

**Evaluation of the WHO Neglected
Tropical Diseases Programme
Volume 1: Report**

Corporate evaluation
commissioned by the
WHO Evaluation Office

July 2019



Report by TDV Global Inc.

Evaluation Team: Elizabeth Dyke, Brian McKay, Mylan Ly, Rosanna Peeling

2460 Lancaster Road, Suite 102
Ottawa, Ontario
K1B 5L1
Canada
Tel: 613-231-8555
www.tdvglobal.com

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Any enquiries about this evaluation should be addressed to:

Evaluation Office, World Health Organization

Email: evaluation@who.int

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Acknowledgements

We thank the WHO Evaluation Office (EVL) for its advice, support, and oversight throughout this evaluation. Thank you to the Evaluation Management Group for their oversight and advice on the evaluation. Key NTD staff at WHO headquarters were instrumental in gathering documents and setting the stage for the evaluation. We also would like to thank the many WHO staff at country, regional, and headquarters levels who participated in the interviews and/or the internal survey. A special thank you to the regions and country offices where we did field visits. Thank you to the external stakeholders who took part in the interviews or survey. A final thanks to the staff from WHO Press and WHO Library who assisted with bibliometrics.

Acronyms and Abbreviations

The following acronyms/abbreviations are used in this report.

Abbreviation	Meaning
AFRO	WHO Regional Office for Africa
CO	WHO Country Office
EMRO	WHO Regional Office for the Eastern Mediterranean
ESPEN	Expanded Special Project for Elimination of Neglected Tropical Diseases
FAO	Food and Agriculture Organization of the United Nations
GPW	General Programme of Work
GRADE	Grading of Recommendations, Assessment, Development and Evaluations
HSS	Health systems strengthening
HQ	WHO headquarters
IRIS	Institutional Repository for Information Sharing
M&E	Monitoring and Evaluation
MDA	Mass drug administration
MoH	Ministry of Health
NTDs	Neglected tropical diseases
AMRO/PAHO	WHO Regional Office for the Americas/Pan American Health Organization
OIE	World Organization for Animal Health
PC	Preventive chemotherapy
PCT	Preventive chemotherapy and transmission control
RO	WHO Regional Office
RPRG	Regional Programme Review Group
SAC	School-aged children
SDG	Sustainable Development Goals
SEARO	WHO Regional Office for South-East Asia
STAG	Strategic and Technical Advisory Group
TDR	Special Programme for Research and Training in Tropical Diseases
TOR	Terms of Reference
UHC	Universal health coverage
WASH	Water, sanitation and hygiene
WER	Weekly Epidemiological Record
WHA	World Health Assembly
WHO	World Health Organization
WPRO	WHO Regional Office for the Western Pacific

Executive Summary

Introduction

Neglected tropical diseases (NTDs) are the cause of much human suffering and death and pose a devastating challenge to health for millions of people. World Health Organization (WHO) efforts to combat NTDs culminated in the WHO's 2011 "Accelerating work to overcome the global impact of NTDs: A Roadmap for implementation" ("Roadmap for implementation") and World Health Assembly (WHA) resolution WHA66.12¹, which was adopted by the Sixty-sixth WHA in May 2013. The Roadmap for implementation timeline is 2012-2020, overlapping with WHO's 12th and 13th General Programme of Work (GPW). As both the GPW12 and the WHO Roadmap for implementation come to an end, an evaluation of WHO's efforts in combatting NTDs is warranted. This evaluation is a corporate priority of the 2018-2019 evaluation workplan, approved by the 142nd session of the Executive Board in January 2018.

Purpose: The overall purpose of the evaluation is to assess the accomplishments of the WHO NTD Programme as well as the lessons learnt throughout implementation at the three levels of the organization, and specifically to: document successes, challenges and gaps of the WHO NTD Programme during the biennia 2014-2015 and 2016-2017 with a focus on the WHO Roadmap for implementation; and provide lessons learnt and strategic recommendations to the design and operationalization of the next steps addressing the remaining toll of NTDs in the context of the GPW13 (2019-2023). Its purpose is primarily about learning, and to provide useful recommendations based on the lessons learnt in overcoming the challenges faced by WHO in the implementation of the WHO NTD Programme in the context of the GPW12 (2014-2019), to help maximize WHO's effectiveness, and provide a sound basis for the design of the follow-up strategies in the combat against NTDs.

Methods: The evaluation approach collected and triangulated data from multiple lines of evidence, including: field visits to 5 regional offices (ROs) and 4 country offices, 147 interviews (67 internal with WHO at country, regional and headquarters levels and 80 external interviews with Member States representatives, donors, and partners), document review of over 140 documents, an online internal survey with WHO staff (210 responses) and external survey with Member States representatives and other partners (277 responses), five country case studies, four disease case studies (lymphatic filariasis, schistosomiasis, soil-transmitted helminthiasis, leishmaniasis), and bibliometrics.

Analysis: Qualitative analysis was done in a three-step process, using NVivo for Mac as support for some of the analysis. SurveyMonkey was used for quantitative analysis. Internal reports were developed for each line of evidence/method. Conclusions and recommendations were developed based on the multiple lines of evidence. Preliminary findings, supported by a detailed evidence matrix, were presented to the WHO Evaluation Office in March 2019 for discussion and clarifications.

Overall Findings

Relevance: In general, the NTD Programme aligns to the needs of Member States as identified in the Roadmap for implementation, WHA resolutions and Sustainable Development Goals (SDGs), and their own country strategies. The London Declaration on NTDs and the Roadmap for implementation were instrumental in increasing the profile of NTDs globally, regionally and nationally. The NTD Programme

¹ Resolution WHA66.12 Neglected Tropical Diseases. In: Sixty-sixth World Health Assembly, Geneva, 20-28 May 2013. Resolutions and decisions. Geneva: World Health Organization 2013 (WHA66/2013/REC/1 http://apps.who.int/gb/ebwha/pdf_files/WHA66-REC1/A66_REC1-en.pdf#page=25, accessed 25 June 2019).

closely mirrors the strategies in the Roadmap for implementation and the WHO core functions are also relevant, although some functions were in higher demand than others, such as the provision of technical advice and guidance. To meet all needs, however, WHO has to work in partnership with other stakeholders internally and externally to address all needs across its core functions. Some of the disease subprogrammes within the WHO NTD Programme are doing this more successfully than others, for example, lymphatic filariasis. Progress has been made in several countries on NTDs with the support of WHO, while other countries are just starting their work in NTDs, resulting in different needs worldwide across the diseases. As countries move to elimination of NTDs, there is increasing demand for guidance on post-elimination surveillance, activities after validation and verification, new diagnostics, and supporting research.

Effectiveness: The past seven years have been successful in terms of reach and increased profile for NTDs thanks to the Member States, the NTD Programme and a variety of partnerships and collaborations with non-governmental organizations, donors, and pharmaceutical companies. There has been great success for the NTD medicine donation programme, with 1.762 billion treatments delivered to 1 billion people in 2017 across five preventive chemotherapy (PC) diseases (i.e. lymphatic filariasis, onchocerciasis, soil-transmitted helminthiasis, schistosomiasis, and trachoma). In general, effectiveness is varied across diseases, strategies and countries. In many cases, WHO guidelines are in place to support diseases, however, there were more activities in relation to some diseases than others (e.g. lymphatic filariasis versus taeniasis). WHO NTD Programme activities have not been evenly distributed across the various diseases; hence, there are some diseases that remain the “neglected of the neglected”.

Efficiency: There is indication that attempts have been made to ensure cost efficiencies in the WHO NTD Programme (e.g. integration of mass drug administration (MDA), delivery across diseases), but there are some fundamental challenges to the programme. The evaluation has highlighted that with existing resources, there remain those “neglected of the neglected diseases”. It is logical therefore that the addition of new NTDs without a corresponding increase in resources will only exacerbate this problem, and WHO NTD resources are not enough to address the priorities. Some areas for improvement identified included: improving the integration across diseases; improving intersectoral coordination across WHO (e.g. with Water, Sanitation and Hygiene, or WASH, and the Special Programme for Research and Training in Tropical Diseases, or TDR); and continued improvements to the medicine supply chain.

Sustainability: The focus of the WHO NTD Programme over the past few years has been on MDA, meaning other strategies for control and prevention of NTDs have not progressed to the same extent, challenging long-term results. There is an opportunity for WHO to refocus efforts under the new GPW13 under Universal Health Coverage (UHC), and given the SDGs, to include key areas of zoonotic diseases, integrated disease management, WASH, and vector control, as well as the health systems strengthening behind this (e.g. laboratory diagnostics, capacity building, and surveillance systems including post-elimination). Funding relationships are extremely important given the competitive environment for funding to meet the SDGs. On the other hand, the WHO NTD programme is reliant on donor funding for 85% of its budget, which can challenge the programme’s autonomy.

Equity: The consensus in the internal and external interviews is that NTDs are diseases of the poor, and hence the work being undertaken is addressing the needs of vulnerable populations. However, there are areas that remain issues in some cases such as rural and remote areas, conflict zones, and

internally displaced people. Improved monitoring would help to ensure that all vulnerable populations are, in fact, reached.

General Conclusions: The online survey revealed different perspectives between WHO staff and external stakeholders on the relevance of the programme on its needs and effectiveness. While some discrepancy is expected, there were several instances with significantly higher proportions of WHO staff rating overall performance or relevance much higher than external stakeholders. There will always be a higher level of demand than what the WHO NTD Programme is able to meet. For example, at the country level, WHO is called upon to do a great deal; however, WHO resource levels are seldom adequate facing such demand, and there may be questions on whether all activities and support fall within WHO's mandate (versus the Member State's mandate). However, there are important components (e.g. surveillance systems) that are required for NTDs that need continued WHO support.

The Way Forward

Development of New Roadmap

1) Another Roadmap, as well as the London Declaration-type document, can help to keep momentum on addressing NTDs, as the current efforts will not be sustained without future commitment.

- The focus of the Roadmap and WHO NTD Programme should be broadened beyond a focus on MDA for PC diseases, to further articulate and implement the other four strategies of the WHO NTD Programme (i.e. integrated disease management/case management, WASH, vector control, and zoonosis).
- Clear, achievable targets (with clear definitions in terms of coverage at different levels such as national, sub-national, implementation unit) and strategies for medicines, integrated disease management/case management, WASH, vector control and zoonosis should be outlined in the next Roadmap (beyond PC diseases). Sustainability targets need to be built into the strategy.
- There is an opportunity to formulate the Roadmap in an integrated way across the 20 NTDs, linking the NTD work to UHC, the GPW13, and the SDGs.
- The NTDs should remain a stand-alone programme. While integration across NTDs is needed, and work on NTDs is closely aligned with UHC, the SDGs and health system strengthening (HSS), there is a risk of losing sight of the NTD work that has been done and needs to continue if the programme is subsumed under a broader umbrella of HSS.

2) The list of NTDs has grown to 20 and given the international attention on NTDs and resources directed to them, there may be pressure to add other diseases to the list. As it stands, some diseases on the NTD list generate more resources and interest than other diseases, from WHO as well as other stakeholders. If too many diseases are added to the NTD list, without adequate resources and support from WHO and other NTD stakeholders (e.g. donors), then there will continue to be a discrepancy between the NTDs that are supported, and those that are the “neglected of the neglected”.

Integration of NTDs

3) The WHO NTD Programme should consider further integration across diseases (e.g. in the WHO guidelines and in coordination of meetings in Geneva). If the WHO NTD Programme is advocating for an integrated programme, WHO should also consider whether an integrated WHO guideline is best. An approach to address integration across all strategies (integrated vector control, WASH and skin diseases guidelines have recently been released related to NTDs) should be considered.

4) All NTD-relevant diseases and subprogrammes within the WHO Secretariat should be developing integrated plans, which should be reflected as a WHO NTD Programme-managed process in the next iteration of the Roadmap for implementation. Otherwise, there is a risk that this work will be done in silos by disease. The resultant integrated plan should then be reviewed internally at WHO (at all three levels) before being verified externally.

5) WHO's work must continue in the area of MDA for PC diseases, but there are "neglected of the neglected" diseases that will require more resources and intersectoral collaboration. For example, the WHO Secretariat may want to consider the distribution of staff across strategies, since there are staff for integrated disease management, zoonosis, and preventive chemotherapy and transmission control (PCT), but no WASH focal point in NTD at WHO Headquarters (HQ).

6) Since donors may have earmarked funding based on disease (and hence not taken into consideration co-endemic diseases or integrated strategies), the WHO Secretariat should work with donors to encourage a more integrated approach. Donors supporting MDAs could also be encouraged by WHO and other stakeholders (e.g. at NTDs partner fora) to dedicate funds for strategies in addition to MDA (e.g. WASH, vector control, etc.) that will help to eliminate NTDs.

Programme Management

7) A strong integrated programme management function is important to ensure efficiencies. It is important for WHO to move from coordination to collaboration and integration of NTDs. This includes moving from exchanging information and limiting duplication, to sharing resources, and working together to build interdependent systems that have a common benefit and purpose.²

- As an example, a formal mechanism to coordinate internally at the WHO Secretariat level is important to ensure intersectoral collaboration and integration that will further address NTDs (e.g. WASH, surgery, mental health, TDR).
- As noted above, partnerships are key to the successful implementation of the WHO NTD Programme and will continue to be critical. There needs to be a clear stakeholder analysis conducted by the WHO Secretariat at a global level with articulated strategies about how to engage external groups (or not to engage). Externally, this includes the WHO Secretariat engaging with disease specific organizations as well as in functional areas (e.g. the research agenda with the Coalition for Operational Research on NTDs, Drugs for Neglected Diseases initiative, etc.). This will help the WHO Secretariat to ensure that diseases/sub-groups collaboratively engage stakeholders in a more harmonized, consistent and integrated way.

² Schematic for a Continuum of Integration. Adapted from: Integrated Health Promotion: a practice guide for service providers (2003). State Government of Victoria, Melbourne, Australia. In: Social Planning and Research Council of British Columbia (SPARC BC)/ Collaboration and Network Development/ [website]. British Columbia: SPARC BC (<https://www.sparc.bc.ca/wp-content/uploads/2016/12/continuum-of-collaboration.pdf>, accessed 26 June 2019).

- The WHO Strategic and Technical Advisory Group (STAG) for NTDs role and membership, and other groups as needed (e.g. Regional Programme Review Groups, or RPRGs), should be more clearly aligned with the new Roadmap for implementation and the WHO NTD Programme moving forward.

8) WHO should conduct a business case study on the global leprosy programme to determine if it is optimally located where it is currently. There were enough issues raised during interviews to warrant, from an organizational effectiveness perspective, a closer look at the current situation and assess options moving forward.

9) The WHO Secretariat, in collaboration with industry, should conduct a closer evaluation of logistical supply chains (e.g. medicines), efficiencies and the logistical burden on staff, and consider alternative service delivery (e.g. third-party delivery), while ensuring quality assurance of medicines.

10) WHO needs to advocate a final push for eradication of dracunculiasis, to ensure that momentum is not lost. Momentum also needs to continue in the post-elimination phase of diseases. Investment on NTDs should continue in all WHO regions, as needed.

11) Work should be undertaken to ensure that WHO meets the needs of the most vulnerable for NTDs (e.g. people in remote and rural areas, conflict zones, women/girls, people with disabilities, internally displaced people).

12) From a programme management perspective, the programme should have a well-articulated programme logic model and a specific, detailed performance measurement framework to ensure management has performance data for decision-making. In addition:

- More systematic tracking is needed to understand the effectiveness of some outputs including reach (e.g. training outputs, dissemination of documents).
- WHO should ensure that disaggregated data is collected and monitored to understand reach to vulnerable populations on an ongoing basis.

Guidelines

13) WHO guidelines, though they vary in scope and availability from one disease to the next, are viewed as critical. WHO can seek ways to expedite guideline development, including communicating clearer timelines/milestones for guideline development to stakeholders. WHO should develop an overall forward-looking plan identifying the guidelines needed in the upcoming future, including detailed timelines for guideline development, and have this reviewed by the WHO NTD programme staff at all levels and WHO expert groups so there is agreement on schedule.

- As efforts continue and targets are met on NTDs, further work needs to be done to address areas such as the changing nature of NTDs (e.g. more specific diagnostics) in WHO guidelines.
- WHO needs to ensure greater integration of the guidelines across other strategies of the Roadmap to ensure sustainability.
- The Chagas guidelines could be used as a case study to see if it is feasible for regions to take the lead on guideline development where deemed appropriate.
- WHO needs formal dissemination plans in place for WHO products and services (including WHO guidelines and advocacy materials) to ensure they reach intended users in a timely manner. This includes timely translation of materials.

Sustainability

14) The WHO NTD programme needs to set the conditions for sustainability (e.g. institutionalization of NTD programming by Member States, drug procurement) and integrate this into the WHO NTD Programme.

- One process that the WHO NTD Programme may consider would be a system to remove Member States from the MDA list, to encourage the institutionalization of NTD drugs and programmes in countries.
- For any diseases control programme, there needs to be good surveillance data. As the WHO NTD Programme moves forward post-elimination, these surveillance systems will become more important as the WHO NTD Programme moves towards elimination and eradication of diseases. WHO should work with partners and countries to strengthen NTD surveillance systems at the country level.

Recommendations

Following from the previous section on the way forward, the following presents each recommendation along with recommended specific actions.

Strategic Recommendation 1	Specific Actions
An updated Roadmap, as well as the London Declaration-type document, is needed to help to keep momentum for NTDs.	<ol style="list-style-type: none">i. The focus of the Roadmap and WHO NTD Programme should broaden beyond a focus on MDA for PC diseases, to include further articulation and implementation of the other four strategies of the WHO NTD Programme (integrated disease management/case management, WASH, vector control, and zoonosis) with clear, achievable community mobilization and strategies for all NTDs. Sustainability targets need to be built into the strategy.ii. The importance of integration across the 20 NTDs should be a focus of the new Roadmap, linking the NTD work to the GPW13, UHC, HSS and the SDGs.iii. The list of NTDs included in the Roadmap for Implementation and in the WHO NTD Programme needs to be safeguarded. The WHO Secretariat and its partners need to ensure adequate resources and support for the NTDs that are included on the list.
Strategic Recommendation 2	Specific Actions
The WHO NTD Programme should consider further integration across NTDs.	<ol style="list-style-type: none">i. To facilitate integration across NTDs, including within the WHO NTD Programme: providing integrated guidelines (e.g. across strategies) and supporting their implementation, planning across diseases in an integrated manner, and ensuring that staffing aligns with integrated strategies across diseases.ii. From a partnership perspective, WHO should encourage donors to adopt an integrated approach to NTDs and ensure intersectoral collaboration within WHO and externally to support work on NTDs.

Strategic Recommendation 3

Specific Actions

A stronger overall integrated programme management function at NTD HQ level to ensure efficiencies, moving from coordination to collaboration and integration of NTDs, and ensure sustainability.

- i. Consider a formal mechanism to coordinate internally at WHO HQ to ensure intersectoral collaboration and integration that will further address NTDs (e.g. with programmes on WASH, surgery, mental health, UHC), as well as research needs (e.g. by formulating a well-articulated research partnership with TDR).
- ii. The NTD Programme should conduct a clear stakeholder analysis with articulated strategies about external engagement to ensure that diseases/sub-groups collaboratively engage stakeholders in a more harmonized, consistent and integrated way.
- iii. The WHO NTD Programme should have a well-articulated programme logic model and a specific, detailed performance measurement framework to ensure management has performance data for decision-making.
- iv. The WHO NTD Programme should assess the logistical support role it provides (i.e. whether it fits within WHO's core functions, and if it is adequately resourced at all levels of WHO).
- v. As country-level NTD surveillance data is critical, surveillance systems will become more important as the WHO NTD Programme moves towards elimination and eradication. WHO should work with partners and countries to strengthen NTD surveillance systems at country levels.
- vi. The WHO NTD Programme needs to set the conditions for sustainability, which are defined clearly (e.g. domestic institutionalization, drug procurement) and integrated into the WHO NTD Programme.

1 Background to the Evaluation

1.1 Context

Neglected tropical diseases (NTDs) are the cause of much human suffering and death and pose a devastating challenge to health for millions of people. They remain a serious impediment to poverty reduction and socioeconomic development.³ Control, elimination and even eradication of these diseases have been shown to be feasible through a coordinated and integrated approach adopted since 2007. The World Health Organization's (WHO's) efforts to combat NTDs culminated in WHO's 2011 "Accelerating work to overcome the global impact of NTDs: A Roadmap for implementation" (the Roadmap),⁴ which targeted 17 NTDs, and the World Health Assembly (WHA) resolution WHA66.12⁵, which was adopted by the Sixty-sixth WHA in May 2013. The Roadmap for Implementation timeline is 2012-2020, overlapping with the 12th and 13th General Programme of Work (GPW).

GPW12 (2014-2019) identified NTDs as a priority programme area, with a goal to achieve "*Increased and sustained access to essential medicines for neglected tropical diseases*". Two outcome indicators were established to help monitor programme achievement: (a) the number of Member States certified for eradication of dracunculiasis, from a baseline of 183 countries in 2014 to an expected target of 194 countries in 2019; and (b) the number of Member States having achieved the recommended target coverage of population-at-risk of lymphatic filariasis, schistosomiasis and soil-transmitted helminthiasis through regular anthelmintic preventive chemotherapy, from a baseline of 25 countries in 2012 to an expected target of 100 (2020).

GPW13 (2019-2023) identified that NTDs continue to pose a major public health challenge in many countries and that a massive, focused effort is still required to eradicate NTDs. As both the GPW12 and the WHO NTD Roadmap come to an end, an evaluation of WHO's efforts in combatting NTDs is warranted.

This evaluation is a corporate priority of the 2018-2019 evaluation workplan, approved by the 142nd session of the Executive Board in January 2018.⁶

1.2 Evaluation Objectives and Scope

The overall purpose of the evaluation is to assess the accomplishments of the WHO NTD Programme as well as the lessons learnt throughout implementation at the three levels of the organization. Please

³ Neglected Tropical Diseases. In: World Health Organization/Health Topics [website]. Geneva: World Health Organization (http://www.who.int/neglected_diseases/about/en/, accessed 21 June 2019).

⁴ Accelerating work to overcome the global impact of neglected tropical diseases – A roadmap for implementation. Geneva: World Health Organization; 2011.

(http://apps.who.int/iris/bitstream/10665/70809/1/WHO_HTM_NTD_2012.1_eng.pdf?ua=1, accessed 25 June 2019).

⁵ Resolution WHA66.12 Neglected Tropical Diseases. In: Sixty-sixth World Health Assembly; Geneva, 20-28 May 2013. Resolutions and decisions. Geneva: World Health Organization 2013 (WHA66/2013/REC/1 http://apps.who.int/gb/ebwha/pdf_files/WHA66-REC1/A66_REC1-en.pdf#page=25, accessed 25 June 2019).

⁶ Organization-wide evaluation workplan for 2018–2019. In: 142nd World Health Organization Executive Board; Geneva 22-27 January 2018. Main Document Evaluation: update and proposed workplan for 2018–2019. Annex .World Health Organization (EB142/27) (http://apps.who.int/gb/ebwha/pdf_files/EB142/B142_27-en.pdf, accessed 25 June 2019).

see Annex A for the Terms of Reference (TOR). The goal is to provide lessons learnt to the upcoming WHO efforts in the combat against NTDs, including the development of a new Roadmap.

The purpose of the evaluation is:

1. To document successes, challenges and gaps of the WHO NTD Programme during the biennia 2014-2015 and 2016-2017 with a focus on the WHO Roadmap for implementation; and
2. To provide lessons learnt and strategic recommendations to the design and operationalization of the next steps addressing the remaining toll of NTDs in the context of the GPW13 (2019-2023).

The scope of the evaluation includes the WHO NTD Programme and the Roadmap between January 2014 to December 2017. While the Roadmap identifies 17 diseases, the GPW12 identifies outcomes for four priority NTDs, including dracunculiasis, lymphatic filariasis, schistosomiasis and soil-transmitted helminthiasis. The WHO NTD Programme, however, includes 20 NTDs as of 2017⁷, but an evaluation of each specific disease is outside the scope of this evaluation. While key documents prior to January 2014 (e.g. the Roadmap, the London Declaration, etc.) were accessed, the focus of the evaluation was on the 2014-2017 timeframe.

This evaluation embodies both a summative and formative focus. It is summative in nature in that it examines the WHO NTD Programme after a long programming period as the end of the Roadmap approaches. The evaluation is also formative in approach in that it is intended to shape how NTDs are addressed in the GPW13. Its purpose is primarily about learning, and to provide useful recommendations based on the lessons learnt in overcoming the challenges faced by WHO in the implementation of the WHO NTD Programme in the context of the GPW12, to help maximize WHO's effectiveness, and provide a sound basis for the design of the follow-up strategies in the combat against NTDs.

1.3 WHO NTD Programme

The NTD Programme is aligned to the WHO core functions, with the notable addition of the provision of essential medicines as a result of drug donations from the pharmaceutical industry launched with the London Declaration⁸ in 2012. For the purpose of this evaluation, the provision of essential medicines has been included under the WHO core function⁹ of “providing leadership and engaging in partnerships”, given WHO's role in negotiating and administering the donation agreements with the industry. WHO also coordinates and arranges shipments for most of the donated medicines. Please see the Findings sections for more information on essential medicines.

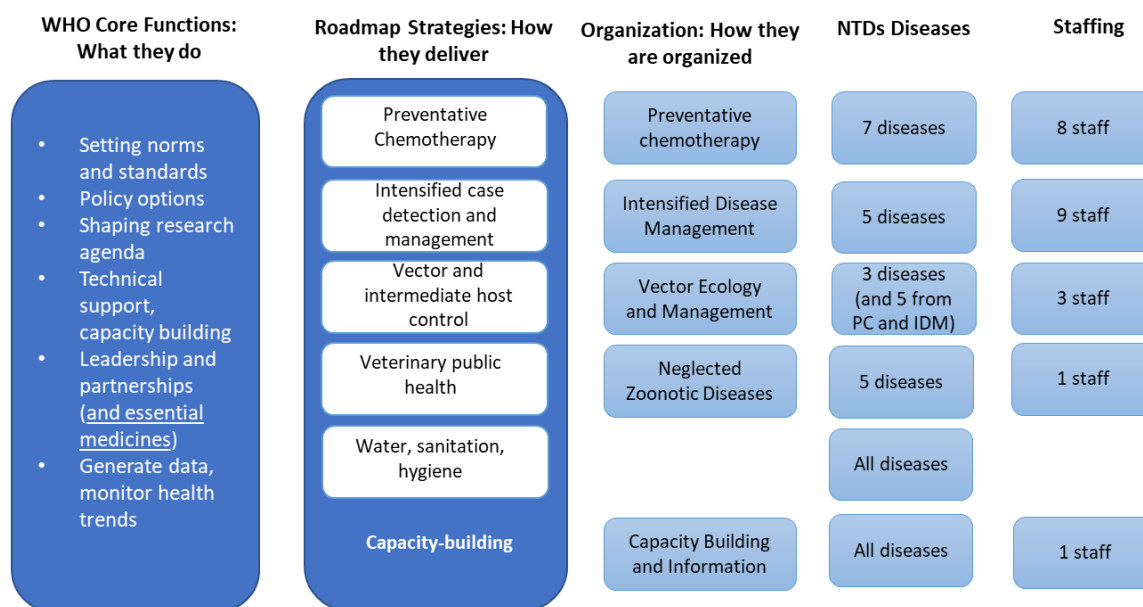
⁷ In 2017, the Strategic and Technical Advisory Group for NTDs received proposals for additional diseases. At this time, three diseases were added to the NTD portfolio, in addition to the 17 diseases that were originally included in Roadmap: chromoblastomycosis and other deep mycoses, scabies and other ectoparasites, and snakebite envenoming.

⁸ The London Declaration on Neglected Tropical Diseases. Uniting to Combat Neglected Tropical Diseases: ending the Neglect and reaching 2020 Goals. In World Health Organization/Neglected Diseases/London Declaration NTDs [website]. Geneva: WHO (https://www.who.int/neglected_diseases/London_Declaration_NTDs.pdf, accessed 26 June 2019).

⁹ WHO: Unique values, functions and comparative advantages. In: WHO Twelfth General Programme of Work; not merely the absence of disease. Geneva: World Health Organization 2014. (https://apps.who.int/iris/bitstream/handle/10665/112792/GPW_2014-2019_eng.pdf;jsessionid=F4717DA297EA2C671EF852451E14273F?sequence=1, accessed 26 June 2019).

The programme itself is also aligned to the six strategies of the Roadmap, understanding that WHO has its own water, sanitation and hygiene (WASH) programme and the NTD programme coordinates internally with that unit. Figure 1 presents the strategies, the respective NTD organizational units involved, and the staff complement (only medical officers, scientists and technical officers are included in these numbers) in the form of a programme overview.

Figure 1: Programme Overview¹⁰



There is also a logistics and operations unit included in the Preventive Chemotherapy (PC) group in the NTD programme. The NTDs classified according to strategies are as follows (see Table 1):

Table 1: Roadmap Strategies by NTD and Staff Complement

Strategy	NTDs and Staff Complement
PC	Dracunculiasis, leprosy, lymphatic filariasis, onchocerciasis, schistosomiasis, soil-transmitted helminths, trachoma (7)
Innovative and intensified disease management	Buruli ulcer, Chagas disease, human African trypanosomiasis, leishmaniasis, yaws (5)
Vector ecology and management	Dengue, Zika, chikungunya (3) (as well as the diseases the PC and IDM diseases of leishmaniasis, schistosomiasis, lymphatic filariasis, Chagas and onchocerciasis)
Neglected zoonotic diseases	Foodborne trematode, echinococcosis, rabies, snakebite envenoming, and taeniasis/cysticercosis (5)
Water, sanitation and hygiene	All of the above with exception of snakebite envenoming

1.4 WHO NTD Programme Results Framework

To develop the WHO NTD Programme Results Framework, work included reviewing GPW12 (2014-2019) that contains a high-level, generic results chain for WHO programmes. Based on that results

¹⁰ Note that the organizational structure and staffing of the NTD Programme is currently undergoing review, and the information presented here corresponds to information as of March 2018 and provided to the evaluators in October 2018.

chain, and a review of the Roadmap, the GPW12 and respective programme budgets, a logic model for the programme was drafted. The draft logic model was reviewed at the inception meeting in September 2018 and modified based on discussions with the Evaluation Management Group members, the Evaluation Office team, and senior members of the NTD group.

A diagram of the programme’s Logic Model is found in Annex B. Activities are drawn from WHA66.12 which also closely aligns to the core functions of WHO as listed in GPW12. The inputs into the WHO NTD Programme include financial (at the HQ, ROs, and country level), human (e.g. experts, researchers, etc.) and material resources (e.g. donations of medicines from pharmaceutical companies, etc.). Medicine donations have a significant role in the NTD Programme and in this report. Medicine donations for NTDs come from established partnerships and are therefore placed under the WHO core function of providing leadership and engaging in partnerships. Essential medicines are also captured under a specific long-term outcome taken for GPW12. Other outcomes are taken from the GPW12 programme budgets.

The following list presents the activities and associated products and services that are produced by the programme. This list is generic and more detail on associated products and services was captured during the evaluation.

<u>WHO Core Functions</u>	<u>Associated Products / Services / Activities</u>
1) Setting norms and standards, and promoting and monitoring their implementation	• norms, standards, guidelines, manuals, publications
2) Articulating ethical and evidence-based policy options	• policy briefs, guidance documents, publications
3) Shaping the research agenda and stimulating the generation, translation and dissemination of valuable knowledge	• publications, research initiatives
4) Providing technical support, catalysing change, and building sustainable institutional capacity	• training programmes, technical meetings and support, conferences, seminars, tools
5) Providing leadership on matters critical to health and engaging in partnerships where joint action is needed	• advocacy materials, partnerships, strategies, medicines and supplies, World Health Assembly resolutions, funding, STAG, RPRGs
6) Generating data and monitoring health trends	• information systems, databases, reports

The outputs produced, and services provided by the WHO NTD Programme, are targeted to the programme’s direct recipients (please see Table 2 and Logic Model in Annex B). For purposes of the evaluation, these outputs are called Knowledge Products and Services and can be a publication, guidance document, training workshop, or coordination meeting for information sharing.

The result chain of the Knowledge Products and Services is defined in terms of its reach, usefulness and use.¹¹ The following table provides a definition as well as highlights where this result chain has been incorporated in the Logic Model.

Table 2: Knowledge Translation Result Chain

Result Chain	Definition	Outcomes
Reach	The extent to which and other WHO NTD Knowledge Products and Services attain their intended audiences.	Immediate Outcome <ul style="list-style-type: none"> • Target audience(s) has access to Knowledge Products and Services
Usefulness	The perceived quality of WHO NTD Knowledge Products and Services in terms of being appropriate, relevant, applicable and practical.	Immediate Outcome <ul style="list-style-type: none"> • Knowledge Products and Services address needs of targeted audience
Use	The application of NTD Knowledge Products and Services with regards to decision making in clinical, public health and policy-making contexts.	Intermediate Outcome¹² <ul style="list-style-type: none"> • Implementation and monitoring of the WHO Roadmap for NTDs facilitated, and • Implementation and monitoring of NTD control interventions facilitated by evidence-based technical guidelines and support.

The GPW12 indicates that the achievement of outcomes is an area of joint responsibility with Member States and partners, with WHO Secretariat accountability for outputs of products and services. Following the immediate outcomes of the WHO NTD Programme’s knowledge products and services, and the intermediate outcomes related to their use, come two long-term outcomes outlined in the GPW and programme budgets related to increased access to health services and reduction of risk factors:

- Increased and sustained access to essential medicines for NTDs; and
- Increased and sustained access to NTD control interventions.

The ultimate outcomes are:

- Eradication of dracunculiasis; and
- Eradication and elimination (country, regional, global) and control of NTDs.

1.5 Evaluation Matrix

The evaluation Terms of Reference (TOR) identified the evaluation criteria and questions as outlined below. Please see Annex C for a complete Evaluation Matrix that was adapted to address the questions outlined below.

The high-level evaluation questions are:

EQ 1. How relevant was the WHO Secretariat’s programme to increase and sustain access to essential medicines and control interventions for NTDs?

EQ2 Which were the main results of the WHO Secretariat, at its three levels, in terms of increasing and sustaining access to essential medicines and control interventions for NTDs?

¹¹ Adapted from Tara Sullivan, Molly Strachan and Barbara Timmons, 2007. Guide to Monitoring and Evaluating Health Information Products and Services, USAID, 2007.

¹² These correspond to the WHO NTD Programme outputs as defined in the GPW programme budgets.

More specifically, which were the main results related to:

- 2.1. the implementation and monitoring of the NTD Roadmap for implementation 2012-2020?
- 2.2. the implementation and monitoring of NTD control interventions facilitated by technical guidelines.

EQ3: Which were the main influencing factors that either facilitated or hampered the successful achievement of the outcomes and outputs of the WHO NTD Programme?

- 3.1 How efficient was the WHO Secretariat in delivering its key outputs for the level of costs incurred?
- 3.2 How could the WHO Secretariat have contributed more effectively to increase and sustain access to essential medicines for NTDs?

EQ4: How did WHO work with others to advance the outcomes and outputs of the WHO NTD Programme?

These questions can be mapped to the Organisation for Economic Co-operation and Development Assistance Committee criteria of relevance (EQ1), effectiveness (EQ2, EQ3), and efficiency (EQ3), with EQ4 focusing on working with others (including effectiveness aspects). In addition, questions of sustainability (perception) and equity (given focus on vulnerable populations) were included as requested by programme representatives during the inception phase.

As noted in the TORs (see Annex A), the evaluation did not assess impact, as attribution of changes in the NTD burden cannot be attributed to WHO alone, considering the nature of its response, the evidence base available and the number of actors in the health sector.

1.6 Methods

The evaluation approach collected and triangulated data from multiple lines of evidence, as outlined in the Evaluation Matrix in Annex C, including:

- i. **Field Visits:** field visits to the Pan American Health Organization (AMRO/PAHO) (Washington, DC), the WHO Regional Office for Africa (AFRO) (Brazzaville, Congo), the WHO Regional Office for the Eastern Mediterranean (EMRO) (Cairo, Egypt), the WHO Regional Office for the Western Pacific (WPRO) (Manila, Philippines), and the WHO Regional Office for South-East Asia (SEARO) (New Delhi, India) were undertaken between November 2018 and January 2019. These field visits involved conducting interviews with regional and country staff, as well as external stakeholders (see interviews below), and provided information for the country case studies (see more details below).
- ii. **Interviews:** a total of 147 interviews were conducted (67 internal with WHO and 80 external interviews). WHO interviews included those at the country, regional, and headquarters levels. External interviews included Member States representatives, donors, and partners. Interviews were conducted in English, French and Spanish. Please see Annex D for the interviewee list.
- iii. **Document Review:** relevant documents such as strategies, reports, surveillance data, and guidelines were reviewed (over 140 documents were reviewed). See Annex E for list of documents reviewed.
- iv. **Internal Survey:** an online survey (available in English, French and Spanish) was distributed to WHO staff working on NTDs in the three levels of the organization. In total, 210 WHO staff were contacted to take part in the survey, and the survey received 133 responses giving a

response rate of 63.6% and a survey completion rate of 77%. See Annex F for internal survey results including more details on the survey administration.

- v. **External Survey:** an online survey (available in English, French and Spanish) was emailed to Member States representatives and other partners. In all, 640 stakeholders were known to have been contacted and the survey received 277 responses giving a response rate of 43% and a survey completion rate of 66%. See Annex G for external survey results including more details on the survey administration.
- vi. **Country Case Studies:** five country case studies were conducted (Peru (by telephone), Egypt, Congo, Philippines, India (in person)). These were largely selected by convenience sample, as these were the countries where the evaluation team visited for the regional field visits. Peru was chosen as a country case study in conjunction with AMRO/PAHO and the evaluators.
- vii. **Disease Case Studies:** four disease case studies were conducted (lymphatic filariasis, schistosomiasis, soil-transmitted helminthiasis, leishmaniasis). These were chosen as they: have World Health Assembly resolutions for elimination; showcase the full range of interventions to reach control and elimination targets; are at various stages of progress towards elimination; and three of the four align with GPW12 priority diseases.
- viii. **Bibliometrics:** Download rates and the print run (number of copies printed) of WHO NTD publications from 2014 to 2017 were extracted as supplemental data for the document review. A total of 370 NTD publications were identified, however download rates of the publications were only available from January 2016 to present on the Institutional Repository for Information Sharing (IRIS) database.

1.7 Analysis

1.7.1 Qualitative Data Analysis

For the qualitative data captured from document review, interviews (including general interviews, four disease case studies, and five country case studies) and open-ended qualitative responses in the surveys, the evaluation team undertook a three-stage analysis process of the different lines of qualitative evidence. NVivo for Mac was also used to support the qualitative data analysis.

Table 3: Qualitative Analysis

First stage analysis	<p>Basic framework: By line of evidence, evaluation question, sub-question (based on the evaluation matrix).</p> <p>First level coding: Coding interview questions by internal versus external to nodes/evaluation questions, coding documents by evaluation question.</p>
Second stage analysis	<p>Second level coding: Themes identified that were common or recurrent (within and across stakeholder groups for interviews), patterns in data, sequences. At this stage, comparison of themes across lines of evidence and triangulation occurred, e.g. with survey results, across case studies.</p>
Third stage analysis	<p>Findings: Developed based on lines of evidence as described below.</p>

The report does not quantify the qualitative data, but there are instances when the report provides proportional qualifiers to the data as per the following broad guidelines:

- Few: less than 20%;
- Some: more than 20%, but less than 40%; and

- Many: more than 40%, but less than 80%.

1.7.2 Quantitative Data Analysis

The online surveys were conducted and analysed using SurveyMonkey. Basic demographic analysis and frequencies are reported in the Survey Technical Reports in Annex F and G.

1.7.3 Developing Findings and Triangulation

Internal reports were developed for each line of evidence (i.e. internal interviews, external interviews, four diseases case studies, five country case studies, internal survey results, external survey results, document analysis). Conclusions and recommendations were developed based on the multiple lines of evidence in a two-day meeting of the evaluation team members who conducted data collection and analysis. Triangulation continued at this stage, and additional data was sought, as needed, to overcome any gaps in the analysis. Preliminary findings, supported by a detailed evidence matrix, were presented to the WHO Evaluation Office in March 2019 for discussion and clarifications.

The findings presented in this report reflect this thorough and detailed analysis process. Findings that are inconsistent between groups are noted. Detailed case study results from specific countries are not presented, given potential sensitivities. However, the findings below reflect the commonalities across case studies (both disease and country level), as well as the other evidence lines.

1.8 Limitations

Limitations of this evaluation, and how they have been mitigated, include:

- The scope of the evaluation was limited to 2014 to 2017. However, some key documents from prior to 2014, such as the Roadmap and the London Declaration, were included and recent information provided (i.e. from 2018) was included if it was identified in the data collection (via interviews).
- The evaluation covers the WHO NTD Programme, and this includes 20 NTDs. It was not possible to evaluate each disease in detail. Hence, the evaluation is a general assessment of the WHO NTD Programme. However, disease specific case studies were conducted to probe additional details. The case studies, though not representative, captured a sizeable share of the NTD “experience”, and thus provided further details on many of the key issues identified through the other data collection methods.
- Three additional diseases (chromoblastomycosis and other deep mycoses, scabies and other ectoparasites, and snakebite envenoming) were added to the WHO NTD portfolio in 2017. Hence, these diseases were only on the NTD list for a few months of the evaluation period and had fewer activities associated with them, given the time period of the evaluation.
- For the survey, WHO staff provided lists for respondents. This may bias the survey, as it may include those who interact the most with the WHO NTD Programme. However, the survey was sent to a wide range of stakeholders, and many respondents shared the survey with others. Response rates were difficult to track as some people sent the survey to others for completion. To help facilitate response tracking, stakeholders were asked to inform the evaluation team when the survey was shared, to ensure response rates could be tracked.
- There were several data availability issues with bibliometrics analysis. IRIS only has statistical data for the 2016-2017 period of the evaluation, and therefore download rates for NTD publications were based on partial data. Data available corresponded to 5 ROs. However, bibliometrics represented a minor contribution to the data collection, and limitations were offset by a thorough document analysis.

- For the document review, the WHO IRIS and website were searched, and documents were collected during the interviews and field visits. This data gathering approach may result in limitations, including unpublished documents not being identified and limited documents being received from the country level. To address this, documents were collected at the field visits and in interviews, and additional documents were sought when gaps in the analysis were identified.
- For the document review, the NTD Programme did provide financial information, but it was not in the format or structure requested and was inadequate for the purpose of analysis. To address this issue, the evaluation relied on other non-financial data sources.

1.9 How to Read this Report

The following sections present the evaluation findings, conclusions and recommendations. Evaluation findings are presented by Evaluation Question (and evaluation subquestion if applicable) as per the Evaluation Matrix (see Annex C).

- **Section 1** presents the background of the evaluation in terms of context, evaluation objectives and scope, and approach;
- **Section 2** presents the evaluation findings on relevance of the WHO NTD programme;
- **Section 3** presents the evaluation findings related to the effectiveness of the WHO NTD programme;
- **Section 4** presents the evaluation findings related to the efficiency of the WHO NTD programme;
- **Section 5, Section 6 and Section 7** presents the evaluation findings related to lessons learnt, sustainability and equity of the WHO NTD programme; and
- **Section 8, Section 9 and Section 10** presents the evaluation's conclusions, way forward, and recommendations.

The focus of this evaluation is on the WHO NTD Programme at the Headquarters, Regional, and Country levels. Where findings vary across these levels, this is noted. Where applicable, relevant evaluation findings about Member States or other NTD stakeholders are identified.

2 Relevance

Relevance refers to the extent that the WHO NTD Programme addresses the needs of Member States and other stakeholders involved in the fight to combat NTDs and its alignment to global priorities.

2.1 To what extent was WHO Secretariat's programme to increase and sustain a) access to essential medicines and b) control interventions relevant?

2.1.1 To what extent was the programme designed to address the identified needs?

In general, the NTD Programme aligns to the needs of Member States as identified in the Roadmap, WHA resolutions and SDGs.

Prior to the 2014-2017 evaluation time period, there was a commitment to addressing NTDs by several stakeholders through various means. Member States needs and specific strategic and resolutions included WHO-led initiatives, such as the WHO Roadmap on NTDs (2012), many WHA resolutions on NTDs, both prior to the evaluation period and as well during this period¹³, and the SDGs in 2015. During the same time period as the release of the Roadmap (2012), 20 partners working in NTDs, including pharmaceutical companies, non-governmental organizations, country governments, and donors signed the London Declaration on NTDs, with a focus on commitment of essential medicines for ten diseases (Guinea worm disease, lymphatic filariasis, leprosy, sleeping sickness (human African trypanosomiasis), blinding trachoma, schistosomiasis, soil-transmitted helminths, Chagas disease, visceral leishmaniasis and river blindness (onchocerciasis)).

Within the strategies, resolutions and commitments, there is a recognition of the significant burden of disease that NTDs represent. As an example, according to the Roadmap, 130 countries required PC for four of the PC-related NTD diseases. There are, however, 20 NTDs covered by the WHO Programme which can represent more complicated needs beyond essential medicines, due to the diversity of their causative agents, vectors, intermediate hosts, morbidity, mortality, associated stigmatization and in some cases their epidemic potential.

The strategies, resolutions and commitments have raised awareness and profile of NTDs in Member States and provided impetus for the need to work on NTDs. However, NTDs still must compete with other priorities within Member States. During the evaluation period, Member States' commitment to NTDs was facilitated by the availability of essential medicines for NTDs,¹⁴ donor support, and WHO NTD guidelines.

The approach of the WHO NTD Programme closely mirrors the NTD Roadmap strategies of PC, intensive case detection and management, vector control, veterinary public health, and provision of safe water and hygiene. The PC strategy has been well supported by the medicine donation programme, first launched with the London Declaration in 2012. Intensive case detection and

¹³ World Health Assembly (WHA) Resolutions on Neglected Tropical Diseases: 1948–2019. In: World Health Organization/Health Topics [website]. Geneva: WHO 2019 (https://www.who.int/neglected_diseases/mediacentre/resolutions/en/, accessed 25 June 2019).

¹⁴ Note that throughout the report, the terms “drugs” (e.g. Mass Drug Administration) is used, as is the term “medicine” (e.g. “essential medicines”) depending on the term used in documents or by stakeholders. Where applicable, it is noted if a finding is related to drug coverage at a country level, or drug coverage of number of people treated.

management, also supported by donated medicines under the London Declaration, are helping to address other diseases such as leishmaniasis and buruli ulcer to name a few. The other strategies are also evident in the WHO NTD Programme, but require higher levels of collaboration with other WHO programmes and in some cases (e.g. water, sanitation, and hygiene) with a separate sector of stakeholders. The different strategies are further elaborated later in this report.

The WHO approach at country level varies. In general, WHO aligns with priorities set by countries. Priority setting may result from joint WHO-country efforts to better understand the disease burden. As an example, the Leishmaniasis programme first helped to define the need through efforts to identify and report on the disease burden, and those monitoring efforts have continued. All five countries in the country case studies had developed programmes that covered at least three NTD diseases. There is variation in approaches, with some of the case study countries developing national NTD strategies and creating NTD programmes, while other countries have disease-specific strategies and deliver programmes through existing departments. In most cases, NTDs were identified in national health plans.

Certain WHO core functions are viewed by interviewees and survey respondents as better addressing the needs of Member States than others (please see Section 1.3 to see how the NTD Programme aligns to WHO core functions). According to interviews and surveys, WHO NTD Programme guidance ranked high (given the normative role of WHO), with 87% (n=101) of WHO survey respondents and 65% (n=150) of external stakeholder respondents citing norms, standards and guidelines as mostly or completely addressing Member States' needs. Provision of essential medicines¹⁵ was also identified as one of the areas WHO is meeting Member States' needs, with 90% of WHO staff (n=104) and 64% of external stakeholder respondents (n=148) saying the needs of Member States were mostly or completely met in this area.

Areas for improvement to meet Member States needs that were identified by some internal and external interviewees included the need for augmented WHO support for the NTD research agenda, operational research and information systems. This will be discussed in further detail in Section 3 on effectiveness.

Key Findings:

- In general, the NTD Programme aligns to the needs of Member States as identified in the Roadmap, World Health Assembly resolutions and SDGs, and their own country strategies.
- The NTD programme closely mirrors the strategies in the Roadmap.
- Awareness of NTDs in Member States has been raised, however, NTDs still must compete with other priorities within Member States.
- The medicine donation programme launched by the London Declaration directly supports two of the programme strategies (PC and intensive case detection and management).
- WHO core functions of providing norms and standards (guidance) and provision of essential medicines are rated the highest in terms of meeting Member States' needs.

¹⁵ Essential medicines donated to control, eliminate and eradicate neglected tropical diseases. In: World Health Organization/Neglected Tropical Diseases/Donations/Contribution of pharmaceutical companies to the control of NTDs [website]. Geneva: World Health Organization (https://www.who.int/neglected_diseases/Medicine-donation-04-march-2019.pdf?ua=1, accessed 26 June 2019).

2.1.2 To what extent are the needs continuing? What, if any, significant changes have occurred in the NTD environment?

The interviews and case studies showed that Member States needs on NTDs are continuing, with needs being diverse. Countries are at different stages of progress in addressing NTDs, and this progress also varies by disease. As mentioned in the previous section, the needs of Member States are determined in their own national health plans, and country case studies demonstrated that the approach on how they deal with those needs varies. The NTD Programme is structured to address all NTD diseases, with five strategies across the six functions. What happens at country level is much more selective, depending on the disease burden in the country and what it has prioritized.

Interviewees (general and case studies) and qualitative survey responses identified other Member States needs for the Neglected Tropical Disease Programme including:

- continuing research to understand changing vectors (e.g. as a result of climate change);
- researching and providing new diagnostics (e.g. more sensitive diagnostics as countries approach elimination);
- researching and providing new drugs (e.g. given potential resistance to drugs or potential new drug combinations);
- addressing NTD capacity issues at the country level (e.g. given turnover of staff); and

For lymphatic filariasis, at least 20 (28%) endemic countries are now under post-MDA surveillance to demonstrate that elimination has been achieved. **Reference:** Guideline – Alternative Mass Drug Administration Regimens to Eliminate Lymphatic Filariasis, p. xv.

Integrated Approach

Schistosomiasis is endemic in areas of Cambodia and Lao People’s Democratic Republic in some villages bordering the Mekong River. Mass drug administration over 20 years had reduced prevalence, but elimination was illusive. A community-led initiative called CL-SWASH was launched in 2016 and builds on national water, sanitation and hygiene planning. It is being implemented jointly by governments of both countries and the communities themselves, facilitated by WHO, with the aim of elimination. The project combines MDA with community-level WASH activities. The countries hope to roll it out to cover all endemic villages based on past success.

Reference:

https://www.who.int/docs/default-source/wpro---documents/regional-directors-report/2017/communicable-diseases/2017-01-dcd-04-mvp.pdf?sfvrsn=935f2c3a_6

- increasing the focus on other NTD strategies (vector control, WASH, zoonosis).

Some interviewees, particularly internal across WHO levels, identified that there is a need for WHO Secretariat to integrate programming across NTDs, striking the right balance of integrated approaches and the need for disease-specific focus for certain diseases. Interviewees noted that this also includes linking NTDs to health system strengthening and Universal Health Coverage (UHC). This integrated approach of Mass Drug Administration (MDA) with WASH is highlighted in the country-level example in the pull-out box in this section.

Many interviewees, both external and internal, felt it was important that the WHO Secretariat update the Roadmap moving forward, as the current Roadmap will end in 2020. Respondents noted that this will help to re-establish momentum amongst all stakeholders, including pharmaceutical company commitment for NTDs. A few respondents also noted that a new London Declaration-type document would also assist with ensuring commitment amongst these companies.

Formal documentation (such as WHA resolutions, a revised Roadmap, an updated London Declaration, etc.) are identified by respondents as key documents for advocacy by WHO and other NTD stakeholders. These are key to ensuring Member States have, and keep, NTDs on their agendas. If these types of advocacy documents are older or are out of date (and only previous Member States administrations have signed these), then Member States may not view their content (e.g. highlighting the importance of NTDs, etc.) as a priority. As a result, momentum on NTDs may be at risk.

Key Findings:

- The needs of Member States are more diverse, as countries are at different stages of progress in addressing NTDs, which also varies across diseases.
- Priority needs include support on addressing capacity gaps on post-elimination verification, surveillance and diagnostics, and supporting research.
- Further integration of programming across NTDs, striking the right balance of integrated approaches and the need for disease-specific focus for certain diseases, is suggested. Another identified opportunity is linking the NTD work with UHC.
- There is a need for a new Roadmap to renew commitment and support advocacy and awareness raising.

2.2 To what extent is the WHO NTD Programme consistent with global priorities and NTD Roadmap?

2.2.1 To what global priorities is the WHO NTD Programme linked? To what NTD Roadmap outcomes is the WHO NTD Programme linked?

The NTD programme is linked to global priorities as outlined in the WHA resolutions, and the SDGs. It is closely linked to the Roadmap in terms of outcomes and strategies.

According to document review, overall, the NTD Programme is well-aligned to the outcomes in the WHA resolutions as global priorities. There are 64 WHA resolutions related to NTDs, of which two have been added since 2014 (the period covered by the evaluation), namely snakebite envenoming and mycetoma. The NTD Programme also aligns to the global priorities of the SDGs, specifically:

- Target 3.3: By 2030, end the epidemics of HIV/AIDS, tuberculosis (TB), malaria, and NTDs, and combat hepatitis, water-borne diseases and other communicable diseases.
- Target 3.8: Achieve UHC, including financial risk protection, access to quality essential health-care services and access to safe-effective, quality and affordable essential medicines and vaccines for all.

Document review and internal interviews noted that the NTD programme is closely aligned with the UHC agenda including equity, which is a central element of both NTD and UHC agendas.

The NTD Programme is closely aligned to the Roadmap in terms of outcomes and strategies. Please see Section 1.3 and 1.4 for more details.

One difference between the Roadmap and the WHO NTD Programme is that the Roadmap (as an earlier document) has 17 diseases, while the WHO NTD Programme now includes 20 diseases. As

noted above, that was in part due to the passing of two WHA resolutions on snakebite envenoming (WHA71.5) and mycetoma (WHA69.21). The other disease added to the NTD Programme list that is not in the Roadmap is scabies and other ectoparasites, as noted in Section 1.3

Some WHO staff see the Roadmap and WHO NTD Programme as the same. Other staff view the Roadmap as a vision/strategy for both WHO and other stakeholders, and the WHO NTD Programme as the WHO implementation of the technical aspects of the Roadmap.

Key Findings:

- The NTD Programme is linked to global priorities as outlined in WHA resolutions, and the SDGs including UHC.
- The NTD Programme is closely aligned to the Roadmap in terms of outcomes and strategies.

3 Effectiveness: To what extent were the main results of the WHO Secretariat met, at its three levels, in terms of increasing and sustaining access to essential medicines and control interventions for NTDs?

This section assesses the extent to which the NTD Programme has produced planned products and services, and the extent those have contributed to intended outcomes.

3.1 To what extent have activities been conducted and produced products and services as planned? At HQ, RO, and CO?

This section provides details on the extent NTD Programme activities have been conducted and produced planned products and services (please refer to Section 1.3 for a crosswalk of WHO core functions to the products and services). Given the pivotal role of essential medicines in the WHO NTD Programme, they have been separated out as their own activity area (although reflected under the WHO core function of leadership in the Logic Model in Annex B).

In general, the NTD Programme delivers products and services as planned although there are variations across diseases in the extent to which they have addressed the needs of Member States.

3.1.1 Provision of essential medicine

One of the outcomes for the WHO NTD Programme identified in the GPW12 is “Increased and sustained access to essential medicines for NTDs”. Activities related to this outcome are not directly reflected in the WHO core functions, and in the case of the WHO NTD Programme, it was decided to align it with the core function of leadership, as the drug donation programme is a strategic partnership with industry and others (please see Logic Model in Annex B, and Section 1.3 of this report). It is highlighted as its own activity area given the pivotal role essential medicines play in the WHO NTD Programme.

There has been great success for the NTD medicine donation programme, with 1.762 billion treatments delivered to 1 billion people in 2017 across five PC diseases (i.e. lymphatic filariasis, onchocerciasis, soil-transmitted helminthiasis, schistosomiasis, and trachoma)^{16,17}. This is a significant and commendable achievement by WHO and many partners, including through the donation of the pharmaceutical industry.

WHO has also been instrumental in facilitating and reaching partnerships and agreements with industry, in providing a framework facilitating the contributions from donors, administering those agreements, and coordinating the supply chain. Of the approximate 17 different medicine donations, 15 are donated through WHO.¹⁸ Another significant contribution has been the WHO Joint Application

¹⁶ Update on the global status of implementation of preventive chemotherapy (PC). 8 February 2019 Department of Control of Neglected Tropical Diseases (NTD). In: WHO/Health Topics/ Neglected Tropical Diseases [website]. Geneva: World Health Organization (https://www.who.int/neglected_diseases/preventive_chemotherapy/PC_Update.pdf, accessed 25 June 2019).

¹⁷ Note that we use the term PC for the diseases themselves, and the term preventive chemotherapy and transmission control (PCT) for the treatment of these diseases. Mass drug administration (MDA) is one strategy that is used to address PC NTDs.

¹⁸ In two cases, drugs are donated through different mechanisms, namely the International Trachoma Initiative and the Mectizan Donation Program.

Package, an online platform for countries to plan and submit their requests for selected PC medicines, which, according to some interviews, has resulted in improved supply chain management.¹⁹

However, shortfalls in essential medicines remain in a few areas. For example, there is a recognized gap in the demand and supply of Praziquantel, with the current donation of 250 million tablets a year targeted primarily to school-age children in Africa, leaving a coverage shortfall for adults and in other regions. WHO projects that the current donation and procurement plans may only result in a 30% coverage of global need instead of achieving the stated target of 75% coverage.²⁰

There has also been progress on diseases addressed by Integrated Disease Management for which there are essential medicines donation programmes for Member States, including donations of liposomal amphotericin B for visceral leishmaniasis, and multi-drug therapies for leprosy and human African trypanosomiasis. There are, however, no medicine donations for cutaneous leishmaniasis, although WHO estimates 600,000 to 1,000,000 new cases each year.²¹ It should be noted, however, that leishmaniasis can be a difficult disease to detect and treat. Medicines include intravenous injection and infusion, which can be expensive to procure while ensuring a temperature-controlled supply chain. As a result of the lack of donation programmes for cutaneous leishmaniasis, there is insufficient or total lack of availability of medicines in countries where the Ministry of Health (MOH) does not have resources to procure those medicines.

In addition, there are other areas for improvement in terms of essential medicines for NTDs. Many interviewees (general and case studies) noted that the logistics chain can be problematic for some countries and some drugs (e.g. medicines stuck at the border, paperwork issues, etc.), the quantity of donated drugs may not match the demand of the Member States (including new targeted vulnerable populations, such as new soil-transmitted helminthiasis guidelines covering women of childbearing years), new drugs may be needed for some diseases given concerns for toxicity or potential drug resistance, and access to deliver medicines in some areas (e.g. rural, remote, conflict zones, or during natural disasters) can be challenging. In some cases, the country case study conducted in the course of this evaluation also identified that supporting drug logistics can demand a high percentage of the time of WHO technical staff at country and regional levels.

NTD Programme staff noted that there are no challenges identified regarding requests and forecasting for the donation programme of visceral leishmaniasis, leprosy, and human African trypanosomiasis.

While the WHO Joint Application Package for preventive chemotherapy and transmission control (PCT) is identified by many internally and externally as an improvement over what existed previously, a few interviewees cited that external capacity to complete this can be low, particularly given turnover of staff at country level and long process timelines.

Please also see the section on sustainability as it related to essential medicines.

¹⁹ The Joint Application Package covers medicines for lymphatic filariasis, schistosomiasis and soil-transmitted helminthiasis including diethylcarbamazine citrate, albendazole, mebendazole, ivermectin and Praziquantel.

²⁰ Integrating neglected tropical diseases in global health and development. Fourth WHO report on neglected tropical diseases. Geneva: World Health Organization; 2017.
(https://www.who.int/neglected_diseases/resources/9789241565448/en/, accessed 25 June 2019).

²¹ Leishmaniasis. Key Facts. In: WHO/Neglected Diseases/Leishmaniasis [website]. Geneva: World Health Organization (<https://www.who.int/news-room/fact-sheets/detail/leishmaniasis>, accessed 25 June 2019).

Key Findings:

- Significant results have been achieved in terms of the coverage of essential medicines, for example, 1 billion people treated in 2017 for the five PC diseases.
- WHO has played an important role in the drug donation programme, but logistical challenges still exist.
- There are still gaps between demand and supply in the PC diseases (most notably Praziquantel) and medicines for cutaneous leishmaniasis under the Integrated Disease Management NTDs.
- In some cases, the country case studies also identified that supporting drug logistics can be time consuming for WHO technical staff at country and regional levels.

3.1.2 Standards, norms, guidelines

From 2014 to 2017, according to the WHO website, WHO released 23 technical documents and guidelines for 10 NTDs. A further eight documents were identified by the NTD Programme staff for a total of 31 technical documents. The largest number of documents released were for leishmaniasis (6) and trachoma (7).²² It is noted that there was both incomplete ascertainment of documents published, or inconsistent classification of what constitutes a technical document on the WHO website (e.g. trachoma). The list of documents is found in Annex H.

According to the WHO website, no technical documents and guidelines were released during the evaluation period (2014-2017) for the following diseases: Mycetoma, chromoblastomycosis and other deep mycoses, Scabies and other ectoparasites, Dengue/Severe dengue, Echinococcosis, Foodborne trematode infections, Rabies, Snakebite envenoming²³, and yaws. WHO ROs have also developed their own guidelines (e.g. Chagas guidelines were developed by AMRO/PAHO and released in 2018) or have adapted guidelines in some cases. See box in this section for more details.

²² Neglected Tropical Diseases. Latest publications and documents. In: WHO /Neglected Tropical Diseases [website]. Geneva: World Health Organization (https://www.who.int/neglected_diseases/resources/en/, accessed 25 June 2019).

²³ Note that chromoblastomycosis and other deep mycoses, scabies and other ectoparasites, and snakebite envenoming were only added to the WHO NTD portfolio in 2017.

Supporting Guideline Development: Some 65 million people living in the Americas are at risk of contracting Chagas disease that claims 12,000 lives in the region every year. In January 2019, the Pan American Health Organization (AMRO/PAHO) has published a new Guide for Diagnosis and Treatment of Chagas Disease. This is an example of a WHO Regional Office supporting work that is often led from WHO headquarters. With the many NTD diseases and limited resources available, AMRO/PAHO understood that Chagas disease was more relevant to their region than other regions and took it upon themselves to lead in the development of the guideline. With the full support of WHO headquarters, the new guide was developed by notable experts in the field and is based on evidence assessed with the GRADE methodology.

Reference:

https://www.paho.org/hq/index.php?option=com_content&view=article&id=14906:paho-issues-new-guide-for-diagnosis-and-treatment-of-chagas-disease&Itemid=135&lang=en

Integrated guidelines (i.e. vector control and NTDs; WASH and NTDs; skin diseases) have recently been released.

There is evidence from the document analysis and internal interviews that show that Member States have developed national guidelines, often with technical and financial support from WHO. For example, they are listed on the WHO global leishmaniasis web page under country profiles.²⁴

The evaluation identified other challenges with the WHO NTD Programme guidelines, including being too region-specific (e.g. schistosomiasis guidelines being too Africa-specific) and the lack of timeliness on the development and/or release of some guidelines resulting in gaps (see also Section 3.5).

Key Findings:

- There is a lack of clarity as to what WHO considers a technical document or guideline and how that is presented on the WHO website.
- Integrated guidelines on NTDs and vector control, WASH and skin diseases have been released during the evaluation period (2014 – 2017).
- WHO provides support to Member States on their national guideline development.
- Challenges include region-specific guidelines for global diseases, and timeliness of guidelines.
- There continues to be gaps in guideline development for some diseases.

3.1.3 Policy options

There was some confusion from many interviewees (both external and internal) across the three levels about what “policy” meant in terms of WHO’s functional role. In some cases, policy was viewed as the same as standards, norms, and guidelines. In other cases, people did not see WHO’s role as being in the policy arena, and therefore felt that WHO was not doing work in this area.

The evaluation took the position that WHA resolutions, the Roadmap and WHO Regional NTD Strategies are intended to raise awareness and influence Member States strategies, which, in this case are considered policy direction. In that sense, there is evidence from document review, country case

²⁴ Leishmaniasis country profile – Priority countries . In: WHO/Neglected Tropical Diseases/Leishmaniasis [website], Geneva: World Health Organization (<https://www.who.int/leishmaniasis/burden/endemic-priority-alphabetical/en/>, accessed 25 June 2019).

studies and internal and external interviews that the Roadmap, and WHO regional and disease strategies are guiding NTD strategies and disease specific strategies at country level.

Key Findings:

- WHA resolutions, the Roadmap and WHO Regional NTD Strategies are influencing Member States strategies.

3.1.4 Research initiatives and publications

In respect to research initiatives and shaping the research agenda, there is some evidence of collaborative research networks and agenda-setting between WHO and other NTD stakeholders, although this was not assessed across all the NTD diseases under the WHO NTD Programme and varies across diseases. For example, in Leishmaniasis, research is conducted in collaborative partnerships with the Drugs for Neglected Diseases initiative (DNDi), Foundation for Innovative New Diagnostics (FIND), the WorldLeish conferences, and the WHO Tropical Disease Research (TDR) programme.

The role of the external Coalition for Operational Research on NTDs²⁵ was identified by a few WHO HQ and regional staff, and a couple external global interviewees, as being the group that sets the research agenda for NTDs. However, the Coalition for Operational Research on NTDs was not widely mentioned across interviewees, perhaps indicating that there may not be widespread awareness of its NTD research work. WHO's TDR was also mentioned as a key group for conducting NTD research by a few interviewees, yet also not widely identified by most interviewees.

In respect to research publications, less than half of both internal (49%, n=55) and external stakeholders (35%, n=39) reported that research publications were mostly or completely developed. However, some (particularly internal and external interviewees at country and region level) did not deem research publications to be as critical compared to practical operational research for NTDs.

Key Findings:

- There is evidence of collaborative research networks and agenda-setting between WHO and other NTD stakeholders, although that varies across diseases.
- There is a lack of awareness on the interaction and role of WHO TDR and the Coalition for Operational Research on NTDs.
- Operational research is a priority at country and regional level.

3.1.5 Training programmes, seminars/meetings and tools

Training and tools for NTD are being developed and delivered by WHO. Whether these are addressing demand is dependent on country (where some Member States have existing high capacity), disease, and subject matter (e.g. diagnostics, medicines, surveillance, etc.).

In the survey, 64% (n=73) of internal respondents reported that WHO NTD Programme training, seminars, conferences were mostly or completely developed, while just under half (49%, n=102) of

²⁵ Coalition for Operational Research on NTDs (COR-NTD). In: the Neglected Tropical Diseases Support Center (NTD-SC)/Cor-NTD [website]. Decatur, Georgia: The Taskforce for Global Health. (<https://www.ntdsupport.org/cor-ntd>, accessed 25 June 2019).

external respondents felt the same. Challenges identified in interviews include limited capacity at the WHO Country Office level to support the Member States, staff turnover at country level (WHO and Member States), and limited resources and staffing (Member States and WHO country office).

Many examples of successful training and tools were identified. For example, there are online WHO training resources available, such as video modules on the Joint Application Package, cutaneous leishmaniasis and post-kala-azar dermal leishmaniasis. To further illustrate, between March 2013 and October 2018, the module on “Cutaneous and mucosal leishmaniasis in the Americas: diagnosis and treatment” had a total of 10,208 professionals enrolled in the online course, and 4,897 (48%) professionals completed and passed the course.²⁶ The Expanded Special Project for Elimination of Neglected Tropical Diseases (ESPEN)²⁷ Laboratory has been active in supporting the development of a network of laboratories on the five PC NTDs through capacity building and technical support. ESPEN has also provided support to assist with country Joint Application Packages. EURO conducted a training on invasive mosquitos and (re) emerging vector-borne diseases in the WHO European Region in 2016. Training is also occurring at the national level through RO and country office support.

Key findings:

- Training and tools for NTDs are being developed and delivered by WHO. Whether these are addressing demand is dependent on the country (where some Member States have existing high capacity), disease, and subject matter (e.g. diagnostics, medicines, surveillance, etc.).
- There are challenges in addressing needs including limited capacity and staff turnover at WHO Country Offices and Ministries of Health.

3.1.6 Leadership, strategies and partnerships

Partnerships are crucial to work on NTDs, and there are a number of players who have played critical roles in leading NTD strategy development (e.g. the London Declaration), conducting research, donating medicines, implementing NTD activities, and generally supporting work on NTDs at the local, regional, and global levels. This work on NTDs could not be done by WHO without the support of these many stakeholders across all levels. Hence, partnerships between WHO and these key players are key to the success of the WHO NTD Programme. An important component of leadership is the provision of essential medicines, and this has been reported on separately (see 3.1.1).

WHO is viewed as a leader and is seen as having the influence to be a convening partner for NTDs at the global, regional and country levels. As an example, the Strategic and Technical Advisory Group (STAG) at global level, and the Regional Programme Review Groups (RPRGs) at regional level, are collaborative advisory forums that are organized by WHO and viewed as important vehicles for stakeholder engagement.

Country case studies also identified the leadership of WHO at country level. The case studies highlighted the importance of WHO’s convening power in terms of bringing different NTD

²⁶ Leishmaniasis case study included in the present evaluation of the WHO NTD Programme.

²⁷ Expanded special project for elimination of Neglected Tropical Diseases (ESPEN). In: WHO Regional Office for Africa. Brazzaville: World Health Organization [website] (<http://espen.afro.who.int>, accessed 25 June 2019).

stakeholders together to discuss strategies, programs and operations. Examples of country level stakeholders included NGOs, different levels of government (e.g. federal, state, district, municipal, etc.) and different government departments for intersectoral collaboration.

There are existing NTD-related strategies that are dated and need to be renewed (from Roadmap to WHO strategies on specific diseases). WHO advocacy materials can be key to keeping NTDs on the agenda at the global, regional and country levels. Please see Section 3.1.3 for more detail on the influence of the NTD Roadmap, WHA resolutions and the NTD Programme on national strategies.

Key Findings:

- WHO plays a leadership role at global, regional and country levels.
- Partnerships on NTDs are critical for success and include medicine donations, funding for medicine transportation and programs, research, operational support, and training.
- WHO advocacy materials can be key to keeping NTDs on the agenda at the global, regional and country levels, and some may need to be renewed.

3.1.7 Information systems, surveillance, and reports

There is evidence from the document analysis of the WHO NTD Programme's work on ongoing data collection and analysis for NTDs, with new tools and platforms being developed. There are also in-field validation exercises for data collection.

Surveillance information on the WHO website is comprehensive for the four case studies diseases that were examined in detail for this evaluation (schistosomiasis, soil-transmitted helminthiasis, leishmaniasis, lymphatic filariasis). One challenge is that country level data for PC diseases is variable (e.g. completeness, comprehensiveness, timeliness, quality, and accuracy of data are issues). More details will be covered in section 3.4.

Key Findings:

- There is ongoing data collection and analysis for NTDs, with new tools and platforms being developed.
- There are in-field validation exercises for data collection.
- Quality of in country data can vary across countries and across diseases.

3.2 To what extent did target audiences access products and services?

In general, the products and services are accessed by target audiences but the extent of accessibility across all WHO NTD Programme products and services was viewed more positively by internal staff than the external respondents, as illustrated by the survey results below and confirmed in the interviews.

Internal survey respondents tended to rate target audiences' access to WHO NTD Programme products and services higher than external respondents across many products and services, except WHO NTD Programme research publications and operational/implementation research. Please see Table 4. Reasons for these discrepancies, based on qualitative data, are outlined below.

Table 4: To what extent did target audiences access products and services?

WHO NTD Programme Products and Services	Internal survey (n) Mostly/Completely	External survey % (n) Mostly/Completely
a) Provision of essential medicines	79% (n=89)	55% (n=115)
b) Norms, standards, and guidelines	73% (n=82)	62% (n=129)
c) Policy options	65% (n=73)	54% (n=113)
d) Research publications	35% (n=40)	44% (n=91)
e) Operational /implementation research	36% (n=41)	39% (n=82)
f) Training, seminars, conferences	52% (n=59)	39% (n=82)
g) Advocacy materials, partnerships, strategies	50% (n=56)	43% (n=89)
h) Information systems, surveillance and reports	48% (n=54)	43% (n=90)

The provision of essential medicines had the highest percentage of internal staff rating this as mostly or completely accessible compared to other WHO NTD Programme products or services (79%, n=89). This contrasts with the 55% (n=115) of respondents in the external survey who reported that the extent of WHO NTD Programme provision of essential medicines is mostly or completely accessible. Access to essential medicines varies across diseases and countries. Some issues of access identified in the interviews include lack of medicines (e.g. Praziquantel), issues with donations stuck at the border/at MOH stores, issues with access in rural, remote, and conflict areas, and new WHO guidelines that include new target groups not previously covered by medicine donations (e.g. pre-school age children and women of childbearing years for soil-transmitted helminthiasis).

WHO NTD Programme norms, standards and guidelines were the highest rated for external respondents, with 62% (n=129) rating these as mostly/completely accessible. However, internal respondents rated accessibility higher than external respondents (73%, n=82 of internal respondents reporting these as mostly or completely accessible). It was noted in the interviews and the survey comments that the process for guideline development (e.g. Guideline Review Committee procedures), while evidence-based, is cumbersome and slow, which delays the release of guidelines in a timely manner. Translation of guidelines into other languages is critical for uptake at a country level, but this is also often delayed. For guidelines to be used at the country level, they need to be contextualized and adapted to the country. Some countries have accomplished this. However, in some cases, the guidelines are difficult to adapt to the country level (e.g. meeting soil-transmitted helminthiasis guidelines on new target groups).

WHO policy options were rated as mostly/completely accessible by 65% of internal survey respondents (n=73) compared to 54% of external respondents (n=113). However, as noted above, what “policy options” exactly entailed in terms of WHO’s role was not easily understood in the interviews. This may have also been an issue in the surveys.

Across the other functions (including WHO NTD Programmes 1) research publications, 2) operational/implementation research, 3) training/seminars/conferences, 4) advocacy materials/

partnerships/strategies, and 5) information systems/surveillance/reports), approximately half or less of both external and internal respondents rated these as mostly or completely accessible.

The top downloads for 2016 and 2017 are identified in the table below. Six out of 10 of these documents are Weekly Epidemiological Record (WER) documents, three are technical documents, and one is an operational manual. Only three of the 10 are focused on PC diseases (trachoma and onchocerciasis) while the others are on non-PC diseases. As noted under limitations, the bibliometric data was incomplete, and it is therefore not possible to draw findings from this information.

Table 5: Bibliometrics of Top 10 Downloads (IRIS; 2016 and 2017 only)

Title	NTD	Language	Type of document	Number of downloads
1) Estudio de indicadores alternativos de tracoma: revisión de datos (2017) (Translation: Trachoma alternative indicators study – data review by STAG Working Group on M&E)	Trachoma	Spanish	Technical document	19 932
2) Weekly Epidemiological Record, 2016, vol. 91, 35 [full issue]	Leprosy	English/ French	WER	17 946
3) Trachoma alternative indicators study: data review	Trachoma	English	Technical document	8169
4) Weekly Epidemiological Record, 2017, vol. 92, 7 [full issue]	Rabies	English/ French	WER	7543
5) Weekly Epidemiological Record, 2017, vol. 92, 28 [full issue]	Dracunculiasis	English/ French	WER	6993
6) Monitoring and managing insecticide resistance in Aedes mosquito populations: interim guidance for entomologists	Dengue	English	Technical document	6287
7) Weekly Epidemiological Record, 2016, vol. 91, 48 [full issue]	Dracunculiasis	English/ French	WER	6147
8) Global leprosy strategy 2016-2020: accelerating towards a leprosy-free world - 2016 operational manual	Leprosy	English/ French/ Spanish/ Portuguese	Operational manual (SEARO)	5288
9) Weekly Epidemiological Record, 2017, vol. 92, 35 [full issue]	Leprosy	English/ French	WER	5138
10) Weekly Epidemiological Record, 2016, vol. 91, 43 [full issue]	Onchocerciasis	English/ French	WER	4420

Key Findings:

- In general, the products and services are accessed by target audiences, but the extent of accessibility across all WHO NTD Programme products and services was viewed more positively by internal staff than the external respondents.
- Norms, standards and guidelines were the highest rated for external respondents, with 62% rating these as mostly/completely accessible.
- Challenges identified in the interviews and the survey focused on provision of essential medicines (Praziquantel gap, logistical issues, changing guidance) and guidelines (timeliness, ease of use).

3.3 To what extent did target audiences find products and services useful (timeliness, relevance, appropriate, usable)

Generally, internal staff are satisfied with the usefulness of the WHO NTD Programme’s products and services, although this varies by product or service. As illustrated in Table 6, for internal respondents, 89% and 85% state that target audiences find WHO NTD Programme’s provision of essential medicines and norms, standards, guidelines mostly or completely useful. Lower numbers (53% and 55%) of internal respondents report that target audiences find operational and implementation research and research publications mostly or completely useful.

Table 6: To what extent did target audiences find products and services useful (timeliness, relevance, appropriate, usable)?

WHO NTD Programme Products and Services	Internal survey % (n) Mostly/Completely	External survey % (n) Mostly/Completely
a) Provision of essential medicines	89% (n=101)	63% (n=130)
b) Norms, standards, and guidelines	85% (n=96)	67% (n=139)
c) Policy options	79% (n=89)	57% (n=119)
d) Research publications	55% (n=62)	48% (n=99)
e) Operational /implementation research	53% (n=60)	44% (n=91)
f) Training, seminars, conferences	74% (n=84)	52% (n=109)
g) Advocacy materials, partnerships, strategies	69% (n=78)	50% (n=103)
h) Information systems, surveillance and reports	67% (n=76)	52% (n=109)

As shown in Table 6, there is a discrepancy between external and internal survey respondents, with WHO staff reporting higher levels of usefulness of the WHO NTD Programme’s products and services than their external counterparts. For external respondents, 67% and 63% report that target audiences find the WHO NTD Programme’s provision of norms/standards/guidelines and provision of essential medicines mostly or completely useful. Like the internal respondents, the products/services with the lowest percentage of people responding positively are research publications (48%) and operational/implementation research (44%).

WHO staff identified adaptability of the WHO NTD Programme’s products and services to the country level as an issue for usefulness, in particular the need for translation. Limited advocacy from the NTD

Programme to the countries was specifically mentioned as an issue. It was reported by some interviewees that with this lack of advocacy, countries will lose momentum and there will be a subsequent decrease in resources once an elimination target has been achieved. Both internal and external staff mentioned the gap in WHO guidance for post-elimination surveillance for diseases.

Many external stakeholders identified that WHO guidelines, training documents and tools are not disseminated on time or widely enough, which creates a gap in knowledge and accessibility.

There were mixed views on the usefulness of NTD documents, varying by disease. In the external survey respondent qualitative comments, some respondents identified gaps in some disease specific WHO global guidelines (e.g. schistosomiasis) while others considered the new WHO global guidelines for soil-transmitted helminthiasis, rabies and lymphatic filariasis to be of good quality.

Key Findings:

- There were mixed views on the usefulness of NTD documents, varying by disease with new WHO global guidelines for soil-transmitted helminthiasis, rabies and lymphatic filariasis to be of good quality. There were also gaps in guidelines identified, for example for schistosomiasis, and for post-elimination surveillance.
- Translation is an important issue for usefulness of products and services.
- Advocacy by WHO on NTD issues needs to continue to keep NTDs as a priority at country level.

3.4 To what extent was the implementation and monitoring of the WHO Roadmap for NTDs facilitated?

The achievement of this programme outcome is a joint responsibility between WHO, Member States and partners. One indicator assessed in this evaluation is the “number of countries in which neglected tropical diseases are endemic implementing neglected tropical disease national plans in line with the Roadmap to reduce the burden of neglected tropical diseases”. This indicator was defined in the GPW12. The baseline was 80/114 in 2015, and the target was 85 in 2017.²⁸ The number of countries that have implemented and reported preventive chemotherapy diseases in 2017 was 86/113.²⁹ This target has been met.

As noted above, the WHO NTD Programme is aligned to the Roadmap for NTDs through its strategies, with slight variation on the diseases included (17 diseases in Roadmap versus 20 now in WHO’s NTD Programme). WHO regional and Member States’ country-level strategies are aligned to the Roadmap based on their needs.

²⁸ World Health Organization. Programme Budget 2016-17. In: WHO/the Programme Budget Portal/Current Biennium 2016-17 [website]. Geneva: World Health Organization (<http://open.who.int/2016-17/home>, accessed 25 June 2019).

²⁹ With regards to the denominator, the number of endemic countries moved to post-treatment surveillance stage is not included in the total. As per email communications with the WHO HQ, the NTD department will soon be updating 86 countries to 88 as they have recently received reports from eSwatini and Zambia.

In terms of monitoring, there is information available on the WHO website on the PC Data Portal,³⁰ the NTD Integrated Database,³¹ the Global Health Observatory³² as well as data tracked by other disease specific programmes (e.g. leishmaniasis). ESPEN also has a data portal.³³ In addition, reports from WHO are regularly released.³⁴ There are also WER articles on surveillance (e.g. schistosomiasis and soil-transmitted helminthiasis).³⁵

Notwithstanding the information collection at global level and its ease of access, as noted above (3.1), there are often weak surveillance systems at the Member States level which lead to challenges with data quality and completeness. However, as the box in this section highlights, there are country-level NTD surveillance systems supported by WHO that are being developed and implemented to help address data shortcomings. Other stakeholders (e.g. Uniting to Combat NTDs) external to WHO are also monitoring the Roadmap implementation.³⁶

Surveillance for Decision Making

The Philippines Department of Health, with support from WHO and the Bill and Melinda Gates Foundation, has developed the Neglected Tropical Diseases Management Information System (NTDMIS) to support the soil-transmitted helminthiasis, schistosomiasis and lymphatic filariasis programmes in the country. The NTDMIS is a combination of a web and mobile-based system for data collection, processing, reporting and use of the information necessary for improving Mass Drug Administration (MDA), drug inventory and adverse event reports of the three programmes, and there are plans to expand it to other areas (e.g. survey reports and for other diseases). Despite challenges, the pilot project has been successful with many lessons learnt as they move to roll-out the system.

Reference: Project documents.

Key Findings:

- The number of countries that have implemented and reported PC diseases in 2017 was 86/113.³⁷ This target has been met.
- The NTD Programme is well-aligned to the Roadmap and facilitates its implementation.
- Monitoring can be hampered due to weak surveillance systems at the Member States level, which can lead to challenges with data quality and completeness.

³⁰ Preventive Chemotherapy (PC) Data Portal. In: WHO/ Global Health Observatory [website]. Geneva: World Health Organization (<http://apps.who.int/gho/cabinet/pc.jsp>, accessed 25 June 2019).

³¹ Integrated NTD database (CIND). In: WHO/ Neglected Tropical Diseases/ [website] Geneva: World Health Organization. (https://www.who.int/neglected_diseases/data/ntddatabase/en/, accessed 26 June 2019).

³² Neglected Tropical Diseases In: WHO/Global Health Observatory/ Neglected Tropical Diseases [website] Geneva: World Health Organization (https://www.who.int/gho/neglected_diseases/en/, accessed 26 June 2019).

³³ Expanded special project for elimination of Neglected Tropical Diseases (ESPEN). In: WHO Regional Office for Africa. Brazzaville: World Health Organization [website] (<http://espen.afro.who.int>, accessed 25 June 2019).

³⁴ Integrating neglected tropical diseases in global health and development: Fourth WHO report on NTDs. World Health Organization; 2017. (<https://apps.who.int/iris/bitstream/handle/10665/255011/9789241565448-eng.pdf?sequence=1>, accessed 26 June 2019).

³⁵ Schistosomiasis and soil-transmitted helminthiasis: numbers of people treated in 2017. World Health Organization, Weekly Epidemiological Record, Relevé épidémiologique hebdomadaire. 2018; 93: 681. (<https://apps.who.int/iris/bitstream/handle/10665/276933/WER9350.pdf?ua=1>, accessed 26 June 2019).

³⁶ Reaching a Billion: ending Neglected Tropical Diseases: A gateway to Universal Health Coverage. Fifth progress report on the London Declaration on NTDs. Uniting to Combat Neglected Tropical Diseases. In: Uniting to Combat NTDs/Reports/5th report [website]. (<https://unitingtocombatntds.org/reports/5th-report/>, accessed 25 June 2019).

³⁷ With regards to the denominator, the number of endemic countries moved to post-treatment surveillance stage is not included in the total. As per email communications with the WHO HQ, the NTD department will soon be updating 86 countries to 88 as they have recently received reports from eSwatini and Zambia.

3.5 To what extent was implementation and monitoring of NTD control interventions facilitated by evidence-based technical guidelines and support?

The achievement of this programme outcome is a joint responsibility between WHO, Member States and partners. The extent to which implementation and monitoring of NTD control interventions has been facilitated by evidence-based technical guidelines and support varies by country and by disease.

Some guidelines have helped Member States to remain current on changes made or advancements made (e.g. triple therapy or bi-annual MDA with two-drug regimen for lymphatic filariasis). See box for more details.

The WHO NTD programme at global, regional and country level provides a range of support to control interventions at country level, which can include:

- Strengthening information systems;
- Strategy development;
- Planning support (e.g. secretariat support to MOH and assistance in convening partners);
- Training of country counterparts; and
- Human resource support (e.g. project staff).

An example that illustrates how WHO supports guideline uptake at country level is lymphatic filariasis. For lymphatic filariasis, the WHO recommended that a pre-transmission assessment survey be conducted in order for countries to make the decision whether to stop mass drug administration. The 2011 monitoring and assessment guideline outlined the process and is followed systematically by many countries.³⁸ This, in turn, is supported by annual reviews of the RPRG in most regions. Modified guidance on mapping, pre-Transmission Assessment Survey³⁹, was disseminated in technical reports (see Annex H). From 2014-2017, at least one workshop for lymphatic filariasis endemic countries was held in AFRO (2016, two in English and French), SEARO (2016), AMRO/PAHO (2017), and WPRO (2016). Standardized workshop modules were developed from 2015 to 2016 but are not yet published. They are based on a WHO

New Lymphatic Filariasis Guideline

In 2017, WHO published a new guideline on alternative MDA regimens to eliminate lymphatic filariasis. Based on research studies, WHO recommends a new treatment co-administering ivermectin, DEC and albendazole. The triple drug regimen has the potential to help eligible countries (without co-endemic onchocerciasis or loiasis) that are implementing MDA catch up or fast track by reducing the time to interrupt lymphatic filariasis transmission from five years down to two years. Following the release of the guideline, the triple drug regimen became more accessible after the Mectizan (ivermectin) Donation Programme expanded their annual donation of ivermectin to reach up to 100 million more treatments per year through 2025. Since the release of the new guideline, four countries have initiated plans to implement the triple drug regimen and another ten countries plan to introduce it in 2019.

Guideline:

<https://apps.who.int/iris/bitstream/handle/10665/259381/9789241550161-eng.pdf?sequence=1>

³⁸ Lymphatic filariasis: monitoring and epidemiological assessment of mass drug administration: A manual for national elimination programmes. In: WHO/Neglected Diseases/Lymphatic filariasis/resources [website]. Geneva: World Health Organization (<https://www.who.int/lymphatic-filariasis/resources/9789241501484/en/>, accessed on 26 June 2019).

³⁹ Transmission Assessment Surveys (TAS) are epidemiological surveys to determine the prevalence of lymphatic filariasis as countries move to elimination targets.

publication⁴⁰ and have been applied in Regional Workshops (SEARO one, AFRO two, AMRO/PAHO one, WPRO one) between 2014 to 2016. Guidance on validation was provided during Regional Programme Managers' meetings held annually between in 2016 and 2017.⁴¹ Finally, in 2017, immediately after the publication of the new guideline on alternative mass drug administration regimens,⁴² and in support of WPRO, a bi-national meeting among American Samoa and Samoa was held to plan for the first national implementation of the new triple drug regimen of ivermectin, DEC and albendazole which occurred less than one year later in August 2018. Three other countries piloted the triple drug regimen as recommended in 2018.

The above positive example demonstrates the WHO NTD Programme delivering new and innovative approaches and producing guidelines, as needed, and with support for uptake at country level. Alternatively, some stakeholders identified some guidelines as having gaps (e.g. schistosomiasis) or not existing (e.g. scabies). Some stakeholders also noted that guidelines on post-elimination surveillance verification are needed (e.g. lymphatic filariasis).

Another area of focus of the WHO NTD Programme at all levels has been on MDA for the PC diseases. There has been work on other strategies, such as integrated disease management, WASH, vector control, and zoonosis, but most internal and external interviews indicated that more work needs to be done in these areas. This finding is not unexpected, given the high value of the medicine donations, high visibility of such a partnership and goals, and relatively quick results that the MDA has been able to achieve, even if not all targets have been reached. There is a risk, however, that other interventions on non-PC NTD diseases may not make the same pace of progress without due prioritization and attention.

Key Findings:

- The extent to which implementation and monitoring of NTD control interventions has been facilitated by evidence-based technical guidelines and support varies by country and by disease.
- The approach by lymphatic filariasis was identified as a best practice for the NTD Programme.
- There continues to be a need to increase focus on the other NTD strategies such as vector control, WASH and zoonotic diseases.
- There continues to be gaps in terms of technical guidance for some diseases.

⁴⁰ Lymphatic filariasis: managing morbidity and preventing disability: An aide-mémoire for national programmes managers. In: WHO/Neglected diseases/resources [website]. Geneva: World Health Organization (https://www.who.int/neglected_diseases/resources/9789241505291/en/, accessed 26 June 2019).

⁴¹ Validation of elimination of lymphatic filariasis as a public health problem. In: WHO/Neglected diseases/ lymphatic filariasis/resources [website]. Geneva: World Health Organization (https://www.who.int/lymphatic_filariasis/resources/9789241511957/en/, accessed 26 June 2019).

⁴² Guideline – Alternative mass drug administration regimens to eliminate lymphatic filariasis. In: WHO/ Neglected diseases/ Lymphatic filariasis/ resources [website]. Geneva: World Health Organization. (https://www.who.int/lymphatic_filariasis/resources/9789241550161/en/, accessed 26 June 2019).

3.6 To what extent is there increased and sustained access to essential medicines for NTDs?

The achievement of this outcome is a joint responsibility between WHO, Member States and partners. In terms of coverage of people, the following table outlines the extent that coverage has been met (compared to targets) for 2017 (with data from February 2019), and hence whether the target has been achieved.⁴³

Table 7: Percent Coverage of People Compared to Targets for PC Diseases 2017

Disease	Target %	% Coverage of People 2017	Has target been achieved?
Lymphatic filariasis	65%	53.8%	Not achieved
Onchocerciasis	65%	70.9%	Achieved
Soil-transmitted helminthiasis	75% SAC	69.1%	Not achieved
Schistosomiasis	75% SAC	70.8%	Not achieved
Trachoma	80%	50.6%	Not achieved
Total PC		65.5% ⁴⁴	

As per Table 7, only one out of five PC diseases (onchocerciasis) has met the coverage target for 2017. The coverage of individuals receiving PCT has increased year over year, from 857 million in 2014 to 1.1 billion in 2017. While there has been varied percentage of coverage over time, the trend line is increasing across these PC diseases. However, for lymphatic filariasis, in 2017, the coverage was lower than in 2015 and 2016. This fluctuation was the result of an update to the denominator once one large country completed their transmission assessment surveys in various districts.⁴⁵

For non-PC diseases, the assessment is more nuanced. For example, the case study for leishmaniasis found that more can be done to reach the Roadmap coverage target. The Roadmap target for visceral leishmaniasis is to achieve 100% case detection and treatment. The Roadmap target for control of cutaneous leishmaniasis is to have detected at least 70% of all cases and treated at least 90% of all detected cases in the Eastern Mediterranean Region by 2015. Among the endemic countries, 25 are considered to have a high burden of leishmaniasis: 14 countries for visceral leishmaniasis, 12 countries for cutaneous leishmaniasis and one country was included in both groups (2016 data). Progress has been made. According to the case study, there has been an increase in control programs, especially in high-burden countries, such as Nepal, which achieved a target of less than one case per 10,000 population at a district level in 2012. There is a significant increase in the number of sub-districts that have achieved the elimination target in Bangladesh and India from, 90% and 67% in 2014 to 97% and 82% in 2015. The strategies are clear, but challenges remain, including the wide gap between the number of reported and estimated cases, limited access to diagnosis and treatments, and incomplete or inappropriate treatment. There are also challenges around post kala-azar dermal leishmaniasis (patients, with only skin signs resulting from delayed or incomplete treatment, that are reservoirs of infection responsible for continued transmission. Other challenges include rising co-infection with HIV/AIDS, armed conflict and population migrations.

⁴³ Update on the global status of implementation of preventive chemotherapy (PC), 8 February 2019, Department of Control of Neglected Tropical Diseases (NTD). In: WHO/Neglected diseases/ Preventive chemotherapy/ PC update [website]. Geneva: World Health Organization. (https://www.who.int/neglected_diseases/preventive_chemotherapy/PC_Update.pdf, accessed 26 June 2019).

⁴⁴ Ibid. This was calculated by the number of people treated divided by the number requiring PC.

⁴⁵ These had previously been reported as no longer requiring treatment.

Survey respondents were also asked to what extent the global access to essential medicines has been increased and sustained from 2014 to 2017. As the highest rated outcome, 75% (n=82) of internal respondents felt that global access to essential medicines was increased and sustained mostly or completely during the evaluation period of 2014 to 2017. However, fewer (56%, n=111) external respondents felt that global access to essential medicines was increased and sustained mostly or completely during 2014-2017. Please see section 3.1 for more details.

Regarding sustainability, the information on the WHO website, as of March 2019,⁴⁶ lists 17 different medicine donations from 11 pharmaceutical companies. Of those, three donations are “until elimination” or for an “unlimited period”. All other agreements are time-bound and ending between 2019 to 2022. According to the NTD Programme, there are negotiations for medicines ongoing for 12 diseases including for scabies, schistosomiasis and soil-transmitted helminthiasis, as well as diagnostic kits for lymphatic filariasis (due to donor support).

Key Findings:

- Despite significant progress and the fact that coverage of individuals receiving PCT has increased year over year, from 857 million in 2014 to 1.1 billion in 2017, only one out of five PC diseases (onchocerciasis) has met the coverage target for 2017.
- Sustainability will be an issue as long as countries require donated medicines.

3.7 How could the WHO Secretariat have contributed more effectively to increase and sustain access to essential medicines for NTDs?

When examining how the WHO Secretariat could have contributed more effectively to increase and sustain access to essential medicines for NTDs, requests were identified for more assistance from WHO (across all levels) when challenges with drug delivery arise (e.g. held up at borders, etc.) to ensure drugs reach all populations that require them, and to help with implementation of MDA at country level (as well as monitoring) beyond the donation of drugs.

WHO technical staff at all levels, but especially at WHO regional and country level, were found to expend significant effort in addressing logistical issues regarding medicines. Some countries experience challenges in tracking drug inventories at country level, which may result in expiry or non-use of drugs. One potential solution initiated by the pharmaceutical stakeholders is NTDeliver⁴⁷ as a supply chain management tool for NTD drugs.

WHO NTD Programme staff noted that for leishmaniasis, there is a web-based system to track the number of vials shipped per country per year and the monthly consumption at the health facility level to anticipate needs and avoid stock out, and that human African trypanosomiasis also has a tracking system.

⁴⁶ Essential medicines donated to control, eliminate and eradicate neglected tropical Diseases. In: WHO/Neglected Diseases/Contribution of pharmaceutical companies to the control of neglected tropical diseases [website]. Geneva: World Health Organization. (https://www.who.int/neglected_diseases/Medicine-donation-04-march-2019.pdf?ua=1; accessed 26 June 2019).

⁴⁷ NTDeliver [website]. (<https://www.ntdeliver.com/about>, accessed 26 June 2019).

Key Findings:

- There are continued requirements for supporting countries with logistical challenges, as well as support on MDA campaigns.
- WHO and partners have developed new tools and methods to better manage the supply chain of essential medicines.

3.8 To what extent is there increased and sustained access to NTD control interventions?

The achievement of this outcome is a joint responsibility between WHO, Member States and partners. In general, there has been an increase in control interventions during the evaluation period, although there are a wide range of operational issues for Member States that can help or hinder this.

The extent to which there is increased and sustained access to NTD control interventions also varies by disease. For external stakeholders in the survey, within the PC NTDs, the elimination diseases (i.e. trachoma, lymphatic filariasis and onchocerciasis) have made significant progress in developing evidence-based targets, treatment guidelines and monitoring and evaluation frameworks. On the other hand, the control diseases (i.e. schistosomiasis and soil-transmitted helminthiasis) have made less progress due to less consensus on targets and the need to identify long-term sustainable programmes. Sustainability for all PC diseases is, however, tied to drug donations.

Given the focus of the Roadmap, some external and internal interviewees identified that the WHO Secretariat has placed greater emphasis on the PC strategy as compared to the other four strategies (i.e. WASH, vector control, integrated disease management, zoonotic control measures). This is not a unique challenge for WHO – it is also identified as a challenge overall for NTDs: “We are also missing important opportunities to promote other aspects of NTD control and elimination that go beyond MDA, such as vector control and clinical management of patients. These aspects have received less attention as the targets for MDA have been prioritized, while improved water and sanitation provision and health education need to be more vigorously encouraged”⁴⁸. Some interviewees identified multisectoral collaboration and more resources as means to addressing these other four strategies in a more comprehensive manner. Morbidity management is also an area that is requiring more focus for some diseases, such as lymphatic filariasis.

Certain diseases (e.g. taeniasis/cysticercosis, fascioliasis (foodborne trematode)) were referred to by interviewees as the “neglected of the neglected” and represent gaps in addressing Member States’ needs. For example, some of these diseases do not have WHO guidelines or strategies for their control and/or elimination.

⁴⁸ Hotez PJ, Fenwick A, Ray SE, Hay SI, Molyneux DH. “Rapid impact” 10 years after: The first “decade” (2006–2016) of integrated neglected tropical disease control. *PLOS Neglected Tropical Diseases*, 2018; 12(5): e0006137; <https://doi.org/10.1371/journal.pntd.0006137>. (<https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0006137>; accessed 26 June 2019).

Key Findings:

- In general, there has been an increase in control interventions during the evaluation period, although there are a wide range of operational issues for Member States that can help or hinder this.
- The extent to which there is increased and sustained access to NTD control interventions also varies by disease.
- There are diseases for which there are no guidelines or strategies and have become known as the “neglected of the neglected”.

3.9 To what extent has dracunculiasis been eradicated?

The achievement of this outcome is a joint responsibility between WHO, Member States and partners. As per the TORs for this evaluation (see Annex A), one outcome indicator to be measured was the “number of Member States certified for eradication of dracunculiasis from a baseline of 183 countries in 2014 to an expected target of 194 countries in 2019”.

*WHO has certified [...]187 WHO Member States [...] as free of dracunculiasis transmission, the latest being Kenya, in February 2018. Seven countries remain to be certified: Angola, Chad, Democratic Republic of the Congo, Ethiopia, Mali, South Sudan and Sudan (25 May 2018).*⁴⁹

Hence, as indicated on the above citation, based on available data published on May 2018, 187 out of a total 194 Member States (96%) were certified (from the baseline of 183 in 2014). Hence, four countries have been certified since the baseline (or 36% of the targeted 11 countries), with seven remaining. The major challenges identified in reaching this target are conflict, access issues, and the infection in dogs (*Dracunculus medinensis*).

Key Findings:

- WHO has certified 187 WHO Member States as free of dracunculiasis transmission. Seven countries remain to be certified: Angola, Chad, Democratic Republic of the Congo, Ethiopia, Mali, South Sudan and Sudan.

3.10 To what extent has there been eradication and elimination and control (at the country, regional, and global level) of NTDs?

The achievement of this outcome is a joint responsibility between WHO, Member States and partners. One indicator for this evaluation is the “number of countries in which diseases are endemic having achieved the recommended target coverage of the population at risk of contracting lymphatic filariasis, schistosomiasis and transmitted helminthiasis” (baseline 25/114 in 2012, target 100 in 2020).⁵⁰

⁴⁹ Weekly epidemiological record. Relevé épidémiologique hebdomadaire. 25 May 2018, 93th Year. World Health Organization; 2018; 21 (93): 305. (<https://apps.who.int/iris/bitstream/handle/10665/272647/WER9321.pdf?ua=1>, accessed 26 June 2019).

⁵⁰ World Health Organization Programme Budget 2016-17. In: WHO/the Programme Budget Portal/Current Biennium 2016-17 [website]. Geneva: World Health Organization (<http://open.who.int/2016-17/home>, accessed 25 June 2019).

The WHO PC Portal⁵¹ reports the following *number of countries* achieving coverage targets (comparative performance) as of February 25, 2019:

- Lymphatic filariasis: for countries reporting, 28 out of 41 (68%)⁵² have achieved national level coverage targets;
- Schistosomiasis: for countries reporting, eight out of 40 (20%)⁵³ have achieved national level coverage targets; and
- Soil-transmitted helminthiasis: for countries reporting, 25 out of 71 (35%)⁵⁴ have achieved national level coverage targets.

These figures show that as of early 2019 (when the data was accessed from the WHO website), 61 countries out of a target of 100 have met coverage targets that are to be achieved by 2020. There are, however, countries that are not achieving coverage targets for these diseases, and other countries that are not reporting data (surveillance issues are identified throughout this evaluation report).

There have been other notable successes beyond those listed in the indicator. Between 2014-2017 the following certifications have been awarded:

- Elimination of Trachoma as a public health problem:
 - Kingdom of Morocco (2016)
 - Cambodia (2017)
 - Lao People's Democratic Republic (2017)
 - Mexico (2017)
- Yaws Certification:
 - India Certified in (2016)
- Validation of Elimination of lymphatic filariasis as a public health problem:
 - Kingdom of Cambodia
 - Cook Islands
 - Arab Republic of Egypt
 - Republic of Maldives
 - Republic of the Marshall Islands
 - Republic of Niue
 - Democratic Socialist Republic of Sri Lanka
 - Kingdom of Thailand
 - Togolese Republic
 - Kingdom of Tonga
 - Republic of Vanuatu.

⁵¹ Preventive chemotherapy (PC) data portal. In: WHO/Global Health Observatory/ Cabinet/PC [website] Geneva: World Health Organization (<http://apps.who.int/gho/cabinet/pc.jsp>, accessed 26 June 2019).

⁵² Out of a total of 51 countries requiring PCT for lymphatic filariasis.

⁵³ Out of 52 countries requiring PCT for schistosomiasis.

⁵⁴ Out of 101 countries requiring PCT for soil-transmitted helminthiasis.

Key Findings:

- As of early 2019, 61 countries out of a target of 100 have met coverage targets that are to be achieved by 2020. There are, however, countries that are not achieving coverage targets for these diseases, and other countries that are not reporting data (surveillance issues are identified throughout this evaluation report).
- Between 2014 and 2017, four countries eliminated trachoma as a public health problem, one achieved certification of elimination of yaws, and 11 countries validated the elimination of lymphatic filariasis.

3.11 Which were the main influencing factors that either facilitated or hampered the successful achievement of the outcomes and outputs of the WHO NTD Programme?

The general and case study interviews revealed the main factors that facilitated or hampered the WHO NTD Programme from successfully achieving its outputs or outcomes during the period from 2014 to 2017.

3.11.1 Internal Factors

For internal factors, the primary facilitator identified by stakeholders was the high-level advocacy led by WHO, including the WHA resolutions and the grouping of these diseases as NTDs. WHO's normative role was also viewed as key to the success of the WHO NTD Programme.

It is noted that only 52% (n=56) of internal respondents (WHO staff) thought that the WHO human resource quantity and skill mix was mostly or completely adequate, and 30% (n=32) thought this was somewhat the case, showing a mixed opinion (this question was not asked of external respondents in the survey). Challenges to human resources identified in the interviews included a lack of dedicated staff in Country and ROs, and a general lack of resources (financial and human) for NTDs.

3.11.2 External Factors

External facilitators for the success of the WHO NTD Programme, outside of WHO, identified via interviews and case studies, included the high-level advocacy for NTDs due to stakeholder development and implementation of the London Declaration, as well as the key support by donors in terms of drug donations and other resources. Member States' institutionalization of NTD programmes was also viewed as a key facilitator in reaching the WHO NTD Programme outputs and outcomes.

Access issues (e.g. geographic location, political instability, and issues with infrastructure), particularly related to distribution of drugs, was identified as hampering the WHO NTD Programme work, as were human resource issues (e.g. lack of MOH staff working on NTDs). A lack of domestic resources to work on NTDs was also noted.

3.11.3 Cross-cutting Factors

A cross-cutting factor that was identified are the strong WHO-MOH relationships that exists in many countries, that helps to support NTD work. Cross-sectoral collaboration, particularly for integrated strategies for NTDs beyond MDA, requires complex coordination, which can also be a challenge. In addition, adverse events from other campaigns can have an impact (e.g. on MDA programmes) on uptake at the community level.

Key Finding:

- There is a wide range of factors that can impact on the programme results both internally and externally to WHO, and these can vary by country and by disease.
- Internally to WHO, the most important influencing factors included the need for continued advocacy and the lack of human resources at regional and country level.

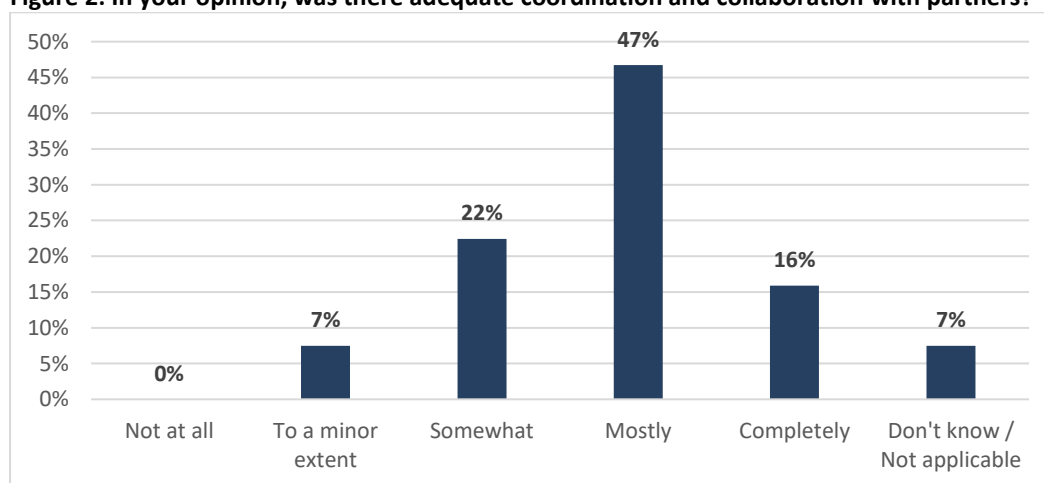
3.12 How did WHO work with others to advance the outcomes and outputs of the WHO NTD Programme?

Please also refer to Section 3.1.6 on Leadership and Partnerships. In terms of WHO working externally with others, as noted in section 3.1, the qualitative data showed that strong partnerships between WHO and key stakeholders in NTD are critical, and the advancements made on the WHO NTD Programme could not have been achieved without the substantial investment by numerous external stakeholders at the local, regional, and global levels. The important role of the pharmaceutical industry and the provision of essential medicines have also been highlighted throughout this report.

Survey data for this section was limited to internal respondents; however, qualitative data from interviews and case studies from external respondents are described below.

As noted in Figure 2, 63% (n=67) of WHO staff reported that there was mostly or completely adequate coordination and collaboration with partners.

Figure 2: In your opinion, was there adequate coordination and collaboration with partners?



There are numerous formal and informal external partnerships across different levels identified in the document analysis and interviews. For example, there is a tripartite agreement between WHO, the World Organisation for Animal Health (OIE), and the Food and Agriculture Organization (FAO) for neglected zoonotic diseases.⁵⁵

⁵⁵ The FAO-OIE-WHO Collaboration: Sharing responsibilities and coordinating global activities to address health risks at the animal-human-ecosystems interfaces. A Tripartite Concept Note. In : World Organization for Animal Health/ One Health/ International Collaboration/ Tripartite Concept Note [website]. Paris: OIE (http://www.oie.int/fileadmin/Home/eng/Current_Scientific_Issues/docs/pdf/FINAL_CONCEPT_NOTE_Hanoi.pdf, accessed 26 June 2019).

There are several formal structures that the WHO NTD Programme has in place to support coordination of its NTD work, including the STAG for NTDs and its associated thematic working groups at the global level, RPRGs at the regional levels, and various WHO Secretariat-led disease-specific meetings. As stated in section 3.1, WHO is seen as the convening partner for NTDs at the global, regional and country levels.

RPRGs are viewed internally and externally as important coordination and collaboration mechanisms at the regional level. Depending on the region, RPRGs vary in terms of which diseases they cover. The number of RPRGs meetings held is generally felt to be adequate by external interviewees.

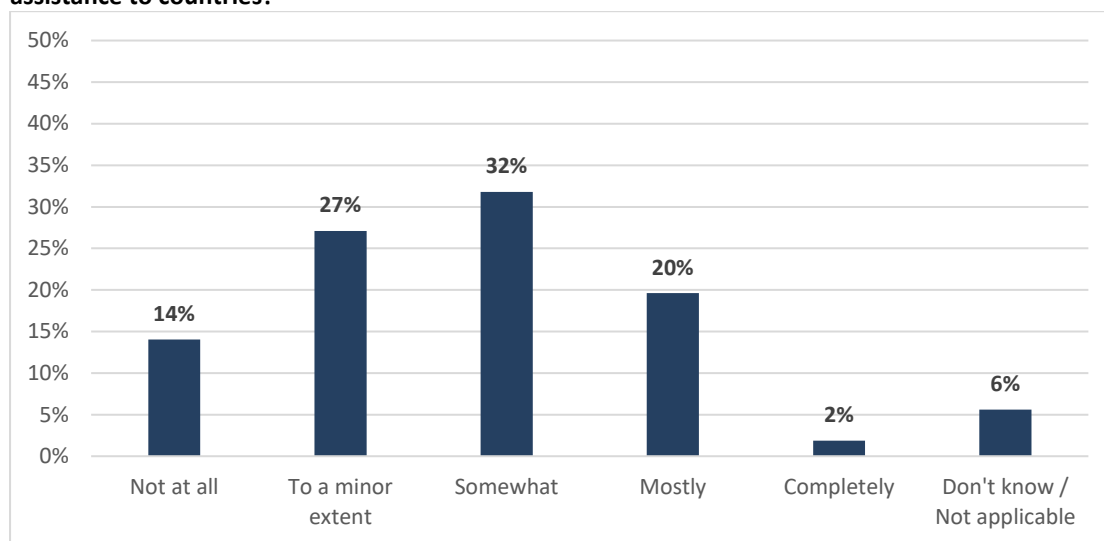
According to some of the STAG interviewees, the role, status and membership of STAG may need to be further discussed with STAG members, as there is a lack of consensus about their membership and function moving forward. Opinions varied widely amongst interviewees, but they included the view that STAG should play a more substantive decision-making role, concerns that STAG was to be reconstituted but there has been a delay in this work, and lack of clarity of who has the final decision-making authority on key NTD items (i.e. STAG versus WHO management). However, the roles and functions of the STAG are of advisory nature: “STAG is the principal advisory group to the WHO concerning the control of NTDs”.⁵⁶ Yet, due to the lack of alignment between perceptions of some interviewees and the mandate of the STAG, there is a need for further clarification on the role and function of STAG for NTDs, and for timely reconstitution of its membership.

While ESPEN is a project launched by WHO, information on the ESPEN Portal is shared between NTD partners. ESPEN is a coordinating entity for all NTD partners (on the PC diseases) in the AFRO region, as well as an entity for resource mobilization in AFRO and some countries in EMRO.

The internal survey found that, with regards to delays or limited capacity in terms of helping countries, some (41%, n=44) WHO staff reported this occurred to a minor extent or not at all. 32% (n=34) felt that this was somewhat the case and 22% (n=23) thought that this was mostly or completely the case. Please see Figure 3.

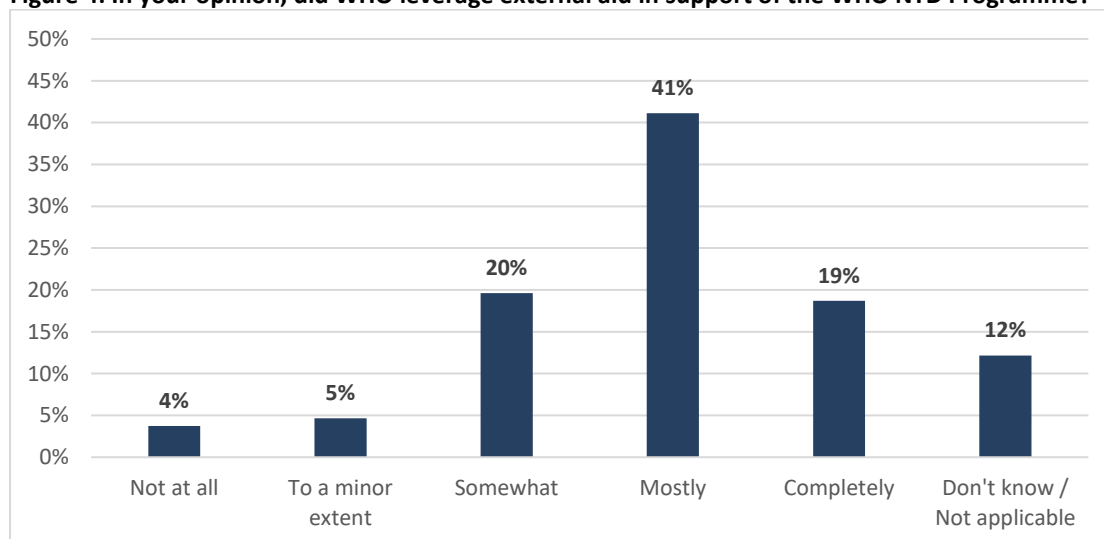
⁵⁶ Report of the first meeting of WHO Strategic and Technical Advisory Group on Neglected Tropical Diseases. Geneva, Switzerland, 17–18 April 2007. World Health Organization (WHO/CDS/NTD/2007.2). (https://apps.who.int/iris/bitstream/handle/10665/69711/WHO_CDS_NTD_2007.2_eng.pdf?sequence=1, accessed 26 June 2019).

Figure 3: In your opinion, to what extent were there delays or limited capacity in terms of providing assistance to countries?



60% (n=64) of WHO staff thought that WHO mostly or completely leveraged external aid in support of the WHO NTD Programme, as shown in Figure 4.

Figure 4: In your opinion, did WHO leverage external aid in support of the WHO NTD Programme?



In the external interviews, it was noted by two donors that there have been issues about late or incomplete progress and financial reporting by WHO management on funding contracts.

Key Findings:

- Strong partnerships between WHO and key stakeholders in NTD are critical, and the advancements made on the NTD Programme could not have been achieved without the substantial investment by numerous external stakeholders at the local, regional, and global levels.
- RPRGs are viewed internally and externally as important coordination and collaboration mechanisms at the regional level.
- The role, status and membership of STAG may need further clarification as there is a lack of consensus about their membership and function moving forward.

4 Efficiency: How could the WHO Secretariat have contributed more efficiently to delivering key outputs?

4.1 Extent to which outputs and outcomes have been achieved at the lowest cost

Efficiency questions were only asked of internal staff in the interviews and surveys. This section assesses the extent the WHO NTD Programme is delivered in a cost-effective and efficient manner. Note that as per Section 1.8 (Limitations), the NTD Programme was unable to provide financial information in the format and structure that was requested and necessary in order to assess the efficiency of the programme. To address this issue, the evaluation relied on other non-financial data sources.

4.1.1 Financial

The internal staff survey found 69% (n=74) thought that financial resources at their budget centre had been efficiently managed mostly or completely.

The evaluation found attempts at cost-efficiencies in the NTD Programme. For example, accurate drug inventories at country level are a challenge. There has been some work to ensure optimization of drug donations. As previously mentioned in the report, that has included supply chain management approaches through the Joint Application Package (see Section 3.1.1) and NTDeliver. Another example included conducting country-level medicine inventory missions to audit inventories of Praziquantel and reallocate inventories as needed.

Co-endemic areas have been ensuring integration of delivery of MDAs where this is appropriate, which helps to ensure cost-effectiveness.

However, one challenge that was identified is the earmarking of NTD funding by donors (e.g. with a disease specific focus), which can lead to working in silos on NTDs, and hindering integration of the work, including on delivery of MDAs.

4.1.2 Human Resources

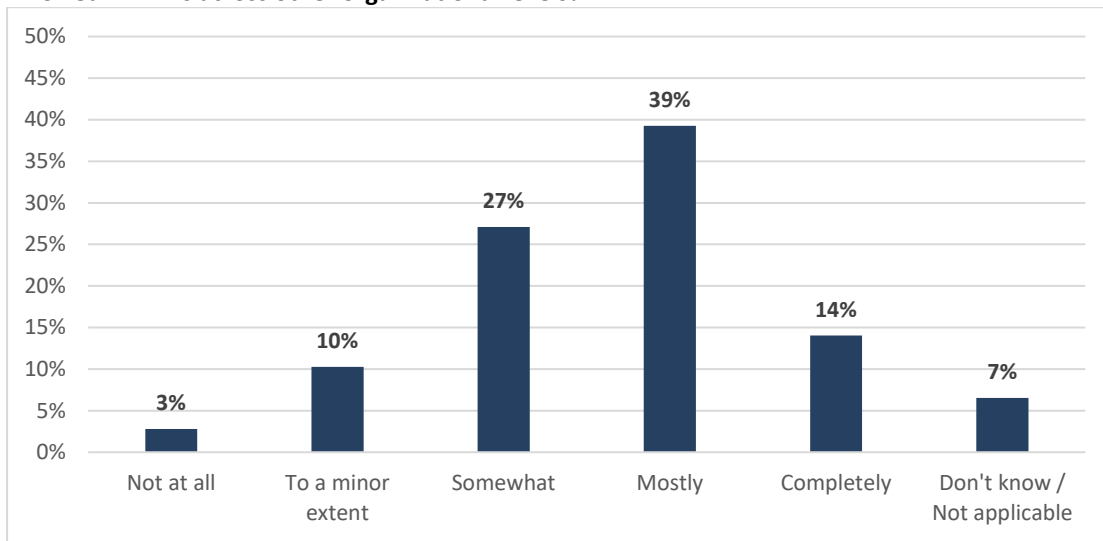
The need for more resources (including human resources) for WHO to support NTDs was identified internally and externally. There may be only one WHO staff person at the regional and country level (and they are often covering many diseases beyond NTDs, including malaria, HIV, and TB); hence, when multiple meetings are taking place at Geneva (or SEARO on leprosy as an example) on various diseases in a short time span, this poses a challenge for WHO country and regional staff in terms of attendance. This also illustrates the challenge of the lack of integration across diseases.

4.1.3 Internal Coordination and Collaboration

Internally, there is general agreement in the interviews and the survey that WHO coordinates its work across the HQ, regional, and country levels, but areas for improvement were also identified.

Slightly over half (53%, n=57) of internal respondents thought that there was mostly or completely adequate coordination and collaboration across the NTD offices at the three levels of the organization. (See Figure 5).

Figure 5: In your opinion, was there adequate coordination and collaboration across the various offices involved in NTDs across other organizational levels?

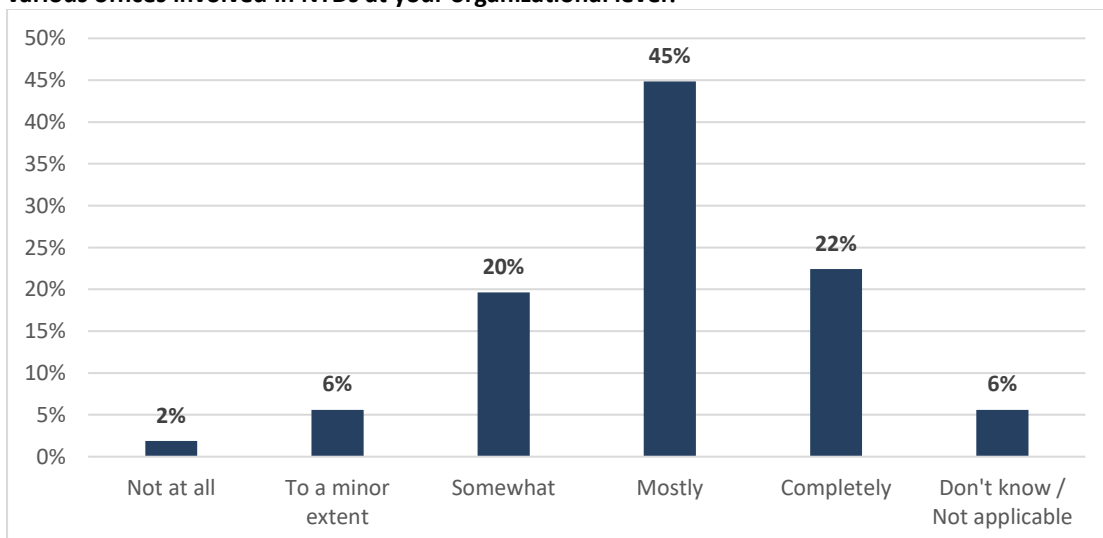


According to comments from surveys and internal interviews, there is a lack of consistency across the WHO Secretariat in terms of an approach for coordination of partnerships within NTDs as an integrated programme. In addition, there is no formal mechanism for cross-departmental working within the WHO NTD Programme on areas needing intersectoral collaboration (e.g. with areas of WASH, TDR).

4.1.4 Coordination and Collaboration among NTD Offices at their Organizational Level

Data from the internal WHO survey shows 67% (n=72) of WHO staff agreed that there was mostly or completely adequate coordination and collaboration across the various NTD offices at their organizational level. Please see Figure 6.

Figure 6: In your opinion, to what extent was there adequate coordination and collaboration across the various offices involved in NTDs at your organizational level?



Key Findings:

- There are actions aimed at cost-efficiencies in the NTD Programme, such as medicine audits and integrated delivery of MDA.
- External donor funding conditions can hinder integration of programs and, therefore, efficiencies.
- There are limited human resources for NTDs at country and regional level, often with competing responsibilities.
- There is a lack of consistency across the WHO Secretariat in terms of an approach for coordination of partnerships within NTDs as an integrated programme.
- There is no formal mechanism for cross-departmental working within the WHO NTD Programme Secretariat on areas needing intersectoral collaboration (e.g. with areas of WASH, TDR).

5 Lessons Learnt: What have been the lessons learnt, positive and negative, in the implementation of the WHO NTD Programme?

Internal and external interviewees were asked about lessons learnt in the implementation of the WHO NTD Programme. These findings are outlined below.

Political commitment and strong leadership at the Member States level is important. Formal advocacy documents can help with securing this political commitment, including documents such as the Roadmap, the London Declaration, and WHA resolutions. Having realistic targets and timelines in the Roadmap is useful to encourage commitment, action and reward achievements across all NTD stakeholders.

Labelling a group of diseases as NTDs together has resulted in an increased profile of NTDs, resources for NTDs, and progress for many of these diseases. However, there are insufficient resources or support for some diseases, even though they are included on the NTD list.

Intersectoral work with partners, communities, donors, and across levels of government is key to the success of NTD programmes, including working in areas beyond MDA (WASH, vector control, zoonosis, integrated disease management).

Ongoing issues for NTDs include cross-border and waterways outbreaks and diseases that traverse countries, requiring approaches across countries.

Detailed elimination plans (at the smallest implementation unit), with supporting WHO guidance and resources, are critical. Surveillance (and WHO-supported capacity to undertake surveillance, including post-elimination surveillance) is needed to ensure this work is carried out.

There are structural issues with having the WHO global centre for leprosy located in India according to interviews and field visits. The antecedents for locating the WHO Global Leprosy Programme in India are not clear, but the location of a global centre under the administration of a RO has certain business process limitations that may impact the performance of the centre. For instance, from a programme and budgeting, planning and reporting perspective, the Global Leprosy Programme is not involved or necessarily aware of leprosy-related activities occurring in other regional offices because information flows to WHO HQ and often not to another RO. As a result, the Global Leprosy Programme makes contingency allocations for estimating what support other regions and countries may need. Secondly, its location in a RO may limit its profile with other WHO programmes and with donors, which, may in, turn have an impact on developing joint or integrated programmes with other WHO sectors/programmes and may impact resource mobilization.

A small number of internal WHO staff noted in interviews that it is important to ensure all WHO ROs, even those with few countries with NTDs (e.g. EURO), receive continued investment (resources and support) from the WHO Secretariat, particularly given how migration influences NTDs.

A few lessons learnt also involved staffing. External stakeholders noted that an appropriate balance between technical and managerial skills at the WHO HQ level is important for success. Many external and internal interviewees cited that having no permanent director for the WHO NTD Programme at the global level for over a year, was a challenge to overall programme management and integration of NTDs.

6 Sustainability: To what extent are the results, including institutional changes, durable over time without continued funding?

6.1 To what extent are the outputs and outcomes from the activities that have occurred likely to be sustained at country level? At regional level? At global level? What are the organizational and contextual factors that affect the sustainability of the results of the WHO NTD Programme?

Sustainability of the WHO NTD Programme was one of the key areas included as part of the evaluation.

The WHO NTD Programme relies heavily on donors, and has a limited core budget, which impacts sustainability:

*“Budget centre activities are mainly carried out with the specified voluntary contribution. WHO’s assessed contribution amounts to 15% of the allocated budget (2016-2017)”.*⁵⁷

There is a competitive funding environment within the context of the SDGs, for which there is a \$1.7 trillion per year shortfall. For NTDs, there is an estimated funding gap of \$250 million for full PCT coverage.⁵⁸ The funding gap for other interventions (integrated disease management, veterinary public health, vector-borne diseases, WASH) is even higher and has not been estimated. This is a serious challenge to the elimination of NTDs in many countries.

There is a challenge in terms of sustainability of progress for NTDs that have an elimination target, as it cannot be expected that drug donations will continue indefinitely. Sustainability and the provision of essential medicines is discussed under Section 3.6.

The focus of the WHO NTD Programme on MDA has meant that other strategies for control and prevention of NTDs have not progressed to the same extent, challenging long-term results. Some internal interviewees identified the need for further integration across diseases, and in key areas of zoonotic diseases, integrated disease management, WASH, and vector control, and the health systems strengthening behind this (e.g. laboratory diagnostics, capacity building, and surveillance systems including post-elimination).

Long-term sustainability requires that Member States institutionalize NTD programming and MDA into their health systems. However, currently, the extent of this institutionalization varies by country and disease, depending on priorities, resources and commitments of the Member States.

⁵⁷ World Health Organization. Neglected Tropical Diseases Financial Flow. In: WHO/programme budget web portal/ Programme Neglected Tropical Diseases/2016-2017/Financial Flow [website] Geneva: World Health Organization (<http://open.who.int/2016-17/our-work/category/01/programme/01.004/flow>, accessed 26 June 2019).

⁵⁸ Integrating neglected tropical diseases in global health and development: Fourth WHO report on NTDs. Geneva: World Health Organization; 2017 (<https://apps.who.int/iris/bitstream/handle/10665/255011/9789241565448-eng.pdf?sequence=1>, accessed 26 June 2019).

7 Equity: What has been the relevance and effectiveness of WHO's contribution to address the needs of vulnerable populations, including the poor and the marginalized, women and the elderly? (from TOR #15)

7.1 To what extent were vulnerable populations taken into consideration by this programme? To what extent were vulnerable populations served by this programme?

The consensus from respondents from the interviews and case studies is that NTDs are diseases of the poor, and hence, by design, are focused on addressing the needs of vulnerable populations. In some cases, WHO has assisted in developing strategies to reach sub-groups of vulnerable populations, such as indigenous groups or military personnel.

Internally, a majority (71%, n=82) of internal survey respondents reported that vulnerable populations were mostly or completely taken into consideration in the design of the WHO NTD Programme. On the other hand, only about half (52%, n=119) of external survey respondents felt that vulnerable populations were mostly or completely taken into consideration in the design of the WHO NTD Programme, indicating that a gap remains.

Gaps identified in terms of vulnerable populations include reaching some rural and remote locations, conflict zones, and internally displaced people.

In addition, there are some populations that are not reached consistently across countries despite being included in the WHO guidelines (e.g. treatment for child bearing women and pre-school aged children for soil-transmitted helminthiasis has been added to the guidelines, but provision of donations of the medications does not yet cover these groups).

Some interviewees noted that there are assumptions made on reach of the WHO NTD Programme without data consistently being available to support whether this reach has been achieved (e.g. reaching girls or children with disabilities in school-based MDA programmes, etc.).

Stigma remains a challenge for certain diseases (e.g. leprosy and cutaneous leishmaniasis), although there are programmes in place in some countries to address stigma for some NTDs (i.e. leprosy).

8 Conclusions

8.1 Relevance

In general, the WHO NTD Programme aligns to the needs of Member States as identified in the Roadmap, WHA resolutions and SDGs, and their own country strategies. The London Declaration and the Roadmap were instrumental in increasing the profile of NTDs globally, regionally and nationally.

The WHO NTD Programme closely mirrors the strategies in the Roadmap, and the WHO core functions are also relevant although some functions may be in higher demand than others, such as the provision of technical advice and guidance. To meet all needs, however, WHO needs to work in partnership with other stakeholders internally and externally to address all needs across its core functions. Some of the disease sub-programmes within the WHO NTD Programme are doing this more successfully than others, for example, lymphatic filariasis.

Progress has been made in several countries on NTDs with the support of WHO, while other countries are just starting their work in NTDs, resulting in different needs across different countries across the diseases. As countries move to elimination, there is increasing demand for guidance on post-elimination verification, surveillance and diagnostics, and supporting research.

8.2 Effectiveness

The past seven years have been successful in terms of reach and increased profile for NTDs thanks to the Member States, the WHO NTD Programme and a variety of partnerships and collaborations with non-governmental organizations, donors, and pharmaceutical companies.

The strong emphasis of the WHO NTD Programme on PC diseases and MDA comes from the General Programme of Work, the Roadmap and also supported by the partnerships and donations with industry and donors. This strong focus on PC diseases is evident when compared with the other NTDs.

There has been progress in other areas, but the challenges are significant. The leishmaniasis case study illustrated the complexity of a disease that cuts across multiple strategies including integrated disease management/case management, vector control and WASH.

In general, effectiveness is varied across diseases, strategies and countries. In many cases, WHO guidelines are in place to support diseases. However, some types of diseases demonstrated more activities than others (e.g. lymphatic filariasis versus taeniasis). WHO NTD Programme activities have not been evenly distributed across the various diseases; hence, there are some diseases that remain the “neglected of the neglected”.

8.2.1 Provision, access and sustainability of essential medicines

The evaluation has found some significant outputs regarding the provision of essential medicines to treat NTDs.

Nonetheless, there are gaps in essential medicines for NTDs that remain. While there is generally an increasing supply of medicine for NTDs (see 3.1), the demand still exceeds supply (e.g. Praziquantel), and there continue to be logistical challenges for delivery. Coverage figures indicate that one out of five of the PC NTDs has reached its WHO coverage targets.

In many cases, there is a reliance by Member States on drug donations for sustained access to essential medicines (see section 8.1). While this may be feasible for diseases with eradication targets, diseases with elimination targets (e.g. soil-transmitted helminthiasis and schistosomiasis) remain a challenge.

Provision of essential medicines was allocated to the WHO core function of leadership and partnerships by the evaluators. It is not clear if actual delivery and logistic support is a core competency of WHO as it is, for example, with the World Food Programme whose mandate is commodity logistics. There are instances where a heavy burden is placed on technical staff at all levels within WHO, but especially at regional and country level, to deal with logistical issues regarding medicine for NTDs. This takes the time of already limited human resources (see Efficiency section), further limiting the time for core function areas such as technical support on NTDs to Member States.

Ensuring the integrity of the supply chain will be a continued requirement for sustaining the donations programme, and some countries may require continued support to ensure such integrity. The efforts by Member States, WHO and industry to further improve the supply chain management need to continue.

8.2.2 Development of guidelines and increased and sustained access to control interventions

There are variations in approach and quality of the work across the different diseases in the NTD Programme, which leads to a need for strengthening the programme management component with a view to incorporating best practices across the programme to the extent possible, including in areas such as cross-sectoral work and integrated programming.

The availability of WHO global guidelines varies by disease, and adaptation of these to a country context varies by country. Some WHO global disease guidelines are insufficient, and gaps remain. In addition, WHO guidelines that focus on integration across diseases require more focus, although there has been some progress on developing integrated guidance on WASH, vector control and skin diseases. Timeliness of the development and release of WHO guidelines, including timely updates of guidelines, as well as adequate and timely translation into other languages, and dissemination to all key stakeholders, are also issues.

There are examples of WHO ROs providing capacity in terms of norms and standards (e.g. developing guidelines). Please refer to text box under 3.2 and the Chagas disease guidelines developed by AMRO/PAHO.

8.2.3 Information systems, surveillance and monitoring the Roadmap

The WHO NTD Programme provides data on its website when it comes to NTD diseases (particularly the PC diseases) as well as some other diseases (e.g. leishmaniasis), and this has facilitated monitoring of the Roadmap. There are also country level efforts for data collection and in-field verification.

However, the quality of the data in terms of timeliness, comprehensiveness and accuracy can vary across countries and diseases. Monitoring (e.g. of essential medicine) remains an issue, as not all Member States report systematically on coverage targets. This data is key to the success of the WHO NTD Programme, and WHO's role in supporting Member States in this regard is viewed as an important function.

8.2.4 Partnerships, Coordination and Collaboration

Partnerships are key to the successful implementation of the WHO NTD Programme, and the work in this area could not have been accomplished without the significant contribution of a variety of external stakeholders at the local, regional, and global levels. WHO has played a leadership role in many of those partnerships at the global, regional and country level.

Advocacy materials are key for keeping NTDs on the global, regional and country agendas. This requires continued effort given the competitive environment in health, and more generally in development and the SDGs.

While there are formal mechanisms for coordination of NTD work (e.g. RPRG, STAG), as well as informal mechanisms (e.g. emails, telephone calls), both internally and externally, there are still areas for improvement within WHO and with external stakeholders. The role and function of STAG may need to be revisited and confirmed given some questions raised in the interviews.

8.3 Efficiency

There is indication that attempts have been made to ensure cost efficiencies in the WHO NTD Programme (e.g. integration of MDA delivery across diseases), but there are some fundamental challenges to the programme. The evaluation has highlighted that with existing resources, there remain those “neglected of the neglected diseases”. It is logical, therefore, that the addition of new NTDs without a corresponding increase in resources will only exacerbate this problem, and WHO NTD resources are not enough to address the priorities.

Some areas for improvement identified included:

- improving the integration across diseases (see Section 9 for more details);
- improving intersectoral coordination across WHO (WASH, TDR); and
- continued improvements to medicine supply chain.

8.4 Sustainability

The focus of the WHO NTD Programme over the past few years has been on MDA, meaning other strategies for control and prevention of NTDs have not progressed to the same extent, challenging long-term results.

There is an opportunity for WHO to refocus efforts under the new GPW13 under UHC, and given the SDGs, to include key areas of zoonotic diseases, integrated disease management, WASH, and vector control, as well as the HSS behind this (e.g. laboratory diagnostics, capacity building, and surveillance systems including post-elimination).

Funding relationships are extremely important given the competitive environment for funding to meet the SDGs. On the other hand, the WHO NTD programme is reliant on donor funding for 85% of its budget, which can challenge the programme’s autonomy.

8.5 Equity

The consensus in the internal and external interviews is that NTDs are diseases of the poor, and hence the work being undertaken is addressing the needs of vulnerable populations. However, there are areas that remain issues in some cases such as rural and remote areas, conflict zones, and internally

displaced people. Improved monitoring would help to ensure that all vulnerable populations are in fact reached.

8.6 General Conclusions

It was noted throughout this report that the survey revealed different perspectives between WHO staff and external stakeholders on the relevance of the programme on needs and its effectiveness. While some discrepancy is expected, there were several instances with significantly higher proportion of WHO staff rating overall performance or relevance much higher than external stakeholders (see Sections 2.1, 3.2 and 3.3 as examples).

There will always be a higher level of demand than what the WHO NTD Programme is able to meet. For example, at the country level, WHO is called upon to do a great deal. However, WHO resource levels are seldom adequate facing such demand, and there may be questions on whether all activities and support fall within WHO's mandate (versus the Member State's mandate). Nevertheless, there are important components (e.g. surveillance systems) that are required for NTDs that need continued WHO support.

8.6.1 Reach, use and usefulness of products and services

There is general agreement of satisfaction on the usefulness of WHO NTD Programme products and services in the surveys and the interviews. However, the interview data showed that this varies by disease, and there was a sense that the quality of certain NTD guidelines could be improved.

The survey results indicate there are access issues for some WHO NTD Programme products and services in terms of timeliness and ensuring adequate reach, particularly to country level.

9 The Way Forward

Development of New Roadmap

1) Another Roadmap, as well as London Declaration-type document, can help to keep momentum on addressing NTDs, as the current efforts will not be sustained without future commitment.

- The focus of the Roadmap and of the WHO NTD Programme should be broadened beyond a focus on MDA for PC diseases, to further articulate and implement the other four strategies of the programme (i.e. integrated disease management/ case management, WASH, vector control, and zoonosis).
- Clear, achievable targets (with clear definitions in terms of coverage at different levels: national, sub-national, implementation unit) and strategies for medicines, integrated disease management/ case management, WASH, vector control and zoonosis should be outlined in the next Roadmap (beyond PC diseases). Sustainability targets need to be built into the strategy.
- There is an opportunity to formulate the Roadmap in an integrated way across the 20 NTDs, linking the NTD work to UHC, the WHO GPW13, and the SDGs.
- The NTDs should remain a stand-alone programme. While integration across NTDs is needed, and work on the NTDs is closely aligned with UHC, the SDGs and HSS, there is a risk of losing sight of the work that has been done and needs to continue that is specific to the NTDs if they are instead subsumed under a broader umbrella of HSS.

2) The list of NTDs has grown to 20 and given the international attention on NTDs and resources directed to them, there may be pressure to add other diseases to the list. As it stands, some diseases on the NTD list generate more resources and interest than other diseases, from WHO as well as other stakeholders. If too many diseases are added to the NTD list, without adequate resources and support from WHO and other NTD stakeholders (e.g. donors), then there will continue to be a discrepancy between the NTDs that are supported, and those that are the “neglected of the neglected”.

Integration of NTDs

3) The WHO NTD Programme should consider further integration across diseases (e.g. in the WHO guidelines and in coordination of meetings in Geneva). If the WHO NTD Programme is advocating for an integrated programme, WHO should also consider whether an integrated WHO guideline is best. An approach to address integration across all strategies (integrated vector control, WASH and skin diseases guidelines have recently been released related to NTDs) should be considered.

4) All NTD-relevant diseases and subprogrammes within the WHO Secretariat should be developing integrated plans, which should be reflected as a WHO NTD Programme-managed process in the next iteration of the Roadmap for implementation. Otherwise, there is a risk that this work will be done in silos by disease. The resultant integrated plan should then be reviewed internally at WHO (at all three levels) before going externally for verification.

5) WHO’s work must continue in the area of MDA for PC diseases, but there are “neglected of the neglected” diseases that will require more resources and intersectoral collaboration. For example, the WHO Secretariat may want to consider the distribution of staff across strategies, since there are staff for integrated disease management, zoonosis, and PCT, but no WASH focal point in NTD, at HQ.

6) Since donors may have earmarked funding based on disease (and hence not taken into consideration co-endemic diseases or integrated strategies), the WHO Secretariat should work with donors to encourage a more integrated approach. Donors supporting MDAs could also be encouraged by WHO and other stakeholders (e.g. at NTDs partner fora) to dedicate funds for strategies in addition to MDA (e.g. WASH, vector control, etc.) that will help to eliminate NTDs.

Programme Management

7) A strong integrated programme management function is important to ensure efficiencies. It is important for WHO to move from coordination to collaboration and integration of NTDs. This includes moving from exchanging information and limiting duplication, to sharing resources, and working together to build interdependent systems that have a common benefit and purpose.⁵⁹

- As an example, a formal mechanism to coordinate internally at the WHO Secretariat level is important to ensure intersectoral collaboration and integration that will further address NTDs (e.g. WASH, surgery, mental health, TDR).
- As noted above, partnerships are key to the successful implementation of the WHO NTD Programme and will continue to be critical. There needs to be a clear stakeholder analysis conducted by the WHO Secretariat at global level with articulated strategies about how to engage external groups (or not to engage). Externally, this includes disease specific organizations and wider scope entities (e.g. the research agenda with Coalition for Operational Research on NTDs, Drugs for Neglected Diseases initiative, etc.). This will help the WHO Secretariat to ensure that units within WHO collaboratively engage stakeholders in a more harmonized, consistent and integrated way.
- The STAG's role and membership, and other groups as needed (e.g. RPRGs), should be more clearly aligned with the new Roadmap for implementation and the WHO NTD Programme moving forward.

8) WHO should conduct a business case study on the global leprosy programme to determine if it is optimally located where it is currently. There were enough issues raised during interviews to warrant, from an organizational effectiveness perspective, a closer look at the current situation and assess options moving forward.

9) WHO Secretariat, in collaboration with industry, should conduct a closer evaluation of logistical supply chains (e.g. medicines), efficiencies and the logistical burden on staff, and consider alternative service delivery (e.g. third-party delivery), while ensuring quality assurance of medicines.

10) WHO needs to advocate a final push for eradication of dracunculiasis, to ensure that momentum is not lost. Momentum also needs to continue in the post-elimination phase of diseases. Investment on NTDs should continue in all WHO regions, as needed.

11) Work should be undertaken to ensure that WHO meets the needs of the most vulnerable for NTDs (e.g. people in remote and rural areas, conflict zones, women/girls, people with disabilities, internally displaced people).

⁵⁹ Schematic for a Continuum of Integration. Adapted from: Integrated Health Promotion: a practice guide for service providers (2003). State Government of Victoria, Melbourne, Australia. In: Social Planning and Research Council of British Columbia (SPARC BC)/ Collaboration and Network Development/ [website]. British Columbia: SPARC BC (<https://www.sparc.bc.ca/wp-content/uploads/2016/12/continuum-of-collaboration.pdf>, accessed 26 June 2019).

12) From a programme management perspective, the programme should have a well-articulated programme logic-model and a specific, detailed performance measurement framework to ensure management has performance data for decision-making. In addition:

- More systematic tracking is needed to understand the effectiveness of some outputs including reach (e.g. training outputs, dissemination of documents).
- WHO should ensure that disaggregated data is collected and monitored to understand reach to vulnerable populations on an ongoing basis.

Guidelines

13) WHO guidelines, though they vary in scope and availability from one disease to the next, are viewed as critical. WHO can seek ways to expedite guideline development, including communicating clearer timelines/milestones for guideline development to stakeholders. WHO should develop an overall forward-looking plan identifying the guidelines needed in the upcoming future, including detailed timelines for guideline development, and have this reviewed by the WHO NTD programme staff at all levels and WHO expert groups so there is agreement on schedule.

- As efforts continue and targets are met on NTDs, further work needs to be done to address areas such as the changing nature of NTDs (e.g. more specific diagnostics) in WHO guidelines.
- WHO needs to ensure greater integration of the guidelines across other strategies of the Roadmap to ensure sustainability.
- The Chagas disease guidelines could be used as a case study to see if it is feasible for regions to take the lead on guideline development where deemed appropriate.
- WHO needs formal dissemination plans in place for WHO products and services (including WHO guidelines, advocacy materials) to ensure they reach intended users in a timely manner. This includes timely translation of materials.

Sustainability

14) The WHO NTD programme needs to set the conditions for sustainability (e.g. institutionalization of NTD programming by Member States, drug procurement) and integrate this into the WHO NTD Programme.

- One process that the WHO NTD Programme may consider would be a system to gradually remove Member States from the MDA list, to encourage institutionalization of NTD drugs and programmes in countries.
- For any diseases control programme, there needs to be good surveillance data. As the WHO NTD Programme moves forward post-elimination, these surveillance systems will become more important as the WHO NTD Programme moves towards elimination and eradication of diseases. WHO should work with partners and countries to strengthen NTD surveillance systems at the country level.

10 Recommendations

Following from the previous section on the way forward, the following presents each recommendation along with recommended specific actions.

Strategic Recommendation 1	Specific Actions
<p>An updated Roadmap, as well as London Declaration-type document, is needed to help to keep momentum for NTDs.</p>	<ul style="list-style-type: none"> i. The focus of the Roadmap and WHO NTD Programme should broaden beyond a focus on MDA for PC diseases, to include further articulation and implementation of the other four strategies of the WHO NTD Programme (integrated disease management/case management, WASH, vector control, and zoonosis) with clear, achievable community mobilization and strategies for all NTDs. Sustainability targets need to be built into the strategy. ii. The importance of integration across the 20 NTDs should be a focus of the new Roadmap, linking the NTD work to the GPW13, UHC, HSS, and the SDGs. iii. The list of included NTDs for the Roadmap and the WHO NTD Programme needs to be safeguarded. The WHO Secretariat and its partners need to ensure adequate resources and support for the NTDs that are included on the list.
Strategic Recommendation 2	Specific Actions
<p>The WHO NTD Programme should consider further integration across the NTDs.</p>	<ul style="list-style-type: none"> i. To facilitate integration across NTDs, including within the WHO NTD Programme: providing integrated guidelines (e.g. across strategies) and supporting their implementation, planning across diseases in an integrated manner, and ensuring that staffing aligns with integrated strategies across diseases. ii. From a partnership perspective, WHO should encourage donors to adopt an integrated approach to NTDs and ensure intersectoral collaboration within WHO and externally to support work on NTDs.
Strategic Recommendation 3	Specific Actions
<p>A stronger overall integrated programme management function at NTD HQ level to ensure efficiencies, moving from coordination to collaboration and integration of NTDs, and ensure sustainability.</p>	<ul style="list-style-type: none"> i. Consider a formal mechanism to coordinate internally at WHO HQ to ensure intersectoral collaboration and integration that will further address NTDs (e.g. with programmes on WASH, surgery, mental health, UHC), as well as research needs (e.g. by formulating a well-articulated research partnership with TDR). ii. The WHO NTD Programme should conduct a clear stakeholder analysis with articulated strategies about external engagement to ensure that diseases/sub-groups collaboratively engage stakeholders in a more harmonized, consistent and integrated way.

- iii. The WHO NTD Programme should have a well-articulated programme logic model and a specific, detailed performance measurement framework to ensure management has performance data for decision-making.
- iv. The WHO NTD Programme should assess the logistical support role it provides, (i.e. whether it fits within WHO's core functions, and if it is adequately resourced at all levels of WHO).
- v. As country-level NTD surveillance data is critical, surveillance systems will become more important as the WHO NTD Programme moves towards elimination and eradication. WHO should work with partners and countries to strengthen NTD surveillance systems at country levels.
- vi. The WHO NTD Programme needs to set the conditions for sustainability, which are defined clearly (e.g. domestic institutionalization, drug procurement) and integrated into the WHO NTD Programme.