programmes.

(iii) Strengthen interventions for finding missing TB cases as there are still significant gap between the Notified TB cases and estimated incidence rate. Each Member States should develop locally appropriate strategies for finding TB missing cases including involving all care providers.

(iv) Strengthen laboratory capacity and networking to expand DST coverage in the region in order to improve the quality of TB treatment and early identification of DR-TB

(v) Prioritise early detection and quality treatment of DR-TB given that the SADC Region is contributes 76% of the AFRO treatment gap for laboratory confirmed RR/MDR-TB

(vi) The SADC Member States should explore and address the causes of existing laboratory confirmed RR/MDR Treatment gaps: The SADC Region is responsible for 76% of the AFRO treatment gap for laboratory confirmed RR/MDR-TB

(vii) Low TB burden Member States should develop country specific TB elimination roadmaps which will facilitate implementation of relevant interventions

Preamble

The outline of the 2019 annual TB report follows the format below

- Section 1: Background information, context of TB in the SADC Region, Global, continental and Regional commitments
- Section 2: Methodology for development of the report
- Section 3: Performance of the Member States against Top 10 Indicators
- Section 4: Member States TB profiles and indicator trends
- Section 5: Recommendations

Annexure includes:

- SADC TB accountability scorecard
- Member States achievements, challenges and lessons learnt
- Definition and rationale for the top 10 TB indicators
- List of references

1. Background

The Southern African Development Community (SADC) develops annually a Tuberculosis (TB) Report to provide the Ministers of Health of the Community, the Secretariat and the partners with an overview of the state of the TB burden and its control activities in the region. The report describes achievements in 2018 towards regional, continental and global commitments by both the SADC Member States (MS). The report also acts as a tool for monitoring progress towards achieving the SDG targets[i].

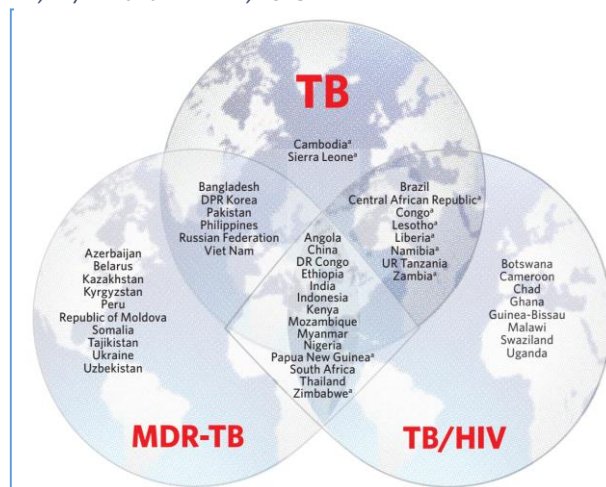## 1.1. The Context of TB globally and in the SADC Region

TB is one of the top 10 causes of death. In 2017, TB caused an estimated total of 1.6 million deaths globally, of which 1.3 million were among HIV-negative people and 300 000 deaths among HIV-positive people. An estimated 10.0 million people developed TB disease: 5.8 million men, 3.2 million women and 1.0 million children. TB cases were reported in all countries and among all age groups. Two thirds of the cases were in eight countries: India (27%), China (9%), Indonesia (8%), the Philippines (6%), Pakistan (5%), Nigeria (4%), Bangladesh (4%), and South Africa with a 3% . 72% of the TB patients living with HIV are from Africa[ii].

Ten (10) out of the 16 (63%) SADC Member States in WHO's list of 30 high TB burden countries (figure 1). The high TB burden countries are in three categories: TB, Multidrug Resistant TB (MDR-TB) and TB/HIV co-infection. The SADC countries listed in these categories are Angola, Democratic Republic of Congo, eSwatini, South Africa, Mozambique, United Republic of Tanzania, Lesotho, Namibia, Zambia and Zimbabwe. This underscores the high burden of TB in the SADC region[iii].

Figure 1: Countries in the three high-burden country lists for TB, TB/HIV and MDR-TB, 2018

Drug-resistant TB continues to be a public health crisis. The best estimate is that, globally in 2017, 558 000 people (range, 483 000–639 000) developed TB that was resistant to rifampicin (RR-TB), the most effective first line drug. Among cases of MDR-TB in 2017, 8.5% were estimated to have extensively drug-resistant TB (XDR-TB). In addition, about 1.7 billion people, 23% of the world's population, are estimated to have a latent TB infection, and are thus at risk of developing active TB disease during their lifetime.

Globally, 41% of TB Budget remained unfunded with wide variations in the level of domestic commitments in TB funding[iv]. This is more of a concern when considering the dwindling international donor funding landscape. The low funding levels poses a challenge to implementing the TB programme strategy and interventions. There remains a need to transform the global political commitment to Ending the TB epidemic to financial commitments.

Within WHO Africa Region (AFRO), the TB incidence rate is declining, but still remains disproportionately high. Africa has 14% of global population but accounted for 25% of global cases in 2017. SADC region is the most affected region in Africa, with Member States contributing 55% of TB notifications of AFRO total notifications, 77% of the RR/MDR-TB burden, 76% to the AFRO gap between diagnosis and treatment of RR/MDR-TB and 94% of all confirmed XDR-TB in AFRO[v].

1.2. Global, Continental and Regional commitments for TB Control

SADC Member States have subscribed to various global, continental and regional commitments.

1.2.1. Global Commitments

2. **The Sustainable Development Goal**: TB specific target is "By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases"

3. **The END TB Strategy 2015-2035**: The goal of this strategy is to "End the global TB epidemic". The strategy sets three high-level indicators and related targets for 2030 – linked to the SDGs – and for 2035, and milestones to monitor progress for 2020 and 2025.

   (i) The three high level indicators are:
      1. Number of TB deaths per year;
      2. TB incidence rate (new cases per 100 000 population per year); and
      3. Percentage of TB-affected households that experience catastrophic costs as a result of TB disease.

   (ii) The 2030 targets are:
      - 90% reduction in TB deaths from 2015 level
      - 80% reduction in the TB incidence rate from 2015 level

   (iii) The 2035 targets are:
      - 95% reduction in TB deaths from 2015 level
      - 90% reduction in the TB incidence rate from 2015 level

   (iv) Milestones for 2020
      - 35% reduction in TB deaths from 2015 level
      - 20% reduction in the TB incidence rate from 2015 level
      - Zero percent of households experience catastrophic cost as a result of TB disease and sustained thereafter

4. **Global Plan to End TB, 2016–2020:** The Stop TB Partnership has developed a Global Plan to End TB, 2016–2020, which focuses on the actions and funding needed to reach the 2020 milestones of the End TB Strategy[vi].

The three Pillars of the End TB Strategy are:

   - Integrated, patient-centred TB care and prevention
   - Bold policies and supportive systems
   - Intensified research and innovation

1.2.2. Continental Commitments

1. Resolution AFR/RC 55/RS, adopted by the WHO Regional Committee for Africa at its 55th session in Maputo, Mozambique in 2005, declared TB an emergency, and also called upon Member States to declare TB an emergency in their countries.[vii]

2. The Abuja Call for Accelerated Action Towards Universal Access to HIV and AIDS, Tuberculosis and Malaria Services of 2001, which called for the prevention of multidrug-resistant TB, and for universal access to prevention, treatment, care and support for TB[viii]. In 2013 the African Union Heads of States signed the Declaration called Abuja actions towards the elimination of HIV and AIDS, tuberculosis and malaria in Africa by 2030[8]. This declaration calls for further scale up of activities to eliminate the three diseases.

3. The African Continental End TB Accountability Framework for Action and the End TB Scorecard initiative[ix].

1.2.3. Regional Commitments

I. SADC Minimum Standards for Child and Adolescent HIV, TB and Malaria Continuum of Care and Support (2013-2017)
II. The Declaration on Tuberculosis in the Mining Sector

2. Methodology

This report was developed based on the SADC Member States TB programme data for 2018 submitted by the National TB Programmes (except Comoros)[1]. The data was consolidated and analysed to show the state of TB in the SADC region, variations and the trend among countries based on the End TB top 10 indicators. Data on programme performance was also analysed to assess progress made in the TB response among the SABC countries. In addition, each SADC Member State (except Comoros) provided a country specific qualitative report on the achievement, challenges and lessons learnt. Based on the analysis of these reports, this report makes recommendations on key issues to be addressed by the SADC member states to strengthen the TB response and accelerate progress towards achievement of the top 10 TB indicators.

National TB Managers and other programme officers reviewed and consolidated the TB data in a meeting held from 26th to 30th August 2019 in Johannesburg, South Africa. This was followed by the development of a draft annual SADC TB report which was reviewed and finalised by the SADC secretariat.

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[1] Comoros did not submitted data because it joined SADC recently.

3. Progress of SADC Member State towards achieving the End TB Strategy targets

This section highlights the state of the TB burden in the SADC region and progress made by countries in the implementation of key TB interventions. The TB burden analysis is based on the internationally recommended indicators. This section also shows the overall performance of the SADC region and Member States in the TB response.

1.3. SADC Member States Performance against top 10 TB indicators

The performance of Member States against the 10 ten TB indicators was analysed based on two criteria:

(i) 2025 global TB targets: All countries have committed to achieve these targets which are set out in the global End TB Strategy. The analysis shows the extent to which SADC countries are on track towards achieving these indicators.

(ii) Rate of reporting: The analysis shows the reporting rate of SADC Member States for each indicator and identified indicators which countries have difficulties reporting on. This analysis forms a basis for an assessment of challenges countries face in reporting and inform appropriate interventions.

1.3.1 Member State performance

The table below shows the performance of all SADC Member States against the top 10 indicators.

Table 1: SADC Member States performance against Top 10 priority indicators targets, 2018[2]

	Indicator	Target 2025	Angola	Botswana	Comoros	DRC	eSwatini	Lesotho	Madagascar	Malawi
1	TB treatment coverage	≥ 90%	61	-	-	63	80	55	50	67
2	Treatment Success Rate Susceptible TB	≥ 90%	66	76	-	90	86	76	84	86
	Treatment Success Rate MDR-TB	≥ 90%	-	-	-	86	74	77	60	59
3	% of TB-affected households that experience catastrophic costs due to TB	0%	-	-	-	-	-	-	-	-
4	% of new and relapse TB patients tested using WRD at the time of diagnosis	≥ 90%	-	-	-	7	100	-	-	44
5	LTBI treatment coverage HIV[3]	≥ 90%	42	-	-	-	17	33	-	-
	LTBI treatment coverage < 5	-	-	-	-	24	12	51	37	9
6	Contact investigation coverage	≥ 90%	-	-	-	-	37	-	-	-
7	DST coverage for TB patients	100%	-	-	-	-	100	94	-	20

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[2] Blanks indicate that data was not provided by the specific country
[3] TPT is not implemented in Botswana, but planned for in the 2018 – 2023 NSP

#	Indicator		Mauritius	Mozambique	Namibia	Seychelles	South Africa	UR Tanzania	Zambia	Zimbabwe
8	Treatment coverage, new TB drugs	≥ 90%	-	-	-	-	66	-	-	-
9	Documentation of HIV status among TB patients	100%	45	95	-	60	99	92	64	99
10	Case fatality ratio (CFR)	≤5%	5.05	-	-	0.20	0.18	0.34	0.25	-

#	Indicator	Target 2025	Mauritius	Mozambique	Namibia	Seychelles	South Africa	UR Tanzania	Zambia	Zimbabwe
1	TB treatment coverage	≥ 90%	100	57	62	87	76	53	58	83
2	Treatment Success Rate Susceptible TB	≥ 90%	90	90	84	56	77	90	90	83
	Treatment Success Rate MDR-TB	≥ 90%	100	50	71	-	54	80	71	57
3	% of TB-affected households that experience catastrophic costs due to TB	0	-	-	-	-	-	-	-	80
4	% of new and relapse TB patients tested using WRD at the time of diagnosis	≥ 90%	100	41	80	100	71	17	46	87
5	LTBI treatment coverage HIV	≥ 90%	-	49	87	-	65	-	24	18
	LTBI treatment coverage < 5	-	-	100	100	56	-	-	22	-	30
6	Contact investigation coverage	≥ 90%	100	-	-	-	-	-	-	72
7	DST coverage for TB patients	100%	100	-	-	100	-	32	-	47
8	Treatment coverage, new TB drugs	≥ 90%	-	-	-	-	-	-	-	-
9	Documentation of HIV status among TB patients	100%	22	98	99	100	90	-	95	94
10	Case fatality ratio (CFR)	≤5%	17	0.27	0.25	0.14	-	0.30	0.31	0.15

Data Source: SADC Member States National TB Programmes

The performance against the top 10 indicators varies among the Member States across all indicators. The table below shows the range between the highest and lowest result reported against the target for each indicator in 2018, for the countries that reported on each indicator.

Table 2: Overall member states performance against to 10 indicators at a glance

#	Top 10 Indicators	Target 2025	No. of member states reporting	Highest results	Lowest result
1	TB treatment coverage	≥ 90%	14	100	50
2	Treatment Success Rate Susceptible TB	≥ 90%	15	90	56
	Treatment Success Rate MDR-TB	≥ 90%	12	100	50

#	Indicator	Target			
3	% of TB-affected households that experience catastrophic costs due to TB	0%	1	80	
4	% of new and relapse TB patients tested using WRD at the time of diagnosis	≥ 90%	11	100	7
5	LTBI treatment coverage HIV	≥ 90%	8	87	17
	LTBI treatment coverage < 5 years		10	100	9
6	Contact investigation coverage	≥ 90%	3	100	37
7	DST coverage for TB patients	100%	7	100	20
8	Treatment coverage, new TB drugs	≥ 90%	1	66	
9	Documentation of HIV status among TB patients	100%	14	100	22
10	Case fatality ratio (CFR)	≤5%	12	17	0,05

1.3.2 Reporting rate against top 10 TB indicators

Member States reporting for rate for all top 10 TB indicators varies considerably, from a high of 92% to a low of 17%. The mean reporting rate for Member States is 58%. This means that countries did not provide data for an average 40% of the indicators. Table 2 below provides the reporting rate for each country.

The reporting rate for each indicator also varies, from a high of 100% to a low of 7%. The reporting rate of 7% means only one country reported on such indicators. The mean reporting rate for all indicators is 70%. Three indicators: percentage of TB affected households that experience catastrophic costs due to TB, Treatment coverage of new TB drugs and Contact investigation coverage were reported on by only one country each.

The reporting rates are generally low considering that these indicators have been prioritised globally to track progress towards the end of TB as a public health threat and will form the basis of country assessment in 20205.

Table 3: SADC Member States reporting rates against top 10 TB indicators, 2018
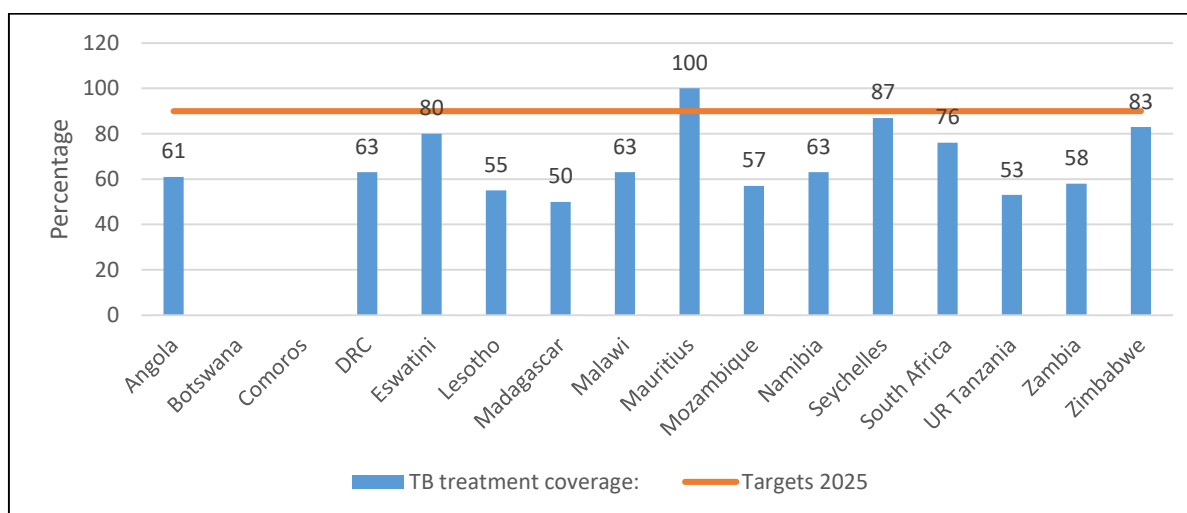
SADC Member States	Member State reporting rate for the 10 priority Indicators		End TB Top 10 Priority Indicators	Indicators Reporting Rate Among Member State
Angola	42%		TB treatment coverage	93%
Botswana	17%		TB treatment success rate susceptible TB	100%
Comoros	*			
DRC	58%		Treatment Success Rate MDR-TB	80%
ESwatini	92%		% of TB-affected households that experience catastrophic costs due to TB	7%
Lesotho	67%		% of new and relapse TB patients tested using WRD at the time of diagnosis	73%
Madagascar	50%		LTBI treatment coverage HIV	53%

Malawi	58%	LTBI treatment coverage-< 5	67%
Mauritius	75%	Contact investigation coverage	7%
Mozambique	67%	DST coverage for TB patients	47%
Namibia	67%	Treatment coverage, new TB drugs	7%
Seychelles	50%	Documentation of HIV status among TB patients	93%
South Africa	50%	Case fatality ratio (CFR)	80%
UR Tanzania	58%		
Zambia	58%		
Zimbabwe	92%		

1.3.3   TB treatment coverage

The target for TB treatment coverage for 2025 is ≥ 90%. Of the 14 countries that reported on this indicator, 64% have less than 70% of treatment coverage and are considered not to be in track towards the achievement of the 2025 target. This performance illustrates challenges countries are facing in linking identified TB patients to treatment and care. The figure below shows the performance of each Member States against this indicator in 2018.

Figure 2: TB treatment coverage

1.3.4   Treatment success rate for susceptible TB

SADC Member States have made significant progress towards the achievement of the treatment success rate indicator for susceptible TB. 33% of the 15 countries that reported on this indicator have achieved the 2025 target of 90% treatment success rate. 60% of the countries have achieved between 75% and 89% treatment success rate while only 13% (two) of the countries have below 65% treatment success rate. Countries should strengthen current efforts to ensure the 2025 target is achieved. the figure below shows the treatment success rate for susceptible TB for the Member States.

Figure 3:Treatment Success Rate -Susceptible TB
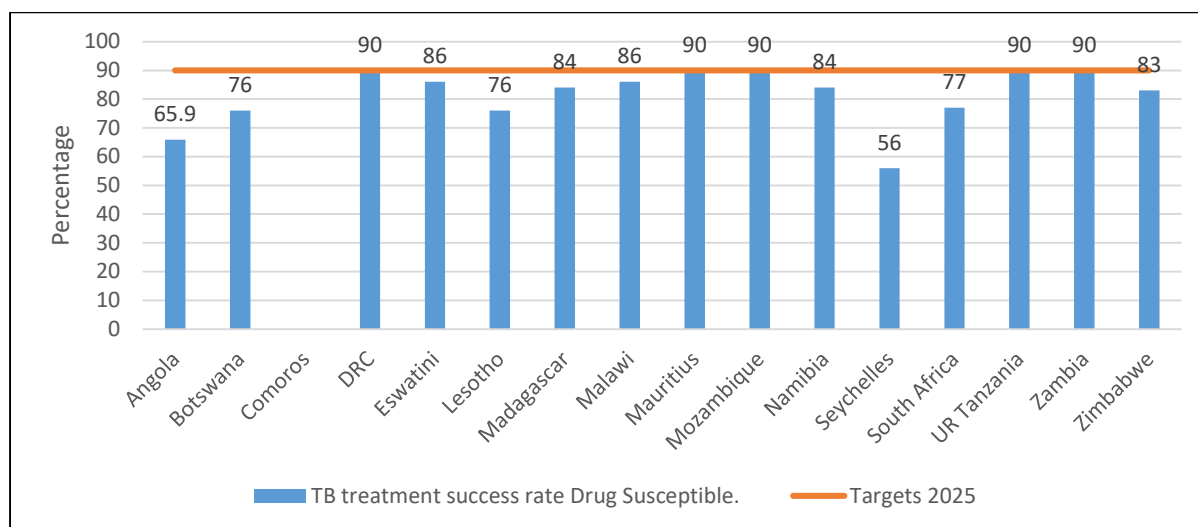
1.3.5 HIV status among TB patients

SADC member countries are well on track to achieving the 2025 target for documentation of HIV status among TB patients which is 100% coverage. As at 2018, one country (1%) documented HIV status in 100% of the TB patients; 64% of the countries documented HIV status among over 90% of the TB patients and only 29% (4 countries) had less than 65% coverage of this indicator. This demonstrates the effectiveness of the TB/HIV collaborative activities.

Figure 4: HIV Status among TB Patients
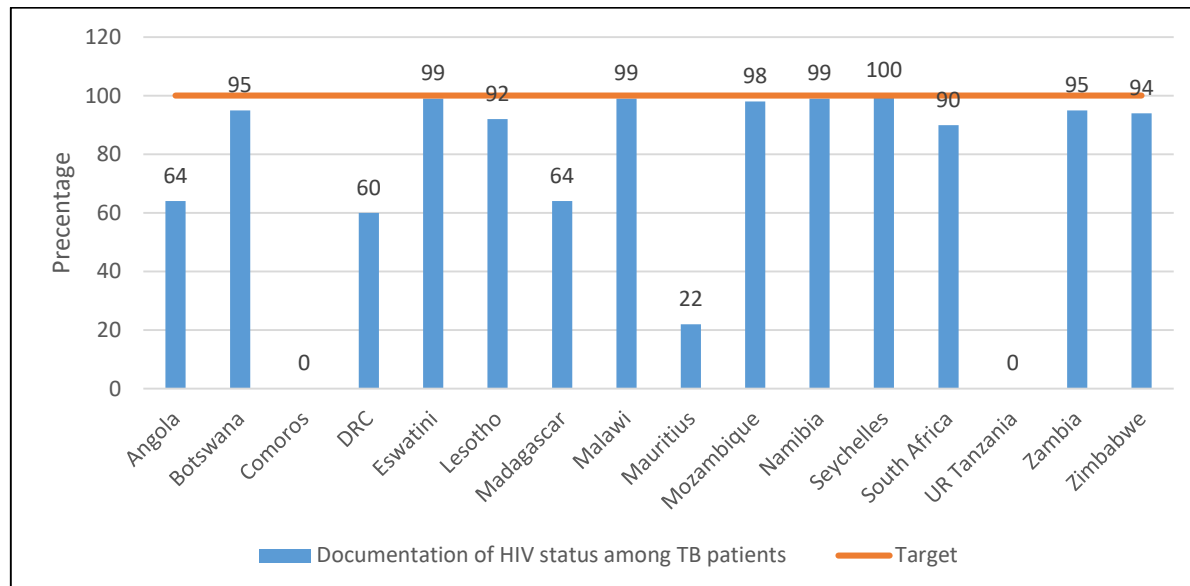
1.3.6 TB preventive treatment

Treatment of LTBI is the main treatment intervention available to prevent development of active TB disease in those already infected with TB. However, the coverage of TB preventive treatment among Member States is very low. Of the 8 countries that reported on Latent TB Infection Treatment among HIV patients, only one has 87% TPT coverage against a 2025 target of over 90%. All the other 7 countries less than 50% coverage with the lowest TPT coverage at 17% in one country.

The target for Latent TB Infection Treatment among children 5 years and below is over 90% coverage by 2025. As at 2018, 20% (2 out the 10) of the countries that reported on this indicator had 100 coverage of children who are in households with contacts of cases started on LBTI treatment. 80% of the reporting countries had less than 50% coverage while 20% had even less than 15% coverage.

Table 4: LTBI treatment coverage (HIV positive patients and <5yrs children)

LTBI treatment coverage among HIV positive patients			
Country	LTBI treatment coverage HIV	Target (2025)	Difference between achieved result and target
Angola	42	90	-48
eSwatini	17	90	-73
Lesotho	33	90	-57
Mozambique	49	90	-41
Namibia	87	90	-3
South Africa	65	90	-25
Zambia	24	90	-66
Zimbabwe	18	90	-72

LBTI Treatment coverage under 5yrs children			
Country	LBTI Treatment coverage under 5yrs	Target (2025)	Difference between achieved result and target
Malawi	9	90	-81
eSwatini	12	90	-78
UR Tanzania	22	90	-68
DRC	24	90	-66
Zimbabwe	30	90	-60
Madagascar	37	90	-53
Lesotho	51	90	-39
Namibia	56	90	-34
Mauritius	100	90	10
Mozambique	100	90	10

1.3.7 TB drug susceptibility testing

Testing for drug susceptibility for WHO-recommended drugs is essential to provide the right treatment for every person diagnosed with TB. The target for DST coverage among TB patients that are eligible is 100%, otherwise, quality of service will be compromised and appropriate drug combination might not be given, hence, leading to drug resistance. Of the 7 countries that reported on this indicator, 43% (3 countries) have 100% DST coverage, and another 43% (3 out of 7 countries) have less than 50% DST coverage. There is a need for countries to prioritise the improvement of capacity and networking of laboratories to increase DST coverage.

Figure 5: Drug Susceptibility Testing for TB patients
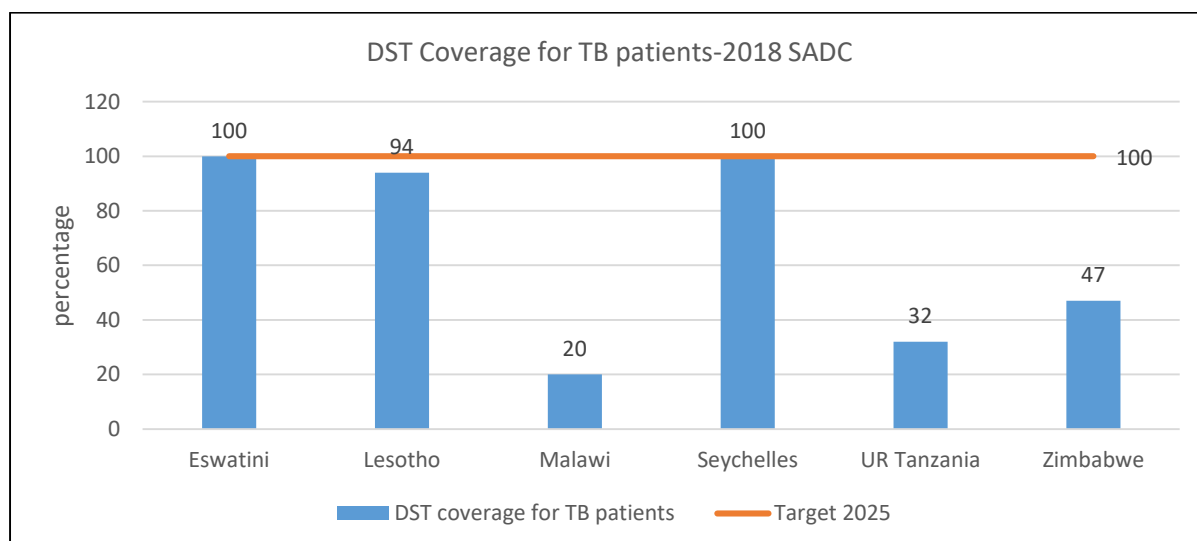
1.4. SADC Member States TB profile and indicator trends

This section looks at the TB profile of the SADC Member States and illustrates trends in certain TB indicators. The performance is also illustrated against the country specific targets. The contextual

differences within the Members States TB programme should be taken into account in interpreting country data against specific indicators in order not to mask different targets set by Member States.

1.4.1   TB incidence

The incidence for all forms of TB (figure 6) have been declining since 2015 in 67% (10 out of 15) of the Member States while incidence rates in 20% (3 out of 15) of the countries stagnated. Further, 20% (3 out of 15) of the countries continue to record over 500 TB cases per 100,000 population. Three Member States achieved more than 20% (3 out of 15) reduction in TB incidence rate compared to 2015 levels, which is the target for 2020. Other countries require more effort to achieve this target within the next one year.

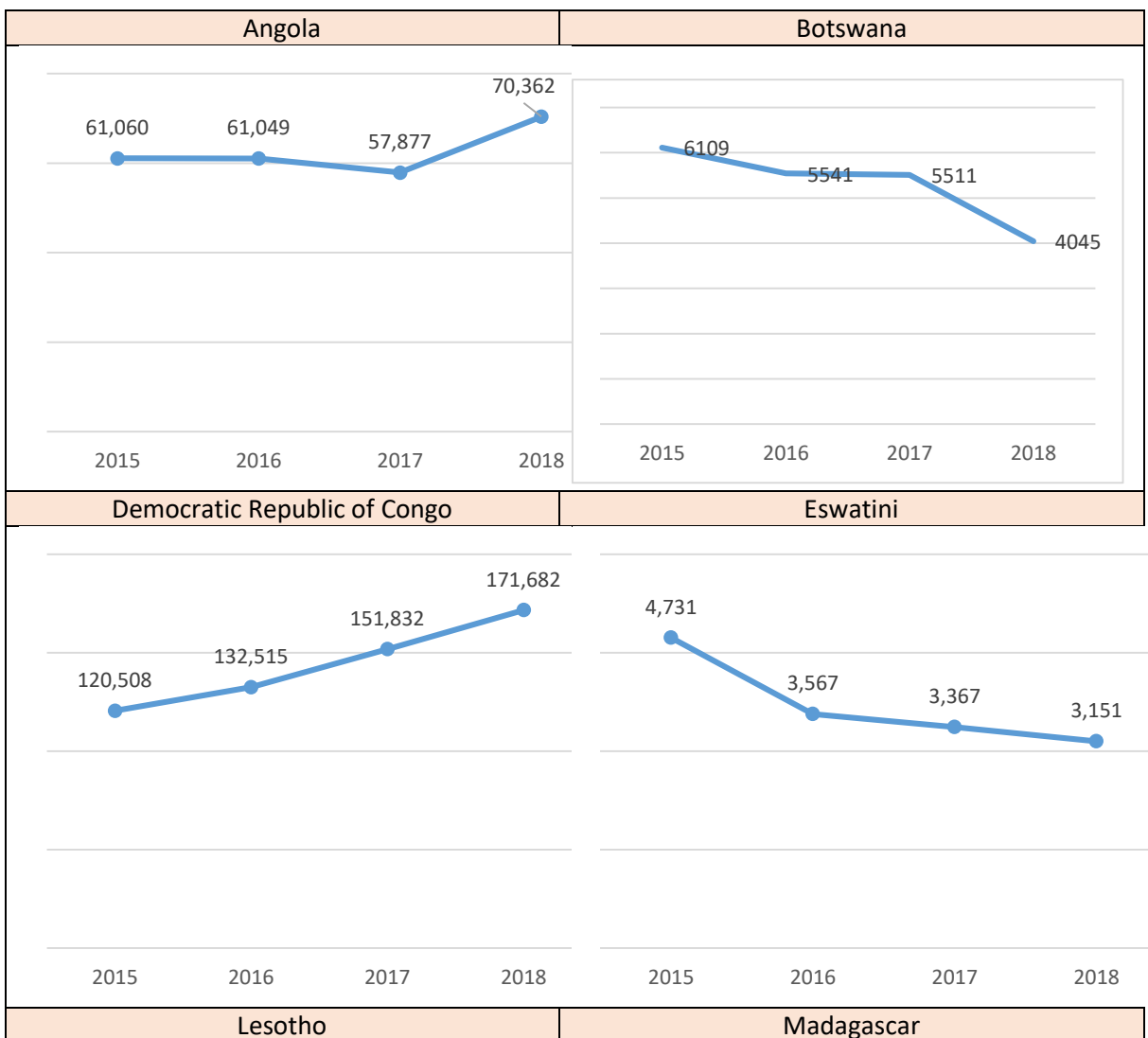*Figure 6: TB Incidence cases (per 100 000 pop) 2015-2018*

Mozambique			
2015	2016	2017	2018
193	159	154	154
154	154	133	131

Namibia			
2015	2016	2017	2018
10	10	9	11
8	8	8	8

Seychelles			
2015	2016	2017	2018
551	551	551	551
441	441	441	441

South Africa			
2015	2016	2017	2018
489	446	423	421
353	353	353	353

United Republic of Tanzania			
2015	2016	2017	2018
10	12	16	18
8	8	8	8

Zambia			
2015	2016	2017	2018
834	781	667	667
667	667	567	520

Zimbabwe			
2015	2016	2017	2018
306	287	269	253
245	245	245	245

2015	2016	2017	2018
391	376	376	346
313	313	313	313

1.4.2   TB case notification (all forms) 2015 to 2018

Overall trend in TB case notification (all forms) in SADC has been increasing, from 747,483 cases reported in 2015 to 777,872 cases in 2018. Among Member States, almost half (47%) had an increasing trend in TB cases notification between 2015 and 2018 while another half (53%) had a declining trend during the same period. The trajectory of TB case notification trends has to be interpreted with caution as trends may increase due to more missing cases being found but not as a result of an increasing
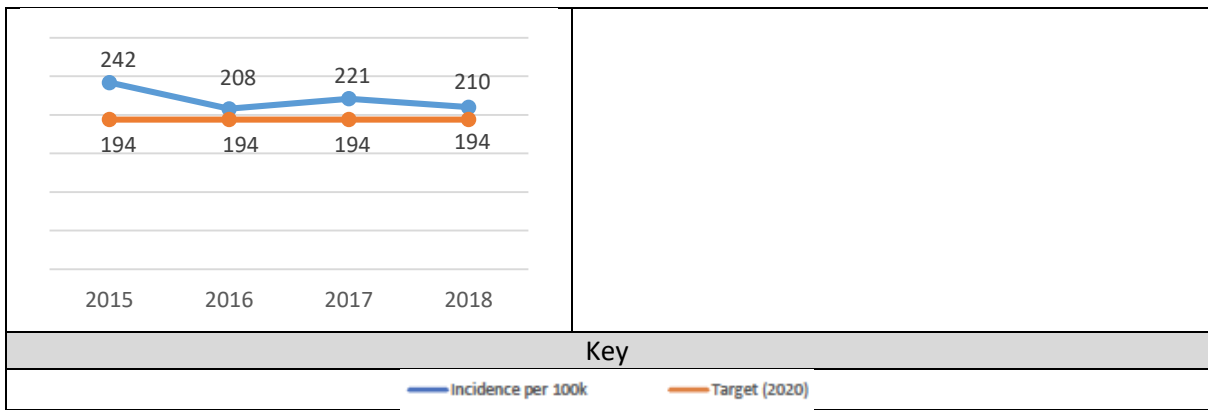
epidemic. The converse in also true of the decreasing trends. The figure below shows the trend in TB case notification for each Member State.

Figure 7: TB Notification All Cases, 2015-2018

Angola	Botswana

Democratic Republic of Congo	Eswatini

Lesotho	Madagascar

16

Malawi

Year	2015	2016	2017	2018
Value	9,856	7,892	7,513	7,271

Mauritius

Year	2015	2016	2017	2018
Value	29,939	29,658	31,783	34,191

Mozambique

Year	2015	2016	2017	2018
Value	17,104	16,959	16,852	15,852

Namibia

Year	2015	2016	2017	2018
Value	129	122	119	133

Seychelles

Year	2015	2016	2017	2018
Value	61,449	73,470	86,515	93,546

South Africa

Year	2015	2016	2017	2018
Value	9,994	9,166	8,851	8,100

		16	15		294,603	244,053	243,297	227,999
8	12						
2015	2016	2017	2018	2015	2016	2017	2018

United Republic of Tanzania	Zambia

			75,828				
62,180	65,908	69,818		41,588	40,153	37,203	35,922
2015	2016	2017	2018	2015	2016	2017	2018

Zimbabwe	SADC

28,225						866,955	
	27,353	26,401	25,775	747,483	717,418		773,872
2015	2016	2017	2018	2015	2016	2017	2018

1.4.3   TB/HIV Collaboration

TB/HIV collaboration comprises of mechanisms for delivering integrated HIV and TB services in order to reduce the burden of TB in PLHIV. TB/HIV standard of care expects all TB patients testing positive

for HIV to be initiated on ART. Two countries have consistently met a 100% target in screening TB patients for HIV while 10 member states are observed to be on increasing trend, and maintaining more than 90% ART coverage.

Figure 8: Percentage of TB patients with HIV positive status started on ART
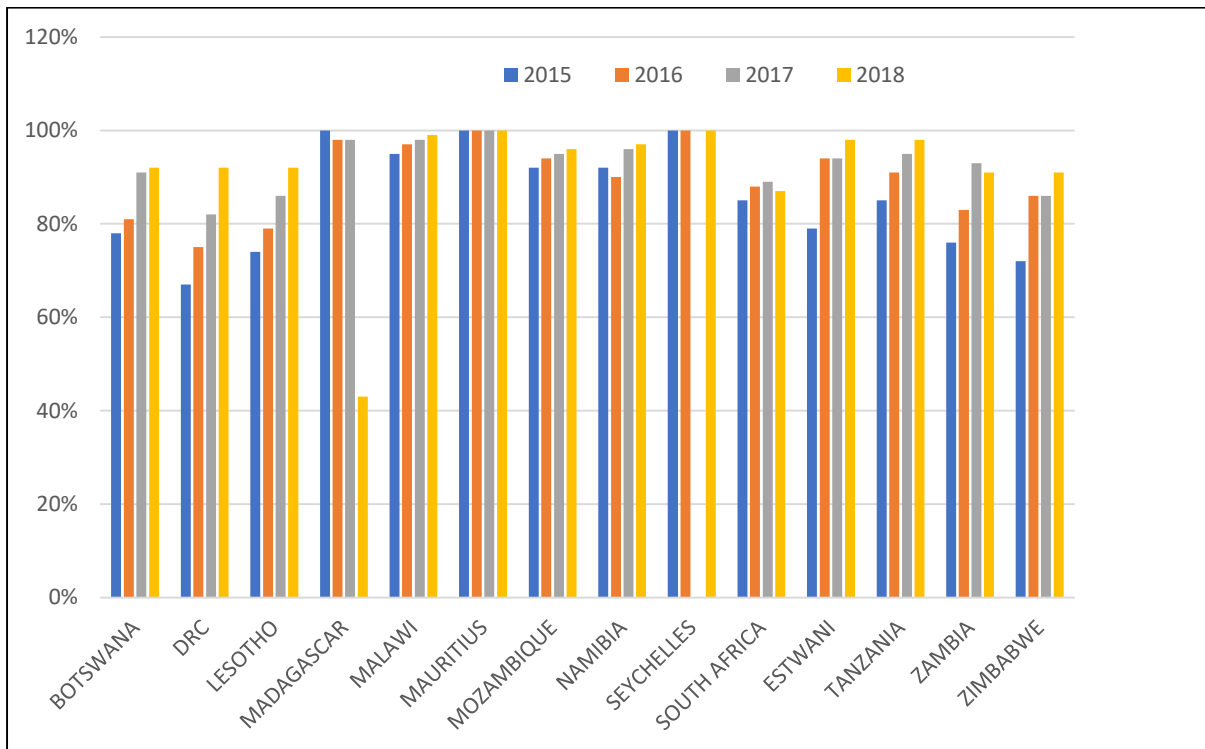
1.4.4   TB Mortality

TB is the leading cause of death among people with positive HIV status. In 2018, the majority of Member States reduced the TB mortality in both HIV negative and HIV positive people. The 2020 milestone of the End TB strategy expects a 15% reduction in the number of TB deaths compared with 2015. Figure 9 shows percentage drop in mortality between 2015 Baseline and 2018 for both TB patients that are HIV positive and negative. Almost all Member States achieved the 15% reduction in the number of TB deaths by 2018, with only one country having an increase in the number of TB deaths.

Figure 9: TB mortality among HIV negative and positive patients
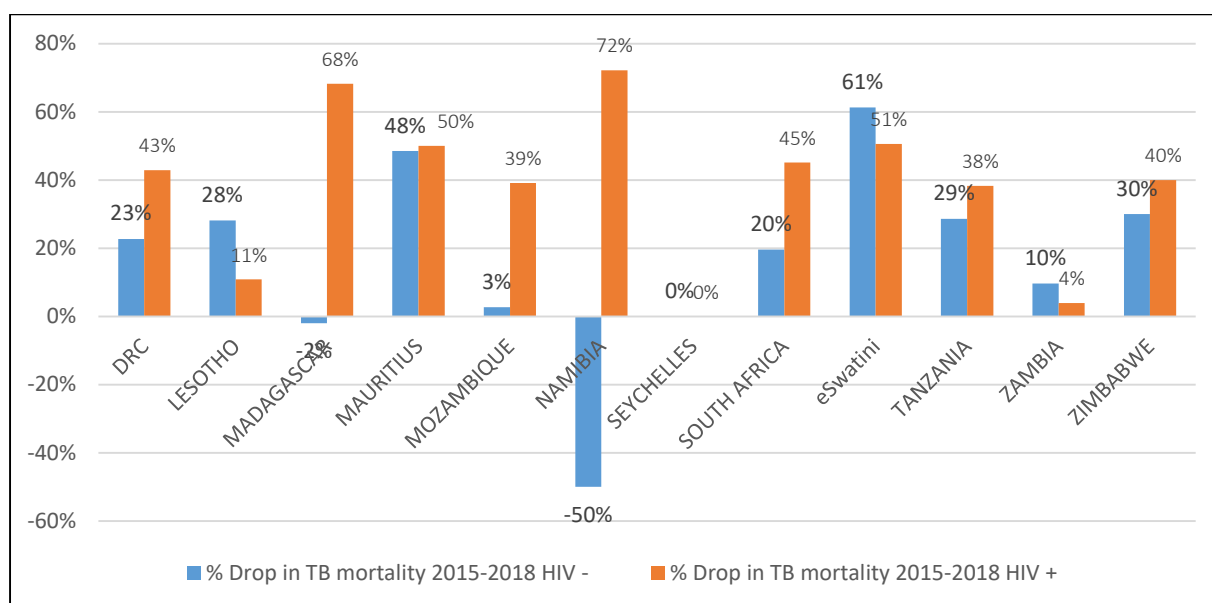
1.4.5 Drug Resistance TB

SADC region disproportionately bears the highest burden of DR-TB in the AFRO Region, accounting for 77% of confirmed RR/MDR TB and 94% of confirmed XDR-TB in AFRO. There is a wide gap between the laboratory confirmed RR/MDR TB and RR/MDR TB cases initiated on treatment and SADC accounts for 76% of this gap within the within AFRO. SADC Member States are adopting WHO recommended Short Term Regimen as well as Rapid Molecular diagnostics and DST to improve case finding and early treatment of DR-TB.

Table 5: AFRO Region DR-TB cases, 2017 and 2018

	Confirmed RR/MDR		Confirmed MDR		All confirmed XDR		Confirmed RR/MDR treated (%)		Confirmed XDR Treatment (%)	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
AFRO	26845		1214	No data	867		69.9	No data	65.5	No Data
SADC	20661	18331	8740	-	819	710	68.7	-	65.3	99%
SADC as % of AFRO	77.0		77.9		94.5		75.7		94.2	

Source: AFRO TB Presentation

The general trend from 2015 to 2018 shows that MDR cases reported annually in SADC are declining though still high. The decline was from 23,711 in 2015 to 18,331 in 2018. 13% (2 out of 15) Member States reported over 1000 MDR TB cases while 20% (3 out of 15) of the Member States reported between 500 and 900 cases in 2018. MDR-TB cases per country is shown in the table below.

Table 6: Laboratory confirmed MDR/RR TB

Country	Year			
	2015	2016	2017	2018
Angola	227	175	529	649

Botswana	73	107	87	66
Comoros	No data	No data	No data	No data
DRC	499	2530	709	765
Eswatini	358	181	207	182
Lesotho	148	332	238	351
Madagascar	41	40	30	22
Malawi	93	66	85	126
Mauritius	2	1	2	2
Mozambique	646	911	861	1158
Namibia	337	387	417	330
Seychelles	0	0	0	0
South Africa	19613	19073	15986	13,199
UR Tanzania	178	196	200	448
Zambia	196	180	270	627
Zimbabwe	1300	572	474	406
TOTAL SADC	**23711**	**24751**	**20095**	**18331**

1.4.6 Childhood TB in the SADC Region

According to WHO, childhood TB for children under 15 years old among new TB cases make up 5% to 15% of all the cases. Most (73%) of the SADC Member States are within the expected range for childhood TB notification while 13% (two) Member States are below the expected threshold (minimum of 5% of all the TB cases notified). There is a need to improve the childhood TB diagnose in the region and better monitor the TB cases in children.

Figure 10: Proportion of children <15 years with TB
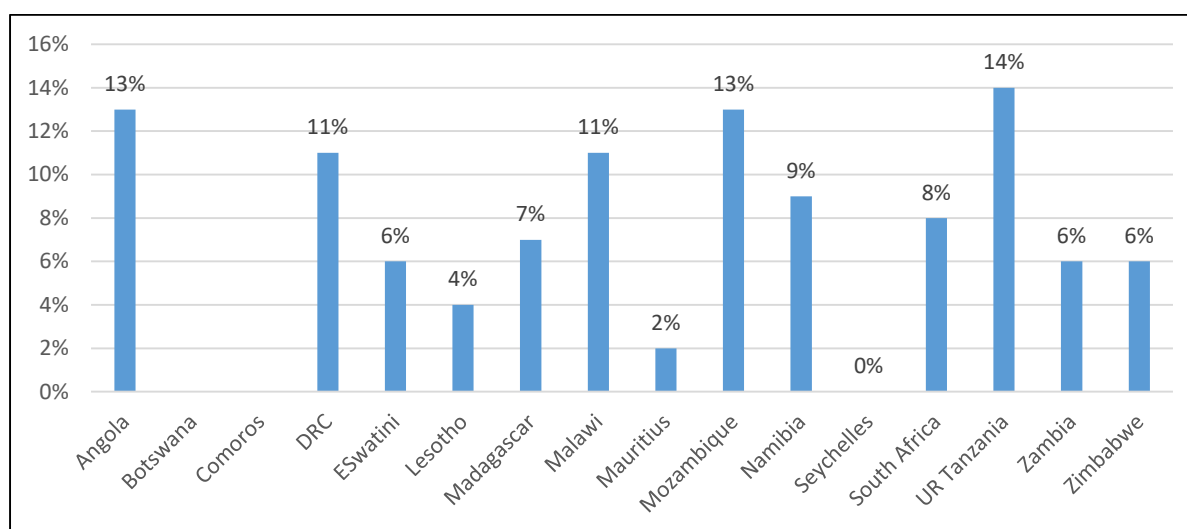
4. TB Financing

Financing is a key aspect of sustainability for the results achieved by national TB programmes. The funding landscape for TB programmes among SADC Member States shows more reliance on donor funding while some countries have significant funding gaps. Domestic funding for TB programmes varies from a low of 1% to a high of 100% among Member States. The mean for domestic funding as a proportion of total funding for TB programmes is 25%. The funding gap for the TB programmes also ranges from a low of 0% to a high of 72% with a mean of 22%. 53% of the Member States provide less than 30% domestic funding for the TB programme while only 20% (3 out of 15) Member States provide over 85% of the funding from domestic resources. 33% (5 out of 15) Member States have over 40% of

funding gap for their TB programme. There is a need to close the funding gap to improve the sustainability of gains made in the reduction of the TB burden.

Figure 11: TB Funding Landscape in SADC
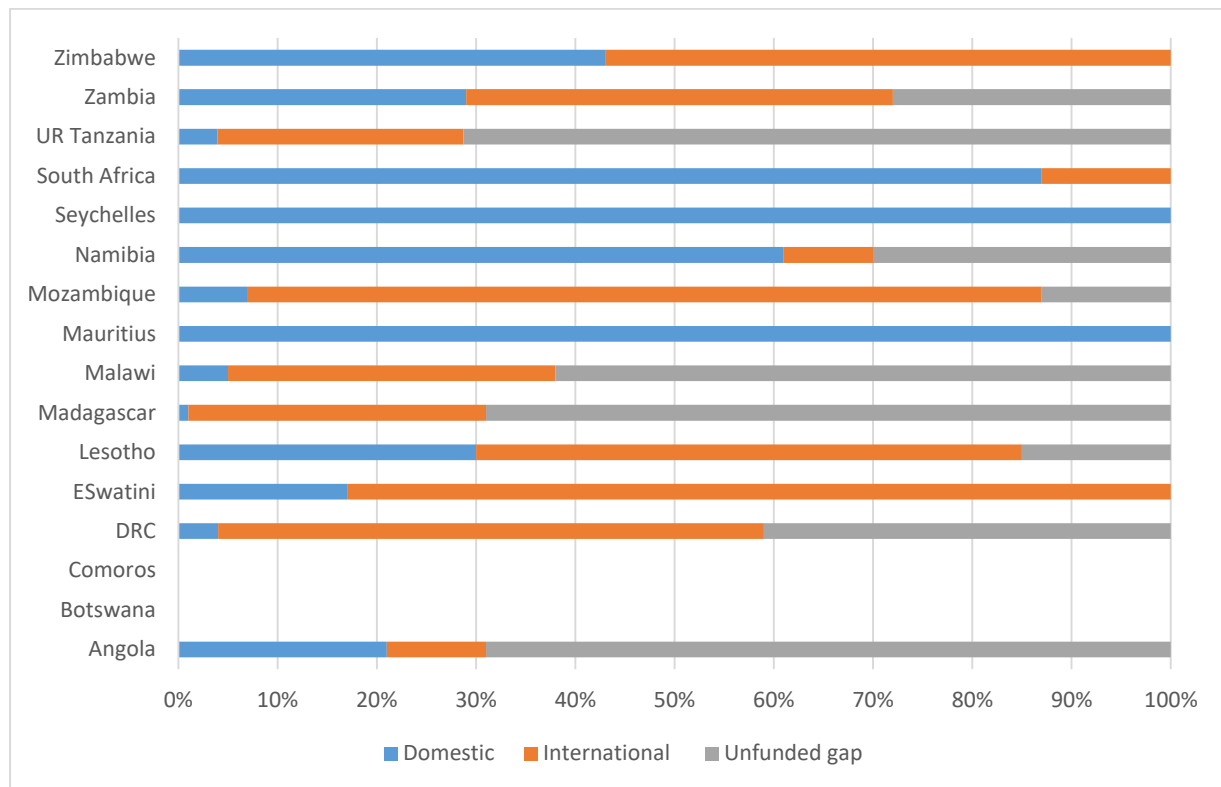
5. Recommendations

Despite the improvement made by SADC Member States in the effort to end TB Epidemic, there are some areas that should be focused on in the next couple of years in order to reach the target set for the first milestone of End TB Strategy.

The recommended areas of improvement are as follows:

(viii) Accelerate the establishment of a monitoring and evaluation systems and surveillance for TB at regional level. Member States should improve the M&E systems to attain 100% reporting rate on the top 10 TB indicators. This will also enable Member States to prepare for the first evaluation of progress towards international commitments which will be undertaken in 3 years.

(ix) Increase domestic funding for national TB programmes: Some SADC Member States have attained middle income status and may not continue to qualify for funding from external sources. External funding is also generally declining and most of national programmes have a funding gap. Member States should increase domestic funding to scale up and sustain results achieved by national TB programmes.

(x) Strengthen interventions for finding missing TB cases as there are still significant gap between the Notified TB cases and estimated incidence rate. Each Member States should develop locally appropriate strategies for finding TB missing cases including involving all care providers.

(xi) Strengthen laboratory capacity and networking to expand DST coverage in the region in order to improve the quality of TB treatment and early identification of DR-TB

(xii) Prioritise early detection and quality treatment of DR-TB given that the SADC Region is contributes 76% of the AFRO treatment gap for laboratory confirmed RR/MDR-TB

(xiii) The SADC Member States should explore and address the causes of existing laboratory confirmed RR/MDR Treatment gaps: The SADC Region is responsible for 76% of the AFRO treatment gap for laboratory confirmed RR/MDR-TB

(xiv) Low TB burden Member States should develop country specific TB elimination roadmaps which will facilitate implementation of relevant interventions

6. Annexure

Annex 1: SADC End TB Scorecard, 2019

Member States	Indicator #1	Indicator # 1 (b)	Indicator 2	Indicator # 2 (b)	Indicator 2	Indicator # 2 (b)	Indicator # 3	Indicator # 4	Indicator # 5	Indicator # 6	Indicator # 7	Indicator # 8	Indicator # 9
Country	Total TB incidence	Progress since 2015	Estimates of TB mortality rate (HIV -)	Progress since 2015	Estimates of TB mortality rate (HIV +)	Progress since 2015	TB treatment success rate	TB treatment coverage	% of TB cases that are bacteriogically confirmed among notified pulmonary TB cases (x)	DST coverage for previously treated TB patients	Documented HIV status among TB patients	HIV-positive TB patients on anti-retroviral therapy (ART)	Percentage of TB-affected households that experience catastrophic (XX) costs due to TB
Angola	218	0						66	61			45		
Botswana	275	-110	25	-3	53	6	76				95	92	
DRC	321	-3	51	-15	12	-9	90	63				92	
Eswatini	329	-236	12	-19	45	-46	86	80		100	60	98	
Lesotho	611	-241	46	-18	206	-25	76	55		94	99	92	
Madagascar	238	2	50	1	2	-4,3	84	50			64	43	
Malawi	154	-39					86	67		20	99	99	
Mauritius	11	1	0,49	0,16	0,24	0,08	90	100		100	22	100	
Mozambique	551	0	72	-2	73	-47	90	57			98	96	
Namibia	421	-68	16	-16	62	26	84	62			99	97	
Seychelles	18	8	0,14	0,04	0	0	56	87		100	100	100	
South Africa	520	-314	37	-9	60	-73	77	76			90	87	
Tanzania	253	-53	40	-16	29	-18	90	53		32		98	
Zambia	346	-45	28	-3	74	-3	90	58			95	91	
Zimbabwe	210	-32	7,7	-3,3	24	-16	83	83		47	94	91	80

X - No data for this indicator

XX - Only one country reported on this indicator. Other countries have no data.

Notes on the SADC End TB Scorecard

This scorecard is aligned to the African Continental End TB Accountability Framework Scorecard to ensure that SADC Member States rate themselves the same indicators as those monitored at continental and global levels. It is a tool for measuring indicators that are known or expected to be available for all Member States at the end of every year or collected periodically. This scorecard will be updated annually.

Cut-off points for performance rating African Continental End TB Accountability Framework Scorecard to allow comparability with other regions and also for reporting to continental level.

Cut-off points for performance ratings

Indicator	Green	Yellow	Red
TB treatment coverage: *Number of new and relapse cases that were notified and treated, divided by the estimated number of incident TB cases in the same year, expressed as a percentage.* **[Referent Global target by 2025 = ≥90%]**	≥ 90%	80-89%	<80%
TB treatment success rate: *Percentage of notified TB patients who were successfully treated. The global target is for drug-susceptible and drug-resistant TB combined, although outcomes should also be reported separately.* **[Referent Global target by 2025 = ≥90%]**	≥ 85%	80-84%	<80%
Total TB incidence rate: Best estimate per 100,000 population according to Global TB Report *[Annual Global estimated incidence as referent target* **(= 140 for 2016)]**	140 and </100,000	141-149/100,000	≥ 150/100,000
Progress since last report: *[Percentage change from previous year's rate]*	Rate has declined since the last report	No change since the last report	Rate increased since the last report
Estimates of TB Mortality: Estimated TB mortality rate (HIV positive and HIV negative people) per 100,000 population **[Global average rate for the 2016 = 22]**	22 and </100,000	23-29/100,000	≥ 30/100,000
Progress since last report: *[Percentage change from previous year's rate]*	Rate has declined since the last report	No change since the last report	Rate increased since the last report
Percentage of TB cases that are bacteriologically confirmed among notified pulmonary TB cases: *Number of notified pulmonary TB cases that were bacteriologically confirmed* **[Annual Global proportion of pulmonary cases that were bacteriologically confirmed in 2016 = 57%]**	≥ 57%	50-56%	<50%
DST coverage for previously treated TB patients: *Number of previously treated TB patients with DST results divided by the total number of notified previously treated cases in the same year, expressed as a percentage. DST coverage includes results from molecular (e.g. Xpert MTB/RIF) as well as conventional phenotypic DST results* **[Referent point: Global Referent target by 2025 = [Global Referent target by 2025 = 100%]**	≥ 91%	75-90%	<75%
Documentation of HIV status among TB patients: Number of new and relapse TB patients with documented HIV status divided by the number of new and relapse TB patients notified in the same year, expressed as a percentage.	≥ 91%	75-90%	<75%
HIV-positive TB patients on anti-retroviral therapy (ART): Number of notified HIV-positive TB patients started on ART expressed as a proportion of all notified HIV-positive TB patients. *[Global Referent target = 100%]*	≥ 91%	75-90%	<75%
Percentage of TB-affected households that experience catastrophic costs due to TB *Number of people treated for TB (and their households) who incur catastrophic costs (direct and indirect combined), divided by the total number of people treated for TB.*	0%	1 – 20%	<21%

Annex 2: Country Reports on achievements, challenges and lessons learnt

Botswana

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2017	
1.1. Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	• Core TB/HIV indicators have progressively increased towards global targets: 93% HIV testing of confirmed TB patients; 83% ART coverage among co-infected patients; and 100% CPT coverage among co-infected patients • TB treatment is free for all and Botswana achieved the core MDG treatment success rate target for new cases by end of 2015 • There is robust laboratory diagnostic capability. Xpert MTB/Rif has been designated the first line of diagnosis for all presumptive cases
2. Progress on recommendations for the Member States post 2015 global TB strategy *(extracted from the 2014 report)*	
2.1. **Resource mobilisation, both financial and human, including from domestic sources:** Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	Botswana has passed the Abuja declaration through allocating over 15% of the national budget to health services. The government is committed to providing TB medicines, laboratory consumables, staff salaries and all required medical equipment for delivery of TB services.
2.2. **Improve treatment outcomes for both sensitive and resistant TB:** Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	• Commitments towards treatment outcomes improvement include provision of DOT through community TB care intervention. • Increasing culture capacity for the country will also improve outcomes evaluation.
2.3. **Increase capacity to diagnose and treat (Drug-Resistant) TB:** Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	Botswana has managed to procure a second Culture facility through Global Fund Support for the Northern side of the country. Preparations are underway to make it operational, including capacity building.
2.4. **Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations:** Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	TB recording and reporting tools have been revised to include Key Populations (High Risk Group) and these includes Miners, Ex-miners and their communities, prisoners, PLHIV and also extended to include DM through bi-directional screening.
3. CHALLENGES AND LESSONS LEARNT	
3.1. Three key challenges	

QUESTION	DESCRIPTION OF PROGRESS
	• Still high TB Burden despite steady and continuing decline in notification rates of all forms of TB. Botswana has higher rates than regional and global averages • Notification / incidence gap suggesting missed cases. • Poor facility compliance with current national diagnostic policy for new cases • Stock out of critical laboratory commodities, especially Xpert cartridges; replacement modules; and reagents for microscopy and DST.
3.2. Three key lesson learnt	• In order to achieve TB targets, there is need for high level commitment. • Adequate Supply chain management, eliminating stock outs of drugs and consumables is at the heart of achieving high treatment coverage.

Democratic Republic of Congo

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2017	
1.1 Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	Notification is increasing by 15% per year; Proportion of TB cases which know her HIV status is increasing from 50% to 64% NOW 60%; Proportion of TB and HIV+ under ART has increased from 67% to 92% (2018); Treatment success among MDR/RR-TB cases has increased from 63% to 90% and 86% (2018)
2. Progress on recommendations for the Member States post 2015 global TB strategy *(extracted from the 2014 report)*	
2.1 **Resource mobilisation, both financial and human, including from domestic sources:** Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	No progress done. 55% of the available funding still comes from donors. 4% domestic et 41% of financial gap
2.2 **Improve treatment outcomes for both sensitive and resistant TB:** Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	Treatment success for susceptible TB reaches 90% versus 86% for resistant-TB.
2.3 **Increase capacity to diagnose and treat (Drug-Resistant) TB:** Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	NRL is the state of art provided with a BSL 3 facility.4 culture facilities are performing more than 12 000 solid cultures within the country. The NRL BSL 3 facility is performing liquid culture and solid and liquid DST for F/SLD. 2 LPA facilities are implemented within the country. The proportion of laboratory confirmed MDR/RR-TB cases has improved from 50% to 85%. With a network of 93 GeneXpert with 230 modules. Also the proportion of MDR/RR-TB cases tested for 2nd line drugs is increasing from 10% to 40%.

QUESTION	DESCRIPTION OF PROGRESS
2.4 Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations: Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	DRC reported now TB cases by sex and age. Data on TB in high-risk groups as minors, prisoners and refugees are now becoming available.
3. CHALLENGES AND LESSONS LEARNT	
1.5 Three key challenges	- Notification rate remains low (approx. 150 000 TB cases missing); - High burden of MDR-TB and XDR-TB; - Unfunded gap of TB NSP still high.
1.6 **Three** key lesson learnt	- Major progress has been done in term of treatment success for both sensitive and DR-resistant TB; - Detection gap for both TB and DR-TB remains very is high; - All TB cases did not know their HIV status; - All co infected TB-HIV patients did not get access to ART; - All PLWHIV are not screened for TB and for those whore free of TB , they don't have access to ITP; - Achievements of END TB strategy targets are feasible. To reach the targets , DRC needs: - To improve notification rate by increasing TB quality service coverage, optimal use of Xpert MTB/RIFas first line tool for diagnostic in high spot provinces and pursue the scaling-up of PMDT.

Lesotho

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2018	
1.1 Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	Lesotho rolled out GeneXpert to all TB diagnostic centres and have since increased the proportion of bacteriologically confirmed new pulmonary cases from 35% (2014) to 57% (2017). Another achievement to mention that ART provision among co-infected TB patients continued to significantly increase (from 72% in 2013 to 92% in 2017). Increase Treatment Coverage from 48% to 55% in 2018 Decline TB incidence with 7% from 724 to 665 and now at 611 in 2018

QUESTION	DESCRIPTION OF PROGRESS
	Conducted Out of Pocket Expenditure (OOPE) and Cost Benefit Analysis and Health Impact of TB (CBAHIT) survey to inform the impact indicator on catastrophic cost results are yet to be finalised, but the preliminary ones are out
	Conducted nationwide TB prevalence survey in 2019
	Achieved the UN High Level targets on finding the missing TB cases for adult TB and MDR-TB
2. Progress on recommendations for the Member States post 2015 global TB strategy *(extracted from the 2014 report)*	
2.1 **Resource mobilisation, both financial and human, including from domestic sources:** Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	Lesotho continues to lobby for increased political commitment which will in turn result in government actively investing in TB through domestic funds. To this effect, the country celebrated the last TB day with parliamentarians and cabinet minister (including deputy prime minister). The celebration included high level delegation from SADC, ECSA and the US ambassador to Lesotho. The outcome was formation of a parliamentary sub-committee on TB. This will also result in declaration of TB as a notifiable.
	Lesotho, through the support of partners like EGPAF, projects like SATBHSS and the GFTAM budget increased human resource base for TB programme (6 M & E personnel as opposed to 2 in 2013, 1 community TB officer and 1 childhood TB officer).
	The country also engaged several data clerks for TB and HIV to address issues of data quality. Implementing partners also provides technical assistance in issues of strategic information and evaluation.
	A unitaid project is facilitating improved childhood TB programme through community involvement, scale up of sputum induction facilities and
2.2 **Improve treatment outcomes for both sensitive and resistant TB:** Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	Treatment success rate for drug susceptible remains low whilst we observed increase from 64% to 77% in drug resistant TB.
	To address issues of low treatment success rates, the country is engaging in intensified case finding at both community and facility level. Projects like SATBHSS and TIMS are instrumental and providing screening and other TB services on miners, ex-miners and other key affected populations to enhance early detection and increase chances of successful treatment outcomes
	To address good treatment outcomes for DR-TB patients, Lesotho accesses new second line anti TB drugs Bedaquiline and delamanid DR TB and pre-XDR-TB patients.
	Transitioned from injectable involving regimen for management of MDR-TB to all oral regimen as per the 2018 WHO guidelines on management of DR-TB.
	Secured a free grant of child friendly second line anti TB medicines including the new and the repurposed drugs

QUESTION	DESCRIPTION OF PROGRESS
	The ongoing multi country clinical trial on shorter regimen in which Lesotho is participating with a good aDSM is place to ensure early detection of unfavourable responses to treatment.
2.3 Increase capacity to diagnose and treat (Drug-Resistant) TB: Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	• NTRL has just been renovated and is now used for the TB prevalence survey testing including first line DST • Genexpert is an entry point to TB diagnosis for all TB patients • Uganda Supra-National laboratory and the regional SATBHSS project support Lesotho NTRL in Quality Management Systems (QMS) and steps toward accreditation. Peer reviews are done across four participating counties to strengthening Laboratory Management towards Accreditation (SLMTA) level. TO date the SCORE has moved from 1 star to 4 star rating
2.4 Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations: Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	• 2018 and 2019 saw another change in the Recording and Reporting tools to accommodate issues like TB in the mines and other key affected populations. The new tools have provisions for age and sex, key populations (miners, ex-miners, house-hold members of current miners, and House-Hold members of ex-miners, factory workers and health workers). • Lesotho also rolled out use of DHIS2 for integrated reporting at facility level. This is an important step in ensuring ownership and data use at source. • The country is also piloting implementation of an electronic open MRS-based TB and HIV register. This is a very important step in improving data quality and availing patient level data. Additional sites are being considered in this pilot
3. CHALLENGES AND LESSONS LEARNT	
3.1 Three key challenges	• Primary loss to follow up laboratory confirmed cases • High death rates, could be attributed to delays in diagnosis of TB. • Poor PSM leading to frequent stock outs of laboratory reagents and TB drugs • Absence of a formalised NTP structure remains a challenge that hinders full scale resource mobilization and improved domestic funding. The programme heavily relies on partner support and donor funding e.g. HR support and PMDT.

3.2 Three key lesson learnt	• Use and tracking of process indicators at facility level can
	     o Improve quality of data
	     o Enforce ownership and data use
	     o Improve clinical outcomes
	 • The country needs to start planning to absorb some of the costs to PMDT e.g. Human Resources, DST, Second Line Anti TB Drugs for both children and adults and Pharmaco-vigilance

Madagascar

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2017	
1.1 Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	• Le système de contrôle de la TBMR est amélioré. Un point focal TBMR est désigné pour gérer le programme concernant le MDR. La notification de la MDR/RR a évolué de 01 en à 36 cas de 2012 à 2015. L'extension de la mise en place de l'appareil GeneXpert a contribué sur l'obtention de ces résultats. Le pays dirige un Centre National de Référence en Mycobactéries, en collaboration avec l'Institut Pasteur de Madagascar. • Pour la prise en charge des cas notifiés : de 2013 à 2018, les Centres de Prise en charge de la TBMR (CRPC) ont augmenté de 3 à 5. Aussi, pour le référencement des échantillons pour le DST ,37 sites col laboratoires ont été accrédités, élargis jusqu'à 101 en 2018. Des soutiens aux patients ont été dotés aux patients TBMR hospitalisés. • Initialement (2012), Madagascar a adopté le régime de traitement de 18 mois. En 2016, après une évaluation menée par le GLC, le régime court de 9 mois est proposé et est adopté au mois de Mars 2018. • Le pourcentage des Patients TB ayant fait le test VIH a augmenté, de 20% à 47% de 2013 à 2017. Le test de VIH est proposé systématiquement à tous patients TB. Pour la disponibilité des tests, le PNT et la Direction de Lutte contre les ISTVIH collaborent jusqu'à ce qu'ils soient disponibles au niveau des CDT, avec un agent de santé formé en counseling-dépistage. Actuellement, 149/ 228 CDT offrent le dépistage VIH. Aussi, un plan conjoint TBVIH a été élaboré en 2017 afin de renforcer la coordination entre les deux programmes.
2. Progress on recommendations for the Member States post 2015 global TB strategy *(extracted from the 2014 report)*	
2.1 Resource mobilisation, both financial and human, including from domestic sources: Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	• Le financement de l'Etat attribué à la Santé n'a pas encore atteint les 15%. Toutefois, la Couverture sanitaire Universelle (CSU) est actuellement en cours d'installation à Madagascar. La prise en charge de la tuberculose figurera parmi les offres de santé au niveau de toutes les formations sanitaires publiques. • La contribution de l'état depuis 2013 n'a pas dépassé de 1%. La mobilisation des ressources en matière de lute contre la Tuberculose est insuffisante. L'Etat s'est engagé de prendre en charge la salaire des personnels dans la lutte antituberculeuse ainsi que certaines infrastructures. • Une partie des réactifs utilises par les laboratoires de dépistage et les antituberculeux sous formes séparées pour le traitement sont achetés par l'Etat.
2.2 Improve treatment outcomes for both sensitive and resistant TB: Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all	Madagascar a un taux de succès thérapeutique environnant les 85%. L'estimation du programme est d'atteindre 90% d'ici 2020. Les activités ci-après sont mise en œuvre afin d'assurer l'adhésion au traitement des patients :

QUESTION	DESCRIPTION OF PROGRESS
Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	• Utilisant la communauté les agents communautaires sur le suivi des malades ; 1890 Agents communautaires assurent le suivi des malades, le transport des lames pour les contrôles, et l'approvisionnement des médicaments des malades des centres les plus éloignés voire enclavés. • Dotant certains malades d'un frais de déplacement pour les contrôles. • Assurant la disponibilité permanente des médicaments antituberculeux au niveau des Centres de Diagnostic et de traitement. • Etendant le réseau de Diagnostic et de traitement de 8 centres par an • Renforcement du partenariat. Pour les TB MDR, le Programme assure : • le frais de déplacement du patient, depuis son domicile jusqu'au CRPC. • tous les frais d'hospitalisation relatifs à la prise en des patients TBMR durant son séjour hospitalier. • le frais de déplacement des malades traités en ambulatoire pour qu'il n'y ait interruption du traitement. • la disponibilité permanente des médicaments antituberculeux de deuxième ligne au niveau des Hôpitaux classés Centres de Prise en charges de la TB et les CDT de collaboration.
2.3 Increase capacity to diagnose and treat (Drug-Resistant) TB: Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity	Pour Madagascar le test de GeneXpert est utilisé pour le diagnostic de la résistance aux médicaments. En 2018, 08 centres à GeneXpert assurent le dépistage de la MDR pour les Cibles. L'achat de Quatre autres appareils est en cours et sera disponible au cours de la même année pour renforcer la surveillance de la TBMR au niveau de 4 nouveau grands centres. Actuellement 05 centres assurent la prise en charges des cas notifiés de MDR. Le programme projete de mettre en place d'un centre de prise en charge de la TBMR chaque année à partir de 2018 afin d'atteindre 8 centres en 2020. Les centres de Diagnostic et de Traitement situés au niveau des services pédiatriques sont sollicités d'utiliser le test GeneXpert pour le Diagnostic des enfants. Madagascar va adopter la recommandation de l'OMS concernant l'arrêt du régime de retraitement de 8 mois à partir de 2019. le Pays a révisé l'algorithme de prise en charge de la TB, stipulant que tous les malades en rechute, échec de traitement ou reprise de traitement doit faire le test GeneXpert. Un plan d'extension de site à GeneXpert jusqu'à ce qu'en 2020 a été élaboré dans le but que les 22 laboratoires de référence régionaux disposeront d'appareil GX. Pour la confirmation diagnostic, le Centre National de Référence en Mycobactérie, situé à l'Institut Pasteur de Madagascar, effectue la culture, pour unifier le mode de dépistage, afin d'amoindrir les

QUESTION	DESCRIPTION OF PROGRESS
	erreurs. L'extension de centre à culture pour la TBMR requière un plateau technique élevé pour la mise en place d'un laboratoire P3. Jusqu'ici (Septembre 2018), aucun cas de XDR n'est pas notifié. Le transport des échantillons suspect de TBMR du CDT vers le centre à GX est assuré par un prestataire national (colis express) engagé par le Programme. Pour les centres non desservis par le réseau de ce prestataire, l'envoi se fera par voie aérienne ou par voie postale rapide ou par le taxi brousse.
2.4 **Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations:** Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	En 2017, Madagascar a renouvelé les outils de gestion des données: outils de collectes depuis les Centres de Diagnostic et de Traitement jusqu'au niveau National (BDD). Nous avons tenu compte de la désagrégation par âge, par genre de tous les cas de TB notifiés (TPB+, TPB-, TEP) Les données désagrégées seront disponibles en 2018 pour le Dépistage. Actuellement, le pays prévoit encore d'améliorer le rapportage, en mode linéaire. Afin de désagréer et le dépistage et la cohorte. Le système National d'Information Sanitaire à Madagascar envisage d'utiliser le DHIS2 et toutes les données de chaque Programme y seront gérées.
3. **CHALLENGES AND LESSONS LEARNT**	
1.2 Three key challenges	• Conquérir d'autres partenaires pour le financement de lutte contre la TB • Augmenter l'engagement de l'Etat dans la lutte contre la TB • Mener une enquête de prévalence nationale de la tuberculose
1.3 Three key lesson learnt	• Le changement fréquent de leader au sein du NTP a un impact sur la bonne marche du programme • Le faible engagement de l'Etat sur le financement a une répercussion sur la réalisation du PSN • La formation du personnel du NTP (CDT, CRPC, CRTL, NTP) apporrte toujours une valeur ajoutée à la bonne gestion du Programme

Malawi

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. **Key country achievements since 2013 to 2017**	
1.1 Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	Malawi has made tremendous efforts in reducing new TB cases and TB deaths. New TB cases have reduced from 261/100,000 to 131/100,000 representing a 50% reduction in TB incidence rates. Mortality has decreased from 31/100,000 to 16/100,000 among all TB cases. Representing a 48% declined in TB mortality. The decline is quite remarkable in people living with HIV (PLHIV) (a decline of 52%)
2. **Progress on recommendations for the Member States post 2015 global TB strategy (extracted from the 2014 report)**	

QUESTION	DESCRIPTION OF PROGRESS
2.1 Resource mobilisation, both financial and human, including from domestic sources: Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	Malawi has not made a lot of progress in reducing donor dependence on health financing, including TB financing. There has been an increase in the total budget allocated to Health, but in percentage terms, it remains at 9% of the total Government budget. The main reason for failure to reach the 15% is that all budget requirements have increased, rendering health budget allocation static despite an increase in allocation. The Government of Malawi has pledged to make deliberate efforts to increase the health budget using budget resources and is in serious consideration to introduce some tax regimes to fund the health services
2.2 Improve treatment outcomes for both sensitive and resistant TB: Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	The treatment success rate for new and relapse cases has surpassed 85%. It is lower in drug resistant TB cases which has improved from 53% to 59% in the past three years. The biggest contributor is a high death rate which requires to be improved.
2.3 Increase capacity to diagnose and treat (Drug-Resistant) TB: Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	Malawi has increased the number of culture facilities in the country by opening two regional culture laboratories to do phenotypic DST. It is expected that the number of TB cases undergoing culture and drug susceptibility testing will increase in a phased manner to 50% by 2020. In addition, the number of GeneXpert platforms to do genotypic DST for Rifampicin has increased over the years to more 81 facilities placed in 69 health facilities. Malawi has also constructed a Line Probe Assay (LPA) laboratory to perform genotypic testing for second line TB drugs
2.4 Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations: Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	This was achieved in Malawi. TB treatment registers were populated with high risk groups so that healthcare workers are able to categorise all patient according to their risk/vulnerable groups, there is also screening registers in which all high risk. Malawi also revised and rolled-out recording and reporting tools in accordance with 2013 revised WHO case definitions and includes all relevant parameters
3. CHALLENGES AND LESSONS LEARNT	
3.1 Three key challenges	• Financial resources are very limited so much so that 62% of the estimated NSP budget remains unfunded. This limits the number of activities and the quantity to be conducted and therefore limits the achievement of some of the targets. • Limited Capacity of health care workers: Some healthcare workers fail to record and report all important parameters due to limited knowledge and skills and also due to work overload as most of them are general healthcare workers who have a number of disease programmes to implement. • Access to healthcare services by the rural and vulnerable groups is limited due to a number of barriers including long distances to reach health facilities, socio-economic barriers and geographical barriers such mountainous areas and wide rivers without bridges.
3.2 Three key lesson learnt	• Collaboration with partners, private hospitals and other stakeholders show that they are improving impact for TB control: For example, collaboration between TB and HIV, collaboration

QUESTION	DESCRIPTION OF PROGRESS
	with partners as in Non-governmental organisations, private health practitioners, media fraternity, etc • Active TB case finding strategies to detect and diagnose TB in the communities significantly contributing to finding the missing TB cases. • Mobile van interventions have improved access to TB services • Strengthening referral systems and sample transportation improves TB diagnostic efforts as non-microscopic and non-Gene Xpert facilities send samples to diagnostic sites and get feedback on results in a timely manner

Mauritius

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2017	
1.1 Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	• 100% patients tested with Genexpert • Introduction of 2nd Line RRTB drug sensitivity facility.
2. Progress on recommendations for the Member States post 2015 global TB strategy (extracted from the 2014 report)	
2.1 **Resource mobilisation, both financial and human, including from domestic sources:** Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	100% Government driven
2.2 **Improve treatment outcomes for both sensitive and resistant TB:** Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	Target of 85% already achieved
2.3 **Increase capacity to diagnose and treat (Drug-Resistant) TB:** Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	GeneXpert is fully operation to detect DR TB and 2nd line drug sensitivity is being done for all DR TB cases. All second line drugs to treat DR TB are available free of cost in Mauritius. All patients are closely monitored by a multidisciplinary team as regards to side effects, monitoring outcomes, Population less than 5 million and we already have one fully equipped lab to conduct drug susceptibility testing
2.4 **Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations:** Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on	Practice already in place by the statistic Department of MOH

QUESTION	DESCRIPTION OF PROGRESS
TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	
3. CHALLENGES AND LESSONS LEARNT	
3.1 Three key challenges	• Managing defaulters among (HIV, Alcoholics and IVDU'S) • Though we don't many cases of MDR TB. We need to remain vigilant on this front to contain emergence of MDR TB in Mauritius and eventually XDR TB • To be vigilant towards migrant workers coming from high TB burden countries
3.2 Three key lesson learnt	• Continue contact tracing towards elimination of TB in Mauritius • Role of Genexpert in orienting timely treatment regarding to DR TB • Mauritius TB strategic plan remains the backbone of making and maintaining Mauritius a low TB incidence country

Mozambique

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2017	
1.1 Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	• In the last five years, NTP has progressively improved total TB case notifications from 59,075 in 2014 to 93,546 in 2018 (notification rate increased from 236 in 2014 to 336 per 100,000 people) and MDR-TB notifications have increased from 482 in 2014 to 1206 in 2018; • The ART coverage, in co-infected patients, has increased from 81% in 2013 to 96% in 2018.
2. Progress on recommendations for the Member States post 2015 global TB strategy *(extracted from the 2014 report)*	
2.1 **Resource mobilisation, both financial and human, including from domestic sources:** Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	The trend of funds for the health sector has decreased from 12.7% in 2015 to 8.7% in 2018 due to the economic crises that the country is facing.
2.2 **Improve treatment outcomes for both sensitive and resistant TB:** Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant eTB.	In Mozambique the treatment success rate for sensitive TB has increased. In 2017 the country reached its target of **90%** of people successfully treated for TB. To reach this target, the country encouraged community involvement in monitoring the treatment of the TB patients at the community level. The MDR TB treatment success rate is still a challenge in Mozambique. In the last three years the country's treatment success rate in these patients has increased **from 43%** in 2016 **to 50%** in 2018. We hope that in the next few years these rates will continue to increase because the country has started using the short regimens to treat these patients and will move on to use only oral medication to all patients with DR TB.

QUESTION	DESCRIPTION OF PROGRESS
2.3 **Increase capacity to diagnose and treat (Drug-Resistant) TB:** Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	• Mozambique has now three Laboratories with capacity to do culture and DST conventional, two of them have the capacity to do LPA of first line TB drugs and one with the capacity to do the second line LPA. • In the last 3 years, Mozambique expanded it's capacity for the DR diagnose using the GeneXpert. The country has now 99 laboratories with GeneXpert machines. By the end of 2019 the country will have added 76 more GeneXpert machines. • Annually the NTP provide training to improve the clinical capacity of DR TB case detection and management to the clinicians. All districts have the capacity to diagnose and treat DR TB patients.
2.4 **Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations:** Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	In Mozambique we updated our reporting tools in 2015. Now the information is collected and reported by sex, age and in high risk groups (health works, prisoners, and miners). We are to do a second revision of the tools this year.
3. CHALLENGES AND LESSONS LEARNT	
3.1 Three key challenges	• Finding the missed cases • Addressing the DR TB (diagnose and case management) • TB screening among HIV patients
3.2 Three key lesson learnt	• Coordination is the key • Community engagement is a strong tool to improve case detection • Fast Strategy in the health facility to increase the case detection

Namibia

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2017	
1.1 Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	• TB related mortality is one of the key indicators being monitored in National Development Plan • The Disease Prevalence Survey has been completed and the results are ready for dissemination. • The new recommended regimen for DR-TB has been started for eligible patients.
2. Progress on recommendations for the Member States post 2015 global TB strategy *(extracted from the 2014 report)*	
2.1 **Resource mobilisation, both financial and human, including from domestic sources:** Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB	• Namibian government contributes 14% of its budget to health, which is close to the Abuja target • The ministry of health had the second highest budget allocation in 2018/2019 from the government budget

QUESTION	DESCRIPTION OF PROGRESS
control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	• Additional funds were sought from the global fund grant to finance the Community Based TB Care interventions and additional community health workers deployed through funding from government.
2.2 **Improve treatment outcomes for both sensitive and resistant TB:** Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	• Appointment of community health workers (field promoters) has strengthened treatment adherence and reduced lost to follow up. • Patients are linked to community care providers for treatment support and care, to reduce travelling long distances to care centres. • Most DR-TB patients are benefiting from a government funded medical disability grant as well as., and ambulatory care for DR-TB patients have been introduced in remote settings
2.3 **Increase capacity to diagnose and treat (Drug-Resistant) TB:** Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	• The National TB Reference Laboratory (NRL) has capacity for second-line DST using LPA (rapid) and MGIT • Gene Expert machine are deployed at district level for molecular test and transportation system is available to transport specimens and results to and from NRL. • Treatment and monitoring of DR-TB patients were decentralized to district hospitals.
2.4 **Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations:** Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	• Nationwide (100%) coverage of electronic and paper-based TB monitoring and evaluation systems is in place and is providing age and sex specific data. • The recording and reporting tools are revised to cater for the high risk group and vulnerable population. • There is good data completeness and accuracy on key epidemiological indicators in the electronic system. • An epidemiological annual report is routinely produced, and periodic programme reviews are regularly conducted.
3. CHALLENGES AND LESSONS LEARNT	
3.1 Three key challenges	• The interruption in the service delivery from the laboratory services that has seen in the last quarter of 2018 could have resulted in patients missing diagnosis during 2018. A reduction in the number of DR-TB patients was noted as well. • Contact investigation was not done consistently because of the reduction in community health workers in the country. • Interruption in medicine supply, for both susceptible and drug resistant TB, as well as the limited numbers of community health workers for patient support, has resulted in not achieving the target for treatment outcomes.
3.2 Three key lesson learnt	• Procurement of pharmaceuticals through the recommended Global Drug Facility can improve pharmaceutical supply chain. • Implementation of CBTBC, including home base treatment support for TB patients, can enhance positive treatment outcome and contact investigation • Involvement of private health and traditional healer can contribute to improved TB prevention and control

Seychelles

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2017	
1.1 Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	No reported cases of MDR/RR TB. No paediatric cases in the last 10 years.
2. Progress on recommendations for the Member States post 2015 global TB strategy *(extracted from the 2014 report)*	
2.1 **Resource mobilisation, both financial and human, including from domestic sources:** Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	Not reached Abuja declaration (<11% of GDP), TB management is 100% funded through Government Health Budget.
2.2 **Improve treatment outcomes for both sensitive and resistant TB:** Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	Treatment success rate is average 75%. Difficulties are related to treatment of foreigners who leave the country before treatment completion. (Due to small number of cases treatment success varies greatly per year)
2.3 **Increase capacity to diagnose and treat (Drug-Resistant) TB:** Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	There are no recorded MDR/RR TB cases to date. However, if we have suspected resistant cases, resistance testing is done through National Reference Laboratories (NRL). First line test is through GENE Xpert machine for all sputum
2.4 **Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations:** Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	Age and gender are reported. Electronic databases: Program data and weekly reporting to Disease Surveillance Unit
3. CHALLENGES AND LESSONS LEARNT	
3.1 Three key challenges	- Screening all foreign workers at point of entry into the country- we currently lack the capacity to do so. - To reduce unfavourable treatment outcomes by 7%- e.g. create a policy for treatment completion before travelling. (To conduct survey for baseline) - Management of latent TB- it is not compulsory to treat latent TB, and certain people refuse treatment.

QUESTION	DESCRIPTION OF PROGRESS
3.2 Three key lesson learnt	• Conduct catastrophic cost survey- this can be carried out at low cost and will provide evidenced-based data for required indicators. • Focus on prevention and treatment on latent TB. • Focus of screening and treatment completion in foreign workers.

South Africa

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2017	
1.1 Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	• Roll out of new drugs, especially for drug-resistant TB (Bedaquiline and Delamanid) • Continued decline in overall TB associated mortality as reported by Statistics Authority in 2017 from 41,904 (8.8%) in 2013, 39,495 (8.3%) in 2014 to 33,063 (7.2%) in 2015. Data from vital statistics (ICT10) • Completed the 1st TB survey and currently analysing data. Draft report expected by September 2019.
2. Progress on recommendations for the Member States post 2015 global TB strategy *(extracted from the 2014 report)*	
2.1 **Resource mobilisation, both financial and human, including from domestic sources:** Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	• Government funds at least 87% of TB services, 13% international funding and no funding gaps • Undertaken a checklist implementation project as well as programme reviews • Resumption of inventory study, catastrophic costs and general cleaning of country data to develop the definitive TB database 2005-2017. Addressing slow flow of data affecting TB reports.
2.2 **Improve treatment outcomes for both sensitive and resistant TB:** Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	• Although the treatment success rate was 81.7% for "All TB patients' it was 85.6% for new smear positive patients. Attributed to the implementation of the new surveillance system at facility level • Treatment success rate for MDR-TB patients of 54% is on par with that achieved globally. XDR-TB treatment success rate has increased from 27 % (2014 cohort) to 51 % (2015 cohort). XDR treatment success rate increased from 51% in 2015 to 58.1% in 2016 cohort • Capacity to treat DR TB has been expanded to sub-district kevel with more than 86% of sub-distircts having at least one MDR-TB treatment initiation site. There is nurse initiated MDR treatment. • Implementation of TB module in TIER.Net as part of the integrated TB HIV system at individual patient level as well as the link to unique identifier for patients
2.3 **Increase capacity to diagnose and treat (Drug-Resistant) TB:** Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	• South Africa has attained the minimum required for culture capacity, and is also able to assist other countries in the region. Capacity to treat drug-resistant tuberculosis has been expanded to sub-district level with at least 86 % of sub-districts having at least one MDR-TB treatment initiation site.

QUESTION	DESCRIPTION OF PROGRESS
2.4 **Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations:** Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	• Reporting (surveillance) systems are being revised (to ensure an integrated TB and HIV/AIDS system) and data can already be disaggregated by age and gender
3. CHALLENGES AND LESSONS LEARNT	
3.1 Three key challenges	• Finding missing patients (missed cases based on WHO estimates) – findings missing cases is a daunting task – varied interpretation and patient related issues. • Ensuring a robust community-based support system is still a challenge • Improving management of TB in hospitals, including correct recording and reporting • Implementation of a new integrated surveillance system for DS-TB
3.2 Three key lesson learnt	• The use of new and repurposed drugs help improve treatment outcomes for MDR and XDR-TB patients through reduction of death rate and increase of the treatment success rate. • Processes of conducting a prevalence in the diverse communities of SA

ESwatini

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2018	
1.1 Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	**TB/HIV**: *Percentage with known HIV status (New and Relapse) at 98% met the 90% target.* This can be attributed to the strengthened implementation of TB/HIV collaborative activities with a focus on providing integrated health services which is guided by the National TB/HIV Intergration policy of 2015. As such TB/HIV co-infected patients are able to access HIV care and management including ART in TB settings and vice versa where feasible. Continuous capacity building of health care workers on TB/HIV services which include, Nurse Led Art initiation which has resulted to TB Nurses being able to initiate eligible patient on ART. **Treatment success**: *DR-TB treatment success rate at 74%*. The country has introduced the new DR-TB drugs (Bedaqiuline - 2015 and delaminad- 2016). These has improved adherence since the drugs had few side effects. Decentralization of DR-TB services, introduction of rapid diagnostic test which allowed prompt diagnoses (incl universal DST) and initiation on treatment, had also played a major role. Introduction of comprehensive patient support package which include; treatment supporters, nutritional support, stipends for both treatment supporter and patients has actually improved the DR TB treatment success.
2. Progress on recommendations for the Member States post 2015 global TB strategy *(extracted from the 2014 report)*	
2.5 Resource mobilisation, both financial and human, including from domestic sources: Member States that have not yet reached the Abuja declaration	*Domestic funding is at 12%.* The government is currently financing 100% of the budget for TB medicines and paying salaries for TB nurses and primary health level and tertiary level. However, there

QUESTION	DESCRIPTION OF PROGRESS
(target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	is still a number of staff that are supported through donor funding eg DR-TB doctors and nurses. In a bid to ensure that government finally takes over the responsibility of increasing the domestic budget towards TB. The program have started to engage the Ministry of Health and other relevant stakeholders to ensure absorption of all core programme position by 2020 (end of the current grant) and also ensure funding for all other activities that are currently donor supported which include trainings of health care workers.
2.6 Improve treatment outcomes for both sensitive and resistant TB: Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	The programme has seen steady improvements and in TB Treatment Success rate which may be attributed to the continuous capacity building of nurses and doctors on TB Management, a strong adherence support program and the intergration of Regional TB/HIV Coordinators into the Regional Health Management Teams(RHMT) for continous mentoring and supportive supervision of Basic Management Units. In addition, the Semi-Annual Review Meetings continue to provide a platform for regular data review and the development of quality improvement plans (QI projects). These initiatives facilitate best practice sharing between facilities and across the different regions and stimulated improved treatment outcomes. This great improvement can be credited to the decentralization of DR-TB services, introduction of DR-TB teams, DR-TB outreach services at community, introduction of rapid diagnostic test(GeneXpert-Ultra), which allowed prompt diagnoses and initiation on treatment, introduction of adherence officers and comprehensive patient support package which include provision of treatment supporters, nutritional support and stipends for both treatment supporter and patients has actual improved the DR TB treatment success. The program has also introduced new drugs, shorter MDR-TB regimen and also optimized the existing tools to improve the management and treatment outcomes of patients with drug resistance TB.
2.7 Increase capacity to diagnose and treat (Drug-Resistant) TB: Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	Population estimated at 1,093, 238 and the country has 1 culture facility hence target met, have also decentralised DR-TB sites for ease access to DR-TB treatment.
2.8 **Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations:** Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	Data collection tools have been revised to include disaggregation by age, sex, high risk groups and vulnerable population to strengthen recording and reporting of relevant information.
3. CHALLENGES AND LESSONS LEARNT	
1.1 Three key challenges	1. Lack of funding to conduct the **catastrophic cost survey** in order to determine the out of pocket cost suffered by TB patients.

QUESTION	DESCRIPTION OF PROGRESS
	2. There is high mortality rate among both DS-TB and DR-TB patients however, the country is in a process of conducting a retrospective mortality study in order to determine the predictors of mortality among TB patients. Institutionalized TB mortality audits to assist the country in determining the probable causes of deaths among TB patients (HSS, clinical factors and patients related factors) and to come up with more specific interventions to address this challenge.
	3. Inadequate implementation of IPC measures. There is no IPC focal person to oversee the development and implementation of IPC Plans at all facilities.
1.2 Three key lesson learnt	1. Adoption of Gene Expert as the first line diagnostic technology has improved universal access to diagnosis hence improved case detection.

2. Introduction of Active Case finding at community level has played a crucial role in in finding the missing TB cases.

3. Introduction of new DR-TB drugs and scaling-up of comprehensive patient support package which include; treatment supporters, nutritional support, stipends for both treatment supporters' drugs have improved patient treatment outcomes. |

Tanzania

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2018	
1.1. Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	1. Among seven countries in the African continent which have maintained a decline in TB incidence rate of above 4% per year above the current global average (1.5%). The incidence has fallen from 327 per 100,000 population in 2014 to 253 per 100,000 in 2018.

2.   There has been a decline in TB mortality from 58/100,000 in 2014 to 40/100,000 in 2017 |
| **2.   Progress on recommendations for the Member States post 2015 global TB strategy** *(extracted from the 2018 report &2019 Country Semi-annual report)* | |
| 2.1. **Resource mobilisation, both financial and human, including from domestic sources:** Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources. | Tanzania government is consistently paying for infrastructures and salaries for most of TB staff at all levels and expected to increase funding for TB control operational interventions from a current 4% up to over 40% in the next 2 years.
Most funding for TB is international funding

The Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) is conducting advocacy campaigns to high level political leaders and recently Tanzania launched the Parliamentarian TB caucus aiming at increasing political will at all levels and increasing access to more resources including domestic funding for end TB interventions |

QUESTION	DESCRIPTION OF PROGRESS
2.2. **Improve treatment outcomes for both sensitive and resistant TB:** Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	Treatment success rates for susceptible TB is high at 90% and drug resistant TB is currently at 80% aimed to be improved it up to 90% in the next 2 years
2.3. **Increase capacity to diagnose and treat (Drug-Resistant) TB:** Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	Tanzania has increased TB culture labs from one to 6, each to serve a designated zone including 3 to 6 different regions. The country continue to expand the use of the WHO approved rapid molecular tests to currently reach 234 gene Xpert MTB/Rif machines covering 61% of the districts

Gene-Xpert technology has been made an initial TB test to all presumptive TB cases at all sites already with the machines and emphasizing to refer all samples from vulnerable groups (PLHIV, children, co-morbidities, those who inject drugs, etc) to sites with the technology.an integrated sample referral guideline has been developed to facilitate the utilisation of spoke and hub modality

5 culture laboratories
3 labs do second line TB drug |
| 2.4. **Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations:** Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information. | The recording and reporting system is already segregated into age and sex for all TB patients' groups and all information is captured electronically all around through a web based – case based DHIS-ETL. At the same time, the community and laboratory TB registers have been synchronized with the mainstream programme recording and reporting framework.

2018 – started case based system (meaning if a patient comes after one year, she/he will be a new case). This allows disaggregation of data by age and sex and TB/HIV; able to archive data from 2002 to date. |
3. CHALLENGES AND LESSONS LEARNT	
3.1. Three key challenges	• High TB financing gap, over 50% of the estimated budget not achieved every year – advocating for TB parliamentary caucus • Poor access to diagnostics – developed integrated sample referral guidelines • Poor engagement and support of community based CSOs • Inadequate multisectoral response to address TB burden including NGOs and CSOs.
3.2. Three key lesson learnt	• Identifying TB patients should be a responsibility of every health facility in charge. Should be a main agenda to their clinical meetings: a case of : Quality Improvement in TB case detection initiative implemented in all high volume health facilities (which promotes TB agenda and has improved case notification) • Community based and social mobilisation interventions are crucial to close the gap of patients who has poor access and those who are not yet aware of having the disease • Role out of the rapid new diagnostic tool and make them accessible: Tanzania has doubled the MDRTB notifications in just two quarters after the significant roll out of the GXpert machines in 2018 (currently covering 61% of the country)

Zambia

KEY ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNT

QUESTION	DESCRIPTION OF PROGRESS
1. Key country achievements since 2013 to 2017	
1.1 Please describe the two most impactful achievements towards the Country/ WHO targets that have been made in your country since 2013	• The country has managed to increase the percentage of TB/HIV co-infected patients who are initiated/started on antiretroviral therapy from about 40% in 2013 to 93% in 2017. The achievement for 2017 is above the target of linking 90% of HIV infected patient to treatment. This achievement may be attributed to the test and treat policy that the country adopted, and enhanced TB/HIV collaboration at both operational and policy levels in the country • The country has also managed to scale up the coverage of TB rapid diagnostic tools (Gene Xpert) from 93 machines in 2013 to 270 in 2017. The scale up of gene xpert coverage has enabled the country to pick more cases of Rifampicin Resistant TB; which were previously missed. Additionally, the country has also decentralised the treatment of MDR/RR TB treatment to all the provincial/General Hospitals, to reduce on the costs that patients used to incur to travel to two (2) treatment sites (UTH and Ndola Central Hospital)
2. Progress on recommendations for the Member States post 2015 global TB strategy *(extracted from the 2014 report)*	
2.1 **Resource mobilisation, both financial and** human**, including from domestic sources:** Member States that have not yet reached the Abuja declaration (target 15% of the government budget towards health) should advocate for reaching this 15%; Member States that rely heavily on donors to fund TB control (more than 50% of the available funding comes from donors), should become more innovative in accessing domestically available resources.	• The country's expenditure towards health goes towards the procurement of health products and supplies. Additionally, the country is in the process of setting up the Social Health Insurance Scheme to complement efforts from both the donor and international community.
2.2 Improve treatment outcomes for both sensitive and resistant TB: Member States that have treatment success rates below 85% of susceptible TB should increase efforts to provide patient-centred care to their TB patients; all Member States should look for treatment provision models to improve treatment outcomes for drug resistant TB.	• To improve the treatment outcomes for Drug resistant TB, the country, through the World Bank project has engaged Community MDR TB nurses to provide DOTs and follow up all MDR/RR TB patients to ensure that they are not lost to follow up. Additionally, the country has set up and trained all Clinical Expert Committees (CECs) at both provincial and national levels to manage MDR TB and has recently embarked on a national geo-mapping exercise of all MDR/RR TB patients on second line treatment to enhance follow up • The country is further in the process of conducting its second (after 2008 DRS) DRS to ascertain the true burden of MDR/RR TB. The country has also embarked on renovation of MDR TB treatment wards and the National Reference Laboratory (NRL) to contribute towards the provision of quality health care and improve infection control
2.3 Increase capacity to diagnose and treat (Drug-Resistant) TB: Member States that have less culture capacity than 1 culture facility per 5 million population, should increase their facility until the necessary levels are reached. Member States should accompany the expansion of diagnostic capacity with an increase in treatment capacity.	• Currently, the country has three (3) culture facilities (UTH, CDL and TDRC) servicing a population of about 16million. The three (3) laboratories are usually assessed from time to time for accreditation, and rated based on benchmarks set by the supra-national Laboratory

QUESTION	DESCRIPTION OF PROGRESS
2.4 Revise recording and reporting systems and include data regarding age, high-risk groups and vulnerable populations: Member States that do not yet report all TB cases by sex and age group, should include age and sex into their routine reporting systems. Member States that cannot provide data on TB in high-risk groups and vulnerable populations, should revise their recording and reporting in such a way to be able to capture the information.	• The country has been reporting all TB cases (both sensitive and resistant) by age and sex. The country is in the process of revising its data collection tools (registers, quarterly reporting forms and database) to capture information in relation to the burden of both active and latent TB in key populations (children <5, Inmates, Mine workers and mobile population). The data collection tools were revised based on changes in treatment guidelines/algorithms, demand to capture data from the private sector and following the development of Latent TB guidelines.
HALLENGES AND LESSONS LEARNT	
3.3 Three key challenges	• Under-utilisation of the current Gene Xpert machines has been a major challenge, which makes it difficult to justify procurement of more diagnostic tools such as the Xpert. • The huge cost associated with printing of data collection tools, guidelines and other policy documents • Low index of TB suspicion; as the country is missing TB cases as evidenced by the 2013/2014 TB Prevalence Survey. Most of the cases were missed within the health facility settings. This may be due to the health worker's capacity to effectively screen for TB
3.4 Three key lesson learnt	• Partner coordination/synergies has helped to inform the allocation of resources to maximise outcomes • The policy pronouncement of HIV testing as a routine test in all health facilities has improved the coverage of HIV testing among patients notified for TB • The adoption of massive TB screening in areas/provinces marked as TB hotspots has proved to be effective, as more cases of TB have been found

Annex 3: End TB Top 10 Indicators, Definition and Rationale

	Indicator	Recommended Target Level 2025	Main Rationale for Inclusion in Top 10
1	**TB treatment coverage** Number of new and relapse cases that were notified and treated, divided by the estimated number of incident TB cases in the same year, expressed as a percentage	≥ 90%	High-quality TB care is essential to prevent suffering and death from TB and to cut transmission. High coverage of appropriate treatment is a fundamental requirement for achieving the milestones and targets of the End TB Strategy.
2	**TB treatment success rate** Percentage of notified TB patients who were successfully treated. The target is for drug– susceptible and drug-resistant TB combined, although outcomes should also be reported separately.	≥ 90%	
3	**Percentage of TB-affected households that experience catastrophic costs due to TB** Number of people treated for TB (and their households) who incur catastrophic costs (direct and indirect combined), divided by the total number of people treated for TB	0%	One of the End TB Strategy's three high-level indicators; a key marker of financial risk protection (one of the two key elements of UHC) and social protection for TB affected households.
4.	**Percentage of new and relapse TB patients tested using a WHO-recommended rapid diagnostic (WRD) at the time of diagnosis** Number of new and relapse TB patients tested using a WRD at the time of diagnosis, divided by the total number of new and relapse TB patients, expressed as a percentage.	≥ 90%	Accurate diagnosis is a fundamental component of TB care. Rapid molecular diagnostic tests help to ensure early detection and prompt treatment.
5.	**Latent TB infection (LTBI) treatment coverage** Number of people living with HIV newly enrolled in HIV care and the number of children aged < 5 years who are household contacts of cases started on LBTI treatment, divided by the number eligible for treatment, expressed as a percentage (separately for each of the two groups).	≥ 90%	Treatment of LTBI is the main treatment intervention available to prevent development of active TB disease in those already infected with Mycobacterium tuberculosis.
6.	**Contact investigation coverage** Number of contacts of people with bacteriologically confirmed TB who were evaluated for TB, divided by the number eligible, expressed as a percentage.	≥ 90%	Contact tracing is a key component of TB prevention, especially in children.
7.	**Drug-susceptibility testing (DST) coverage for TB patients** Number of TB patients with DST results for at least rifampicin, divided by the total number of notified (new and retreatment)	100%	Testing for drug susceptibility for WHO-recommended drugs is essential to provide the right treatment for every person diagnosed with TB.

	cases in the same year, expressed as a percentage. DST coverage includes results from molecular (e.g. Xpert MTB/ RIF) as well as conventional phenotypic DST results.		
8.	**Treatment coverage, new TB drugs** Number of TB patients treated with regimens that include new (endorsed after 2010) TB drugs, divided by the number of notified patients eligible for treatment with new TB drugs, expressed as a percentage.	≥ 90%	An indicator that is relevant to monitoring the adoption of innovations in all countries. The definition of which patients are eligible patients for treatment with new drugs may differ among countries.
9.	**Documentation of HIV status among TB patients** Number of new and relapse TB patients with documented HIV status, divided by the number of new and relapse TB patients notified in the same year, expressed as a percentage.	100%	One of the core global indicators used to monitor collaborative TB/ HIV activities. Documentation of HIV status is essential to provide the best care for HIV-positive TB patients, including antiretroviral therapy.
10	**Case fatality ratio (CFR)** Number of TB deaths divided by estimated number of incident cases in the same years, expressed as a percentage.	≤5%	This is a key indicator for monitoring progress towards the 2020 and 2025 milestones. A CFR of 5% is required to achieve the 2025 global milestone for reductions in TB deaths and cases.

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