



**ASSESSMENT OF CHILD AND ADOLESCENT TB POLICY AND GOVERNANCE IN COUNTRIES PARTICIPATING IN THE UNION'S SUB-SAHARAN AFRICA CHILD AND ADOLESCENT TB CENTRE OF EXCELLENCE**

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International Union Against  
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## **ABBREVIATIONS AND ACRONYMS**

CDC	U.S. Centers for Disease Control and Prevention
CLHIV	Child(ren) living with HIV
COE	The Union/CDC Sub-Saharan Africa Child and Adolescent TB Centre of Excellence
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
GF	The Global Fund to fight AIDS, Tuberculosis and Malaria
GTB	Global Tuberculosis Control and Prevention Branch (CDC)
HIV	Human Immunodeficiency Virus
IMCI	Integrated Management of Childhood Illnesses
INH	Isoniazid
MCH/ANC	Maternal Child Health/Antenatal care
M&E	Monitoring and Evaluation
MOH	Ministry of Health
NSP	National Strategic Plan
PEPFAR	United States President's Emergency Plan for AIDS Relief
PLHIV	Person(s) living with HIV
RMNCAH	Reproductive Maternal, Newborn, Child and Adolescent Health
TB	Tuberculosis
TBI	Tuberculosis infection
The Union	International Union Against Tuberculosis and Lung Disease
ToT	Training of Trainers
TPT	Tuberculosis Preventive Treatment
UN	United Nations
WHO	World Health Organization

## **1. ACKNOWLEDGEMENTS**

This assessment of policy and governance related to the management of child and adolescent TB among the member countries of the Sub-Saharan Africa Child and Adolescent TB Centre of Excellence (COE) was developed by The International Union Against Tuberculosis and Lung Disease (The Union) in collaboration with the Global TB Branch (GTB) in the Division of HIV and TB (DGHT), U.S. Centers for Disease Control and Prevention (CDC) and funded through The Union's Cooperative Agreement with CDC. Special thanks go to all nine COE member countries' Ministries of Health-National TB Programs (MOH-NTPs) for undertaking this assessment, particularly, the respective COE member country representatives for completing the questionnaire and sharing key national documents and guidelines. We would also like to thank our COE Advisory Committee members for providing technical guidance on completing the assessment protocol. We also thank Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) for providing both technical guidance and sharing benchmarking assessment tools for this exercise.

## **2. EXECUTIVE SUMMARY**

In August 2019, The Union in collaboration with GTB/CDC convened a regional stakeholder meeting in Kampala, Uganda to launch the COE and discuss the need to address the child and adolescent TB policy-practice gap, and share best practices and lessons learned in combatting child and adolescent TB among countries in sub-Saharan Africa. The meeting was attended by global TB stakeholders and representatives from nine NTPs: Eswatini, Ethiopia, Kenya, Malawi, Mozambique, Tanzania, Uganda, Zambia, and Zimbabwe. These countries eventually became the founding members of the COE. The goal of the COE is to pursue the bold vision of the Childhood TB Roadmap by capacitating national leadership, bridging the policy-practice gap, and fostering partnerships across the region to improve and expand interventions to end child and adolescent TB. To optimize the quality and type of technical assistance provided to COE member countries, the COE team needed information on the landscape of policy, governance, financing, and training for child and adolescent TB in the COE member countries. This foundational information would then enable COE staff to support the development of tools and other forms of technical assistance that address specific needs/requests by country teams. Further, this landscape assessment would serve as a baseline by which to measure the contributive impact of the COE's activities on child and adolescent TB programming in member countries in the future.

In April 2021, all nine COE member countries were provided with a standardised survey tool to complete the landscape assessment. The analysis of survey results was performed with a focus on aggregated country results to identify variability in policy, governance, training and management processes, including prioritizing common technical assistance needs.

The NTPs of all COE member countries provide oversight of TB programming in the respective countries and are responsible for the inclusion of child and adolescent TB in the TB National Strategic Plan (NSP). Only 44% of member countries have specific interventions and targets for addressing adolescent TB in the TB NSPs that were in effect during the survey. While child TB was included in all NSPs, there were gaps in the integration of child TB into MOH/NTP guidelines. All member countries have dedicated child and adolescent TB focal points. The NTPs ensure the functionality of child and adolescent TB Technical Working Groups (TWGs) (existing in 89% COE member countries), these however have a varying representation of relevant stakeholders. All COE member countries report having dedicated funding for child and adolescent TB but only half report such funding from their national MOH or government.

All COE countries have training programs informed by a curriculum. In addition, they have tools for supervision and mentorship. Not all COE member countries have training materials that comprehensively cover all relevant topics in the management of child and adolescent TB. In addition, adolescent TB management has been omitted in some of the member countries' training materials, supervision and mentorship tools. Only four countries are capturing the WHO recommended age disaggregated data for child and adolescent TB. These findings will further guide the COE work plans and provision of technical assistance that addresses the specific needs of its member countries.

### **3. INTRODUCTION**

#### **3.1 Background**

In 2021, children (aged <10 years old) and young adolescents (aged 10–14 years) accounted for 11% (1,166,000) of the global TB cases reported. During this same period, 1.4 million global TB deaths were reported among HIV-negative people and 14% (196,000) were among children (aged <15 years) while 11% of the global TB deaths among HIV-positive people were in children aged <15 years.<sup>i</sup> It is estimated that 80% of child deaths from TB are among children under five, while 95% are among those who never received treatment.<sup>ii</sup> While case notifications of TB among children have nearly quadrupled in the past decade, only 45% of all children and adolescents (<15 years) and 28% of young children (<5 years) with TB were diagnosed in 2021, compared with 62% of adults.<sup>i</sup> Between 2019 and 2020, there was an 18% and 24% reduction in TB case notifications overall and among children, respectively, and an overall increase in TB-related mortality for the first time in a decade.

TB preventive treatment (TPT), a proven and effective intervention, particularly in young children and children living with HIV (CLHIV), remains underutilized, especially in countries with the highest TB burden. Since 2018, nearly 500,000 CLHIV have completed TPT through the United States President's Emergency Plan for AIDS Relief (PEPFAR), reaching close to three-quarters of eligible CLHIV in PEPFAR-supported programs.<sup>iii</sup> However, the cumulative number of contacts under 5 years initiated on TPT from 2018–2021 was 1.6 million (40% of the UN High-Level Meeting on TB [UNHLM] five-

year target of 4 million).<sup>i</sup> Each year, only one-third of eligible child contacts under five years are provided with TPT.

Recent global TB strategies provide an unprecedented opportunity to introduce and scale up an effective response to the challenges of child and adolescent TB. The WHO 2022 Guidelines on the Management of Tuberculosis in Children and Adolescents along with the companion operational handbook present several updated guidelines that can close the case detection gap and improve treatment and prevention options.<sup>iv</sup> The persistent policy-practice gap for child and adolescent TB is alarming, with common challenges shared by many low-and middle-income countries. Confronting and overcoming these challenges requires targeted yet flexible interventions that will continuously evolve alongside the child and adolescent TB epidemic.

The Union in collaboration with CDC established the virtual regional COE for child and adolescent TB in 2019, coordinated and based in The Union Uganda Country Office. The Sub-Saharan African region is the primary focus of the COE, a region with a high burden of child and adolescent TB, HIV, and TB-related mortality. The establishment of the COE followed a regional stakeholder meeting, convened by The Union in collaboration with CDC in Kampala, Uganda, in August 2019. The nine official founding member countries of the Sub-Saharan Africa Regional Child and Adolescent TB COE are Eswatini, Ethiopia, Kenya, Malawi, Mozambique, Tanzania, Uganda, Zambia, and Zimbabwe. The COE, working with its member countries, is focused on strengthening policy, governance, and capacity for management of child and adolescent TB. While providing a platform for sharing best practices and technical knowledge for solving common challenges, the COE fosters partnerships across the region to improve and expand interventions to end child and adolescent TB. The overall goal of the COE is “to pursue the bold vision of the Childhood TB Roadmap” that is aimed at ending TB in children and adolescents.

### **3.2 Purpose and justification of the assessment**

To optimize the quality and type of technical assistance provided and to identify common best practices and challenges, the COE team needed to undertake this assessment to better understand the current structure and performance of management, financing, and training for child and adolescent TB in the COE member countries. These data enable the COE team to support the development of tools and other forms of technical assistance that address specific needs or requests by the country teams; it will also provide a baseline for tracking the progress of intended adaptations and improvements in the management, financing, and training elements of these childhood TB programmes over time.

This survey was carried out following ethical review and approval by CDC and The Union’s Ethics Advisory Group and will be repeated near the five-year anniversary of the COE to monitor and document any changes in policy, governance, management, and service delivery within the COE member countries. Any changes to the survey instrument will be resubmitted for ethics review as an amendment to the protocol of the first iteration of the assessment.

### **3.3 Aim and objectives**

**Aim:** To assess the landscape of governance, policy, and training efforts for management of child and adolescent TB among the current nine member countries of the Union/CDC Sub-Saharan Africa COE.

#### **Objectives:**

- To describe the governance and leadership structure for management of child and adolescent TB;
- To understand the policies and funding mechanisms for child and adolescent TB; and
- To document the management and training practices for child and adolescent TB.

### **3.4 Methodology**

#### **Study design**

This was an online cross-sectional survey completed by government officials nominated by their Ministries of Health to represent their NTPs on the COE virtual platform.

#### **Study Population**

The focus population was child TB focal points and representatives to the COE from the member country governments (NTPs). All member countries of the COE were asked to fill out the baseline survey questionnaire to document the status of their policy, governance, and service delivery elements.

#### **Methods**

The Union developed a standardized survey tool that participants completed independently. The tool was piloted among non-participating subject matter experts, refined and standardized for the survey.

In April 2021, The Union staff invited members of the COE countries to participate and consent via email, provided each individual recipient with instructions, and answered any queries regarding the intent, structure, and content of the survey. The participants were requested to return their informed consent form before providing their survey responses. Completed surveys were reviewed by The Union and CDC staff who assessed for completeness and identified inconsistent or unexpected results, which were then further clarified with the specific survey respondent.

Data from validated surveys was manually entered into a password-protected Excel spreadsheet for analysis. A second reviewer assessed the entries against the source survey to validate that no errors were made during the data entry process.

#### **Data analysis**

The analysis of survey results focused primarily on aggregated country results to identify variability in governance and management processes and prioritize common technical assistance needs. Descriptive statistics, including frequencies, mean, median and interquartile range, were used to



summarize the data. Analysis was restricted to de-identified data to protect the identity of the countries. However, the COE will use the individual profile of each country to inform tailored interventions to be delivered through the COE platform.

### **3.5 Ethical considerations**

The research proposal was reviewed and approved by The Union Ethics Advisory Group (EAG-02/2021) and the CDC's Center for Global Health (CGH-PSET1-4/8/21-ef93a). This survey was designed to be completed by duly appointed officials within the member country Ministries of Health who had knowledge of these activities within the scope of their official duties. With the invitation to participate in the survey, each member of the COE was asked to review and sign an informed consent document before participating.

Signed informed consents, original survey responses, and de-identified datasets are stored in a password-protected folder hosted on the Union's internal server which is backed up on a separate encrypted server during routine maintenance. Upon study completion, when all planned analyses have been conducted and validated (expected- August 2024), the original survey responses and informed consents will be destroyed. De-identified datasets for individual years (2021 and 2024) and compiled two-year datasets will be retained in a secure, password-protected folder on The Union's internal server for not more than 10 years.

**Limitation:** This assessment is an overview/snapshot of the COE member countries' child and adolescent TB policy and governance in April 2021 and the analysis does not allow for granular assessment of training or health system capabilities at each level of the health system.

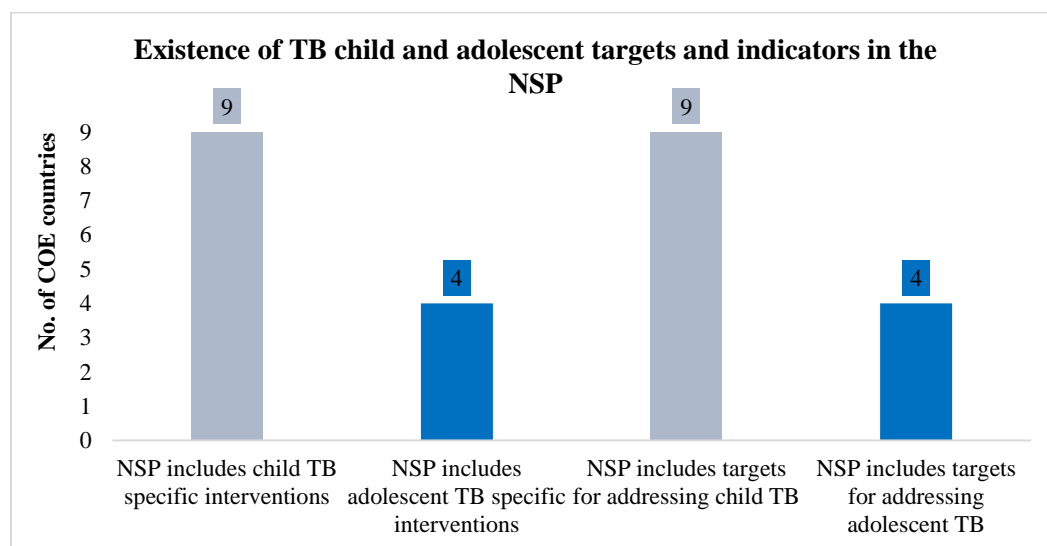
## 4 FINDINGS

### 4.1 TB National Strategic Plan and Guidelines

TB National Strategic Plans (NSPs) are a road map to preventing, controlling and eventually eliminating TB at country level. These country-specific plans provide strategic direction for TB care and prevention over time and are developed and reviewed with input from all country stakeholders. To achieve successful implementation of the strategic plans, it is crucial to have TB-specific targets and indicators for monitoring performance and progress towards achieving these TB-specific targets. Child and adolescent TB national guidelines provide guidance on the management and treatment of TB at health facility, district, regional/sub national and national level.

#### **TB NSP includes child and adolescent TB specific interventions**

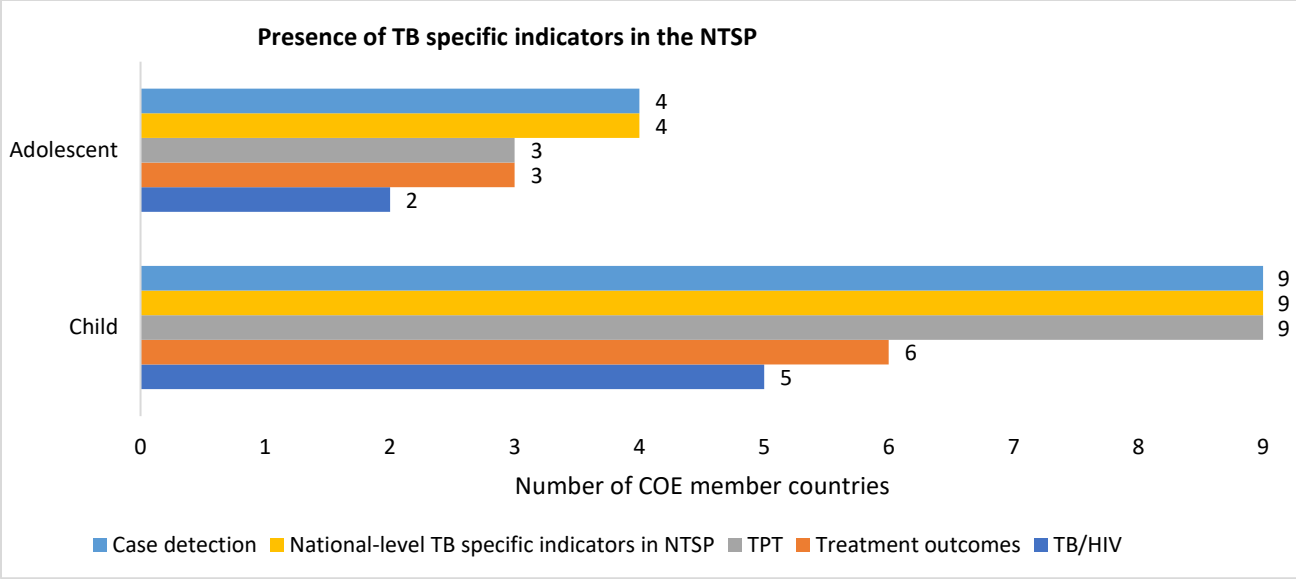
All nine member countries had a national TB strategic plan which included specific interventions and targets for addressing child TB. However, NSPs in only four out of the nine countries (44%) included specific interventions and targets for addressing adolescent TB. (**Figure 1**)



**Figure 1:** Presence of child and adolescent TB-specific interventions and targets in the TB NSP of nine COE member countries

#### **TB specific targets and indicators included in National Strategic Plans**

All indicators on case detection and TPT were included in the NSPs of all nine countries. Six (67%) and five (56%) countries had indicators on treatment outcomes and TB/HIV in children, respectively. All four (44%) countries with adolescent TB specific indicators in their strategic plan included indicators related to case detection, while three countries (33%) included indicators on TPT and treatment outcomes in adolescents and two (22%) countries included TB/HIV indicators specific to adolescents. (**Figure 2**)



**Figure 2:** Presence of child and adolescent TB specific indicators in the national TB strategic plans (NSP) of nine COE member countries

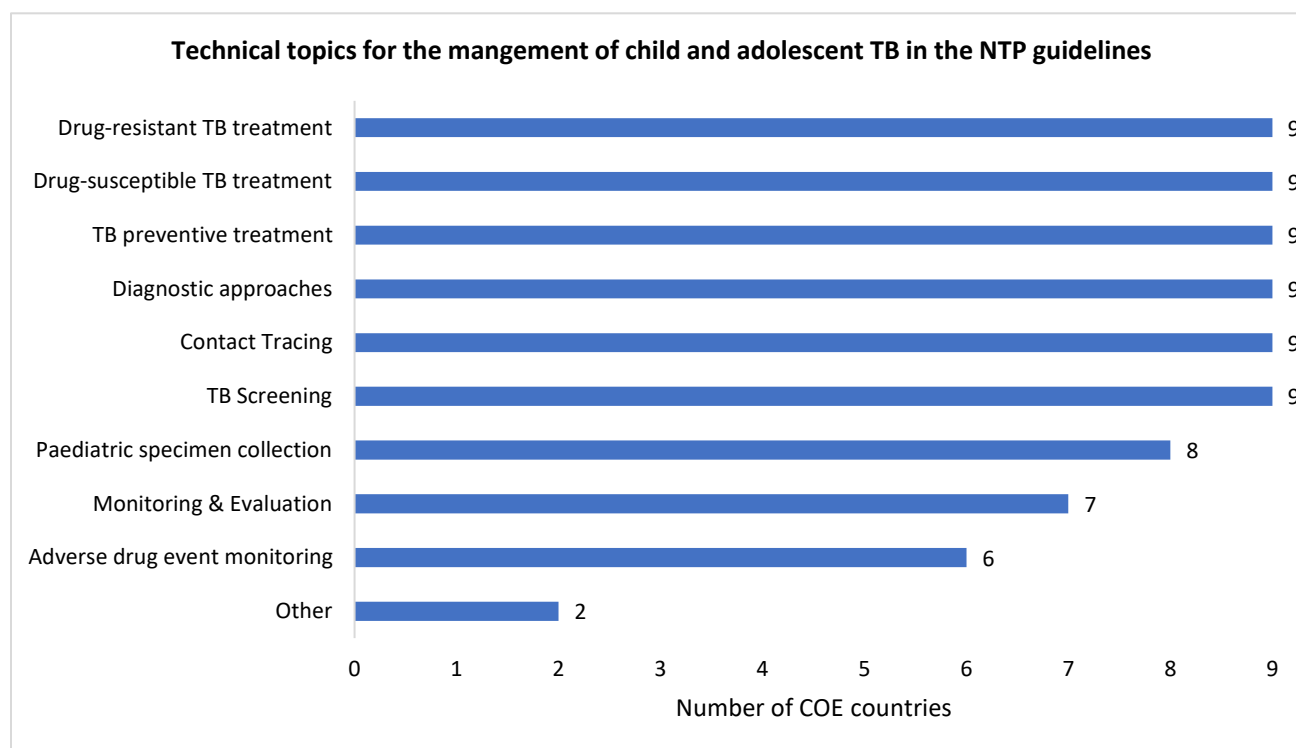
**National guidelines on management of child and adolescent TB**

All nine countries have national guidelines for the management of child and adolescent TB. However, none of the countries have dedicated adolescent TB guidelines. Three countries (33%) included child TB and seven countries (78%) included adolescent TB in their general TB guidelines, while six countries (67%) have separate, dedicated child TB guidelines.

**Technical topics for management of child and adolescent TB in the NTP guidelines**

Child and adolescent TB screening, contact tracing, diagnostic approaches, TPT, and treatment of drug-susceptible and drug-resistant (DR-TB) were detailed in the NTP guidelines of all nine countries. Pediatric specimen collection procedures, monitoring and evaluation mechanisms, and adverse drug event monitoring were present in the NTP guidelines of eight (89%), seven (78%), and six (67%) countries, respectively. Two (22%) countries highlighted other areas in their guidelines, including adolescent TB clubs and guidance on DR-TB management among children. (Figure 3)

Out of the nine countries, only three (33%) included all nine technical topics on the management of child and adolescent TB in their NTP guidelines. Five countries (56%) included eight topics while one country covered seven of the topics in their NTP guidelines.



**Figure 3:** *Topics of child and adolescent TB management detailed in the guidelines of the national TB program (NTP) in nine COE member countries. "Other" included funding for pediatric TB, adolescent TB clubs and updated guidance on MDR TB management in children.*

**Presence of child TB specific algorithms in the NTP guidelines and inclusion of child TB into other existing child health guidelines**

Seven (78%) of the nine countries had a national diagnostic algorithm specific to childhood TB. Six (75%) of the eight countries that responded reported that HIV guidelines included child TB management. Similarly, six (75%) countries have child TB management elements included in the Integrated Management of Childhood Illness (Management of the Sick Child) guidelines.

## **4.2 Governance, Leadership, and Financing**

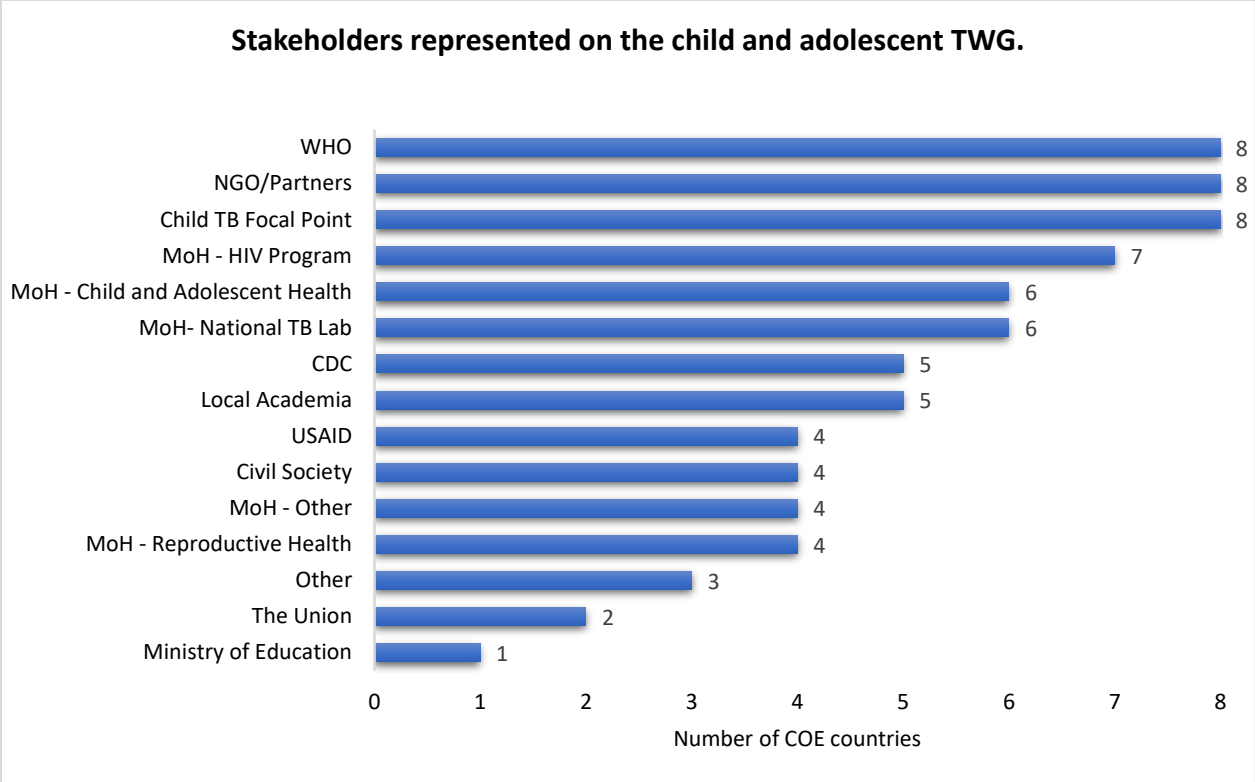
Leadership and governance involve ensuring strategic policy frameworks exist and are combined with effective oversight, coalition-building, regulation, attention to system design and accountability. Health financing is a core function of health systems that enables progress towards universal health coverage by improving effective service coverage and financial protection.

Management of health services follows a decentralized structure with the MOH providing overall oversight and coordination of health service delivery while the districts/provinces and health sub-districts (HSDs) take charge of delivering and managing health services at the local government level. The health centers provide health prevention, promotion, curative and rehabilitation health services. The overall coordination of TB programming at national level is provided by the National TB Program (NTP) whose coordinators oversee the provision of TB services at national level and this support is mirrored at sub-national levels.

### **Child TB focal points and Technical Working Groups at national level**

All nine countries have a designated TB focal point responsible for child TB in the NTP. The child TB focal point is also responsible for adolescent TB. Eight (89%) of the nine countries had a child and adolescent TB Technical Working Group (TWG) at national level. **(Figure 4)** All eight countries with a TWG had terms of reference for its functioning, with six (75%) countries meeting quarterly, one (13%) biannually, and one (13%) as and when necessary. The one remaining country that did not have a child and adolescent TB TWG at the national level had an integrated working group within the NTP that covers all areas of TB, including child and adolescent TB.

Five (63%) out of eight countries were able to share the number of members participating in the child and adolescent TB TWGs with an average of 30 participants per country. **(Figure 4)**

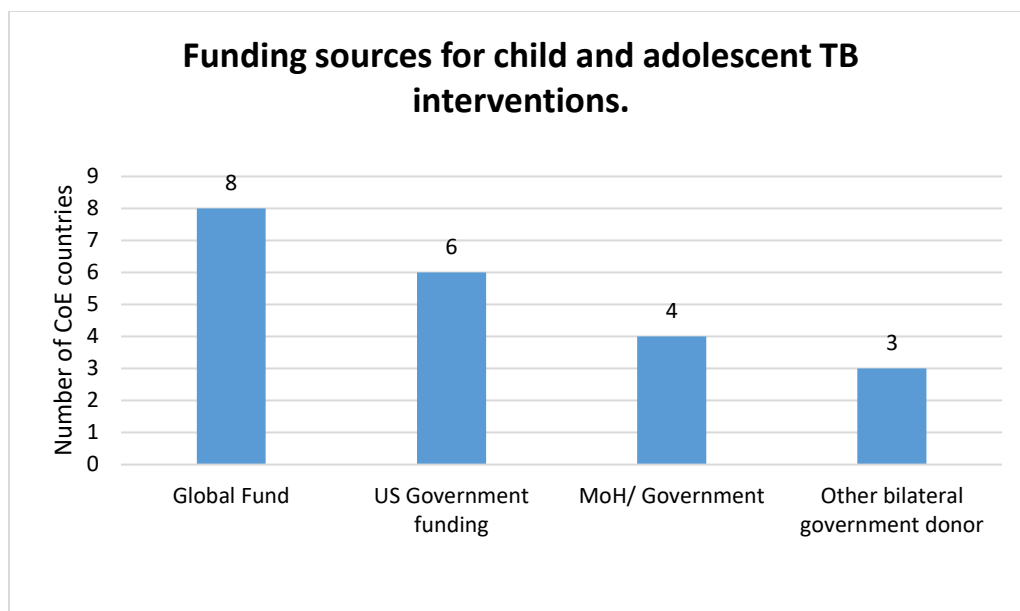


**Figure 4:** Stakeholders represented on the child and adolescent TB TWG in the of national TB program (NTP) Note: “Other” includes UNICEF and Pediatric Association.

**Child and adolescent TB funding**

All nine countries received targeted funding to support child and adolescent TB interventions. Eight (89%) countries included costed elements for child TB in the NTP budget.

Seven countries received funding from more than one funding source. Out of the nine countries receiving targeted funding to support child and adolescent TB interventions, eight (89%) were able to mention their funding sources. Among those countries, all eight (100%) received funding from The Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM), six (75%) from US government, four (50%) from the national Ministry of Health or government, and three (38%) from other bilateral government donors. (Figure 5)



**Figure 5:** *Source of funding for child and adolescent TB control efforts in the nine-member countries of COE*

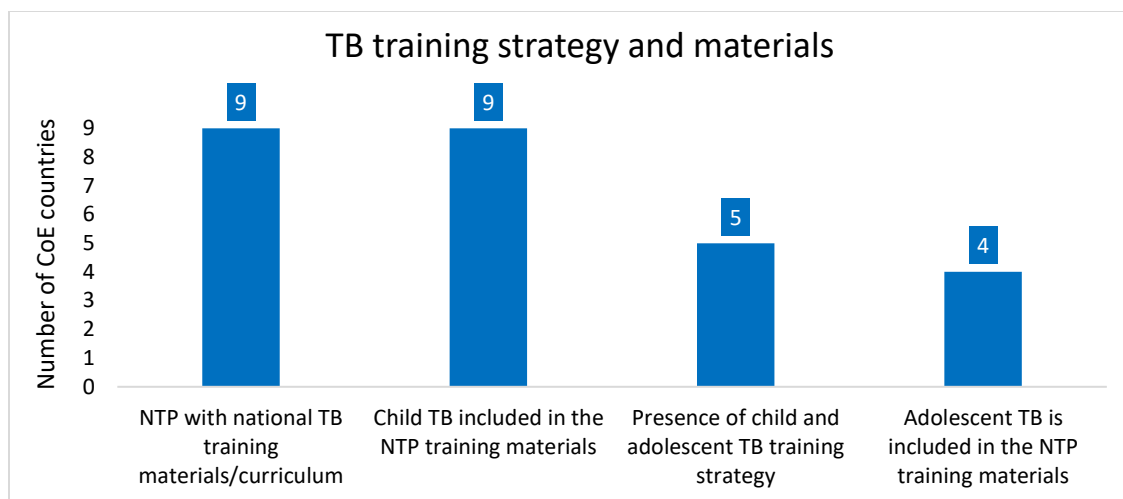
### 4.3 Training and Mentorship

Training aims to develop healthcare workers' skills to the desired standard by instruction and practice with an objective of improving the quality, effectiveness and efficiency of health service delivery. Mentorship, on the other hand, is the ability to influence, guide, or provide direction to health care workers through mentorship on-site and consistently over time. Both training and mentorship are components of capacity building. Reaching communities with health care services and ensuring equitable service delivery requires building capacity of health care workers to address gaps in access to TB services including prevention, diagnosis, treatment and management.

Capacity building is provided through didactic training, experiential learning or practice, supportive supervision and mentorship for both health care and community health workers and aims to strengthen health care workers' TB case management and data use skills for continuous quality improvement.

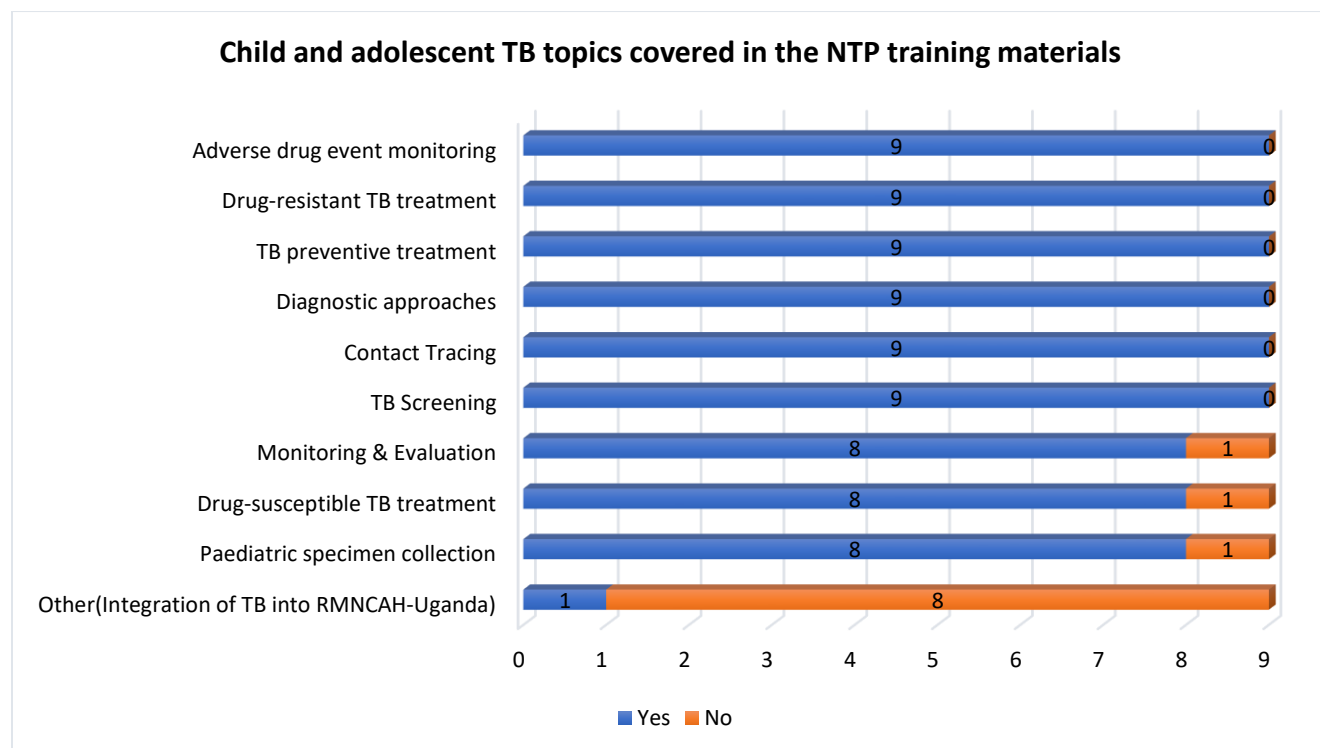
#### **Existence of a national child and adolescent training strategy and training materials**

All nine countries had national TB training materials/full curriculum for health care workers. Although nine (100%) countries had child TB included in these training materials, only four (44%) included management of adolescent TB. Of the nine countries, five (56%) had a child and adolescent TB training strategy.



**Figure 6:** Presence of training strategy and materials on child and adolescent TB management in the national TB program

Among the topics covered in the NTP training materials, the following were listed in all nine countries: TB screening, contact tracing, diagnostic approaches, TPT, treatment of DR-TB, and adverse drug event monitoring. However, only eight (89%) countries covered topics on pediatric specimen collection, treatment of drug-susceptible TB, and monitoring and evaluation. One country included a topic on the integration of TB into Reproductive Maternal, Newborn, Child and Adolescent Health (RMNCAH). (Figure 7)





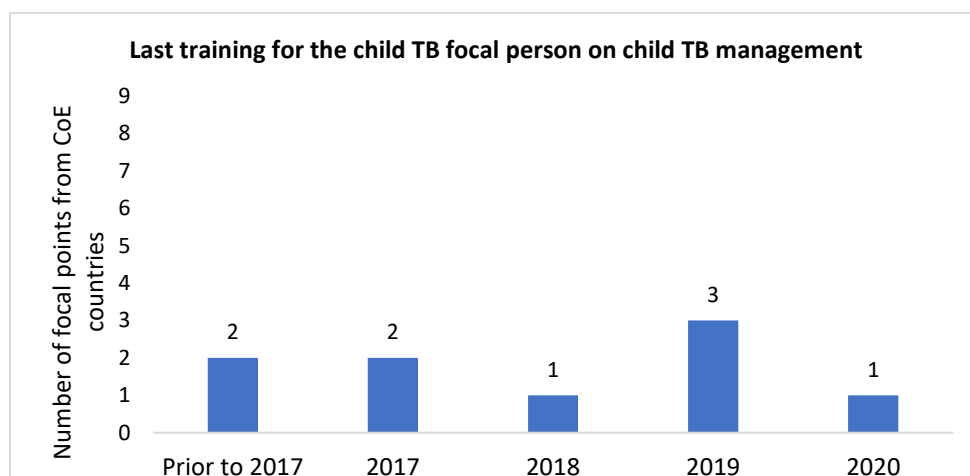
**Figure 7:** Various topics in the national TB programme materials on child and adolescent TB management in the nine COE member countries

### **Supervision and mentorship tools for child and adolescent TB**

All nine (100%) countries included child TB in NTP supervision and mentorship tools. However, only five (56%) countries included adolescent TB in these tools.

### **Training frequency for TB focal persons**

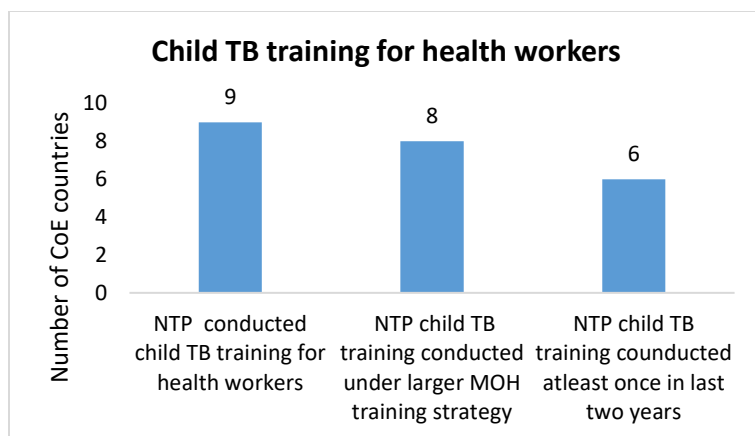
The child TB focal persons of all nine countries were trained on management of child TB although five (56%) of the nine had received this training in or before 2018 (**Figure 8**). TB management is dynamic, and as such, trainings should be conducted every one to two years to update the focal persons on new guidelines, policies, and best practices.



**Figure 8:** Year of last training of the focal points on the child and adolescent TB management in the nine member countries of COE

### **Training of health care workers on child TB**

All nine countries conducted child TB training for health care workers. In eight (89%) countries, the last NTP training for health care workers on child TB was part of a broader MOH training strategy for all TB technical areas. Six (67%) of the nine countries have had child TB training for health care workers conducted in the last two years. (**Figure 9**)

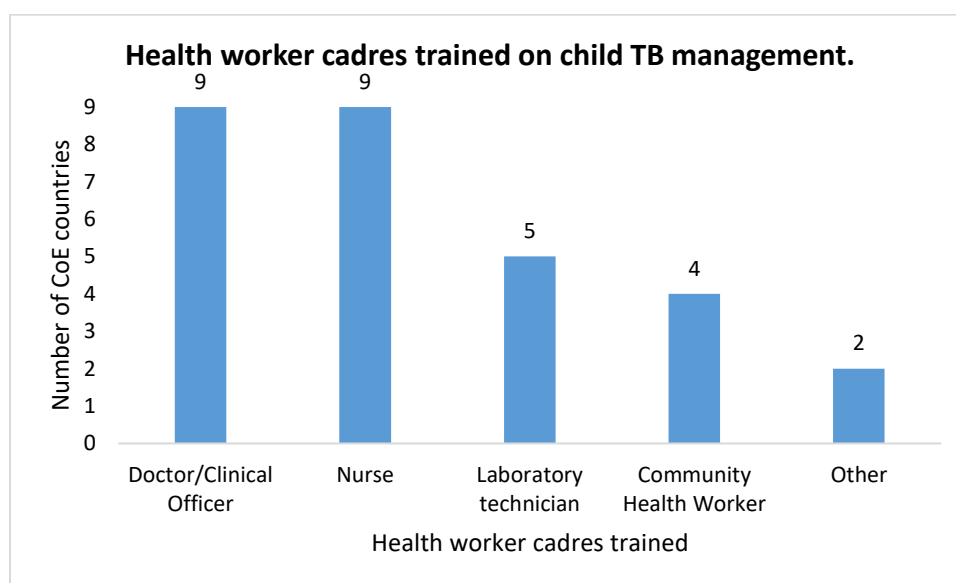


**Figure 9:** Conduct of child and adolescent TB management by the National TB program in the nine COE member countries

### **Cadres of health care workers trained**

During the child TB training for health care workers, all nine countries trained doctors/clinical officers and nurses on management of child TB. Five (56%) countries trained laboratory technicians, four (44%) trained community health workers, and two (22%) trained other health care workers but no specifics were shared. (Figure 10)

Of the nine COE countries, only two (22%) trained all health care worker cadres, five (56%) countries trained three cadres while two (22%) countries trained only two cadres.

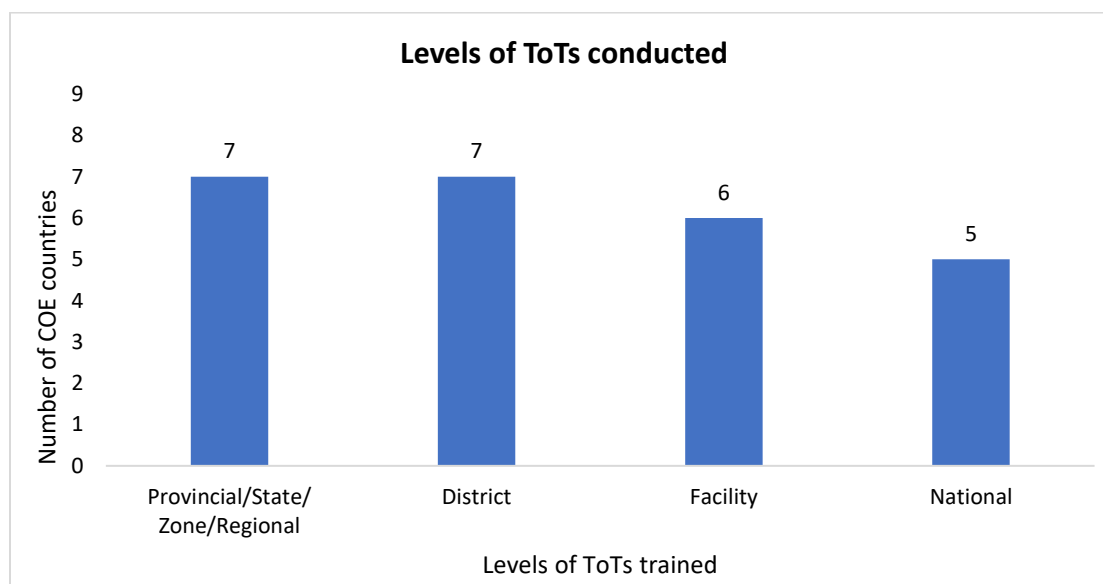


**Figure 10:** Cadres of health workers trained on child and adolescent TB management under the national TB program training in the nine COE member countries

### **Levels of training of trainers**

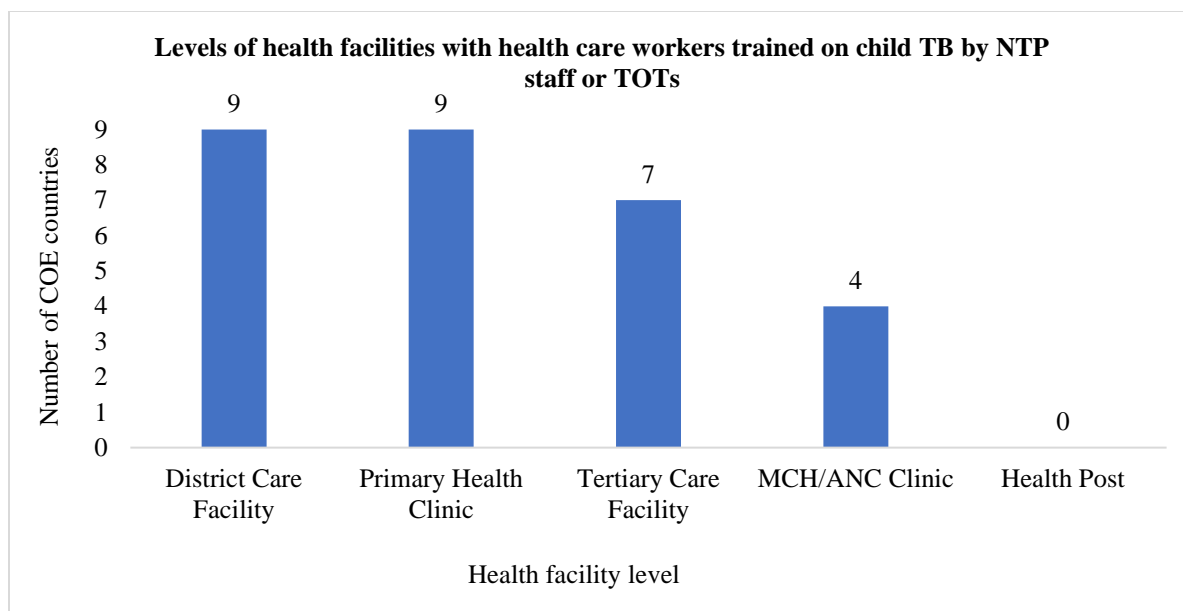
Out of the nine countries, seven (78%) conducted trainings of trainers (ToTs) from provincial or state or zone/regional and district levels. Six (67%) out of the nine countries conducted ToTs with participants from the facility level and five (56%) countries conducted the ToTs for national-level staff. (Figure 11)

Of the nine countries, only three (33%) conducted trainings for all levels of ToTs, two countries (22%) conducted trainings for three levels of ToTs while four countries (44%) conducted training for only two levels of the ToTs.



**Figure 11:** *Level of training of trainers (ToTs) on child and adolescent TB management under the national TB program in the nine COE member countries*

All nine (100%) member countries had their health care workers from district level health facilities and primary health care clinics trained on child TB by NTP staff or trainers trained by NTP. Of the nine countries, seven (78%) and four (45%) had trained health care workers from tertiary care facilities and maternal child health/antenatal care (MCH/ANC) clinics, respectively. No countries reported training health care workers in the periphery or at health post level. (Figure 12)



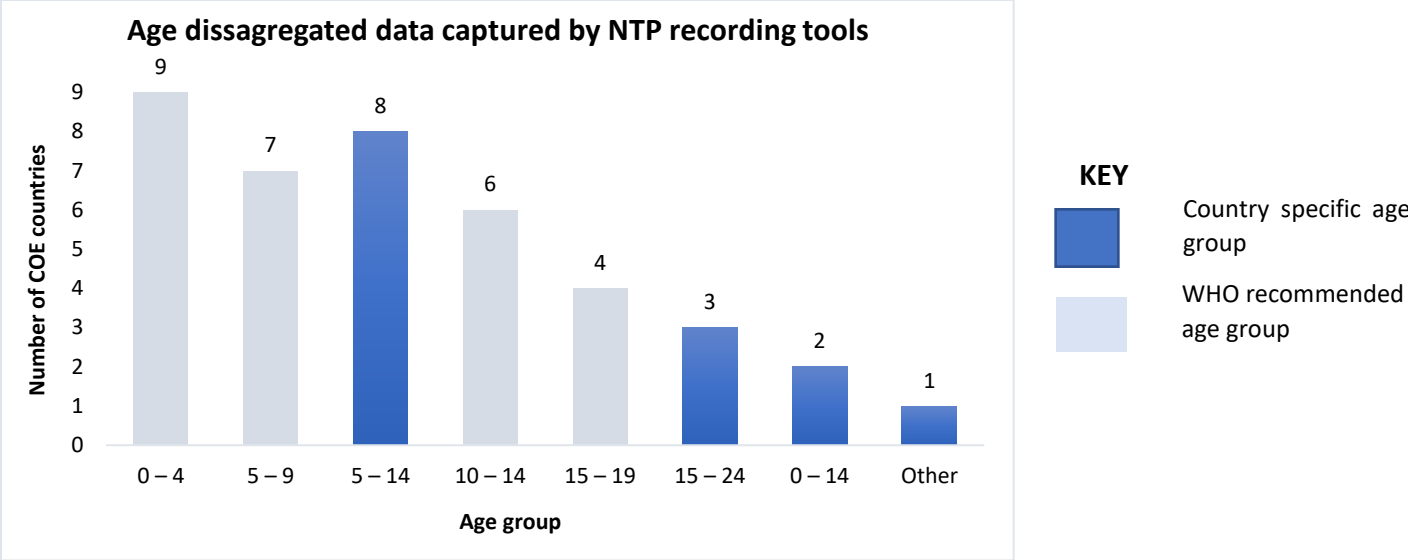
**Figure 12:** *Level of health facilities with healthcare workers trained on child and adolescent TB management under the national TB program in the nine COE member countries.*

#### **4.4 Monitoring and Evaluation of Health Service Delivery**

Monitoring and Evaluation (M&E) is a continuous management function to assess progress toward NTP goals and targets, to spot bottlenecks in implementation, and to highlight whether there are any unintended effects (positive or negative) from the program and its activities. M&E is crucial for an efficient health data management system and should also be applied to improve the quality of TB data. To have a strong M&E program, countries need to strengthen the coordination of their M&E activities and collaborate with partners that provide M&E support.

##### **Age disaggregated data captured by NTP reporting tools**

Only four (44%) countries are following the WHO-recommended disaggregated age categories (infants <1, young children 1-4 years, older children 5-9 years, young adolescents 10-14 years and older adolescents 15-19 years). Although all nine countries included age disaggregated reporting for young children ages 0-4, only six countries (66%) had NTP reporting tools with disaggregated data for young adolescents ages 10-14 while only four (45%) countries disaggregate data for older adolescents ages 15-19. (Figure 13)

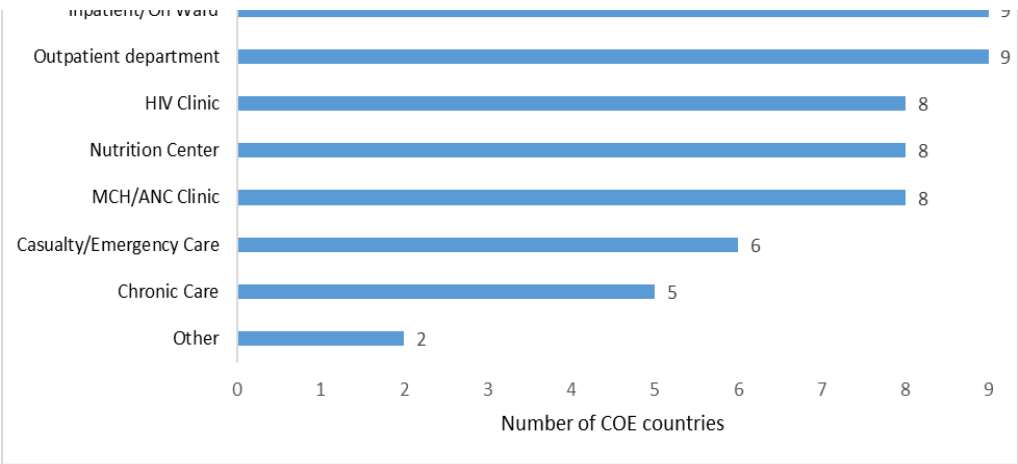


**Figure 13:** Age groups for aggregate reporting of data on child and adolescent TB in the nine COE member countries

**Healthcare entry points for TB screening and referral services**

All nine countries provided TB screening and referral services at the outpatient and inpatient/on ward departments. In eight (89%) of the nine countries, MCH/ANC clinics, nutrition centers, and HIV clinics included child and adolescent TB screening and referral at these entry points. Six (67%) and five (56%) member countries provided TB screening and referral services at casualty/emergency care and chronic care facilities, respectively. In two (22%) countries, additional entry points offered these services but they were not specified by the country respondents. (Figure 14)

**Figure 14:** Health care entry points for TB screening and referral services for child and adolescent TB in the nine COE member countries



The COE team will follow up to ascertain if TB screening at these entry points is routine and in place at all or most health facilities in the countries.

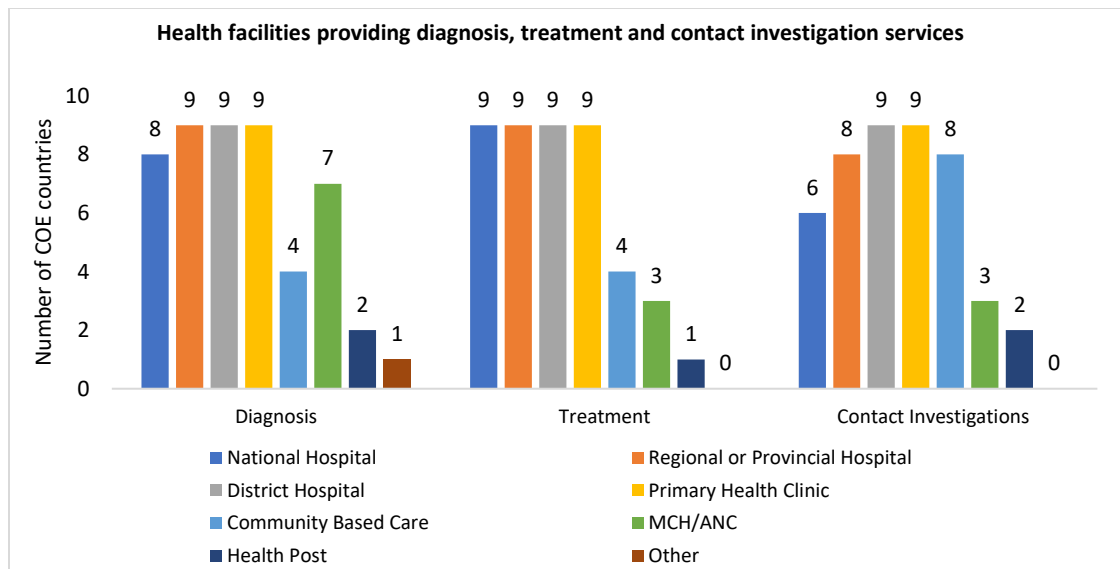
**Levels at which TB services (diagnosis, treatment and contact investigation) are offered**

All nine countries offered TB diagnostic services at regional or provincial hospitals, district hospitals and primary health clinics whereas eight countries (89%) offered the same services also at national hospitals. Seven (78%) of the nine countries offered TB diagnostic services at MC/ANC clinic. Four (44%), two (22%) and one (11%) of the nine countries offered TB diagnostic services at community-based care, health post and ‘other’ (not specified), respectively.

**NOTE:** The survey tool that was used did not specify to respondents to indicate which diagnostic services are available at the different health care levels. Further analysis is therefore required to understand the different diagnostic services available at different levels.

TB treatment services were offered in all nine countries at the levels of national hospital, regional/provincial hospital, district hospital and primary health clinic. Four (44%), three (33%) and one (11%) of the nine countries offered TB treatment services in Community based care, MCH/ANC clinic and health posts, respectively.

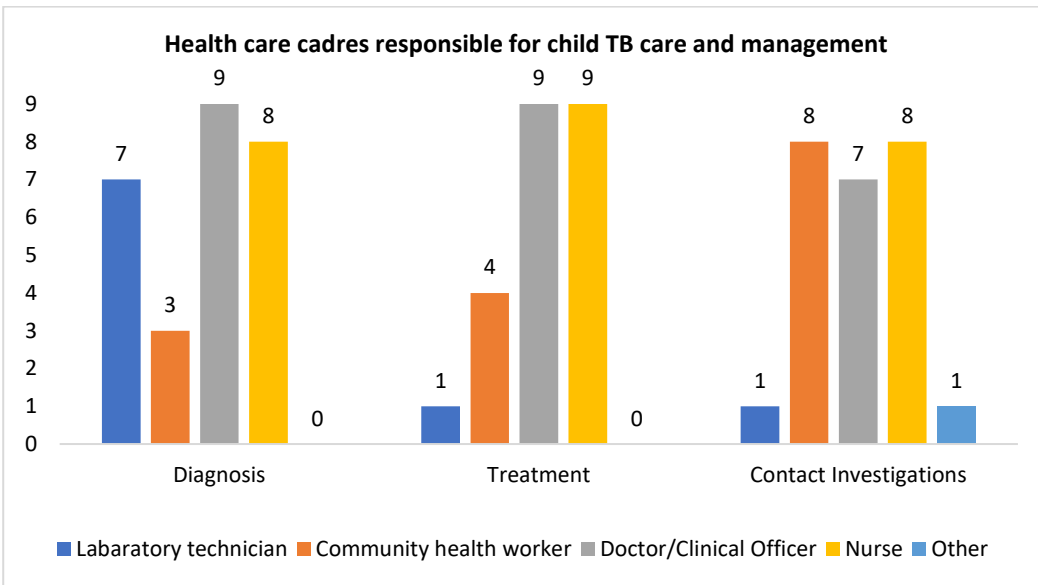
TB contact investigation services were offered at primary health clinics and district hospitals in all nine countries. Eight countries (88%) offered TB contact investigation services at regional/provincial hospital and community-based care whereas six (67%), three (33%) and two (22%) countries offered the services at national hospitals, MCH/ANC clinics and health posts, respectively. **(Figure-15)**



**Figure 15:** Availability of child and adolescent TB diagnosis, treatment, and contact investigations at different health facility levels of the nine COE member countries

### **Health care worker cadres responsible for child TB care and management**

All nine countries that participated in the assessment confirmed that the doctor/clinical officer was responsible for the diagnosis and treatment of TB among children. In eight (89%) of the nine countries, the nurse is responsible for diagnosis and contact investigation. In eight (89%) of the nine countries, community health workers were responsible for contact investigations. For other details, see figure 16 below.



**Figure 16:** *Healthcare cadres involved in child and adolescent TB diagnosis, treatment, and contact investigations in the nine COE member countries*

## 5 CONCLUSION AND RECOMMENDATIONS

The landscape assessment was intended for the COE to better understand governance, leadership structure, policies, funding mechanisms, practices, and management of child and adolescent TB programs in the member countries. The common best practices, challenges, and needs identified included:

Conclusion	Recommendation
<b>A. National TB Strategic Plan and Guidelines</b>	
<p><b><u>Best practices</u></b></p> <ul style="list-style-type: none"> <li>i. All countries had NSPs with specific interventions and targets for child TB.</li> <li>ii. Child and adolescent TB screening, contact tracing, diagnostic approaches, TPT, and treatment of drug-susceptible and drug-resistant (DR_TB) are also well-detailed in the NTP guidelines.</li> <li>iii. The majority of countries have national diagnostic algorithms specific to childhood TB.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Support the COE member countries to enhance the existing NSPs to comprehensively capture both child and adolescent TB interventions.</li> </ul>
<p><b><u>Gaps identified</u></b></p> <ul style="list-style-type: none"> <li>iv. Most programs have more specific guidelines, policies, and interventions for child TB compared to adolescent TB. For example, only four COE member countries have specific targets for adolescent TB.</li> <li>v. There is also still a gap in the integration of child TB management in other MOH child health guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>➤ The COE will facilitate training and dissemination of the 2022 WHO child and adolescent TB guidelines and conduct webinars and COE workshop series to support member countries to integrate adolescent TB interventions/targets and child TB management into the NSPs and other MOH health guidelines respectively.</li> </ul>
<b>B. Governance, Leadership, and Financing</b>	
<p><b><u>Best practices:</u></b></p> <ul style="list-style-type: none"> <li>i. All countries have TB focal points for child and adolescent TB and almost all have a child and adolescent TB Technical Working Group (TWG) at the national level.</li> </ul>	<ul style="list-style-type: none"> <li>➤ The COE will continue to work with its member countries to ensure that all TB TWGs have adequate representation of all relevant stakeholders.</li> </ul>



<p><b><u>Gaps identified</u></b></p> <p>ii. Although all countries have targeted funding for child and adolescent TB, only half are receiving funding from domestic sources.</p>	<p>➤ The COE will continue to work with member countries to explore opportunities to enhance both domestic and international funding for child and adolescent TB interventions.</p>
<p><b>C. Training and Mentorship:</b></p>	
<p><b><u>Best practices</u></b></p> <p>Training for health care workers on child TB is mainly provided as part of the MOH training strategy. However, it is important to ensure that there is dedicated training/capacity building for all cadres on child and adolescent TB.</p>	
<p><b><u>Gaps identified</u></b></p> <p>i. Although all countries have child TB included in their national TB training materials, supervision and mentorship tools, only four included adolescent TB in their training materials and only five countries have included adolescent TB in the NTP supervision and mentorship tools.</p> <p>ii. Training materials do not comprehensively cover all relevant topics in the management of child and adolescent TB.</p> <p>iii. Training for health care workers on child and adolescent TB does not include all relevant health care workers and levels of the health system.</p>	<p>➤ The COE through its workshop series will support member countries to develop a comprehensive child and adolescent TB capacity-building strategy that will be cascaded to sub-national and facility levels.</p> <p>➤ Support member country NTPs to develop and refine existing TB training strategies, supervision, and mentorship tools to comprehensively capture relevant child and adolescent TB needs and requirements.</p> <p>➤ Continue to facilitate south-to-south experience sharing among member countries on best practices in the management of child and adolescent TB care and management.</p>
<p><b>D. Monitoring and Evaluation of Health Service Delivery</b></p>	
<p><b><u>Gaps identified</u></b></p> <p>i. NTP recording and reporting tools in the majority of the countries do not adequately capture the WHO-recommended age categories.</p> <p>ii. TB screening and referral services, diagnosis, treatment, and contact investigation services are not provided at key entry points in some diagnostic and treatment units.</p>	<p>➤ Through webinars, the COE will emphasize the need for countries to integrate the recommended WHO reporting guidelines into the national reporting system.</p> <p>➤ The COE child and adolescent TB capacity-building workshop series will encourage member countries to develop approaches appropriate for their country context to ensure</p>

<p>iii. Some key health care worker cadres were not considered responsible for child TB care and management.</p>	<p>child and adolescent TB management is provided at all relevant levels of the health care system.</p> <p>➤ Facilitate south-to-south sharing on child and adolescent TB management and data use for decision-making, including TB-specific indicators and targets for adolescent TB.</p>
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Overall, the COE intends to use these findings to continue pursuing the bold vision of the Childhood TB Roadmap by capacitating national leadership, bridging the policy-practice gap, and fostering partnerships across the region to improve and expand interventions to end child and adolescent TB among COE member countries. These findings will further guide the COE work plans including the provision of technical assistance that addresses the specific needs of its member countries.

## References

<sup>i</sup> WHO Global TB Report, 2022

<sup>ii</sup> Dodd, P.J.; Yuen, C.M.; Sismanidis, C.; Seddon, J.A.; Jenkins, H.E. The global burden of tuberculosis mortality in children: A mathematical modelling study. *Lancet Glob. Health* 2017, 5, e898–e906. [https://doi.org/10.1016/S2214-109X\(17\)30289-9](https://doi.org/10.1016/S2214-109X(17)30289-9).

<sup>iii</sup> President’s Emergency Plan for AIDS Relief, Monitoring, Evaluation, and Reporting Dataset, TB Screening and TPT: Global. Subset used: October 2017-September 2021, accessed 13 December 2021.

<sup>iv</sup> WHO consolidated guidelines on tuberculosis - Module 5: Management of tuberculosis in children and adolescents