

‘Stepping into the decade of NTDs elimination’

Report of the Fourth Meeting of
NTD National Programme & Data
Managers from the WHO African
Region

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ACRONYMS

APOC	The African Programme for Onchocerciasis Control
AMR	Antimicrobial Resistance
ARD	Assistant Regional Director
CM-NTDs	Case Management neglected tropical diseases
CoP	Community of Practice
COR-NTD	Coalition for Operational Research on NTDs
CHAI	Clinton Health Access Initiative
CHIP	Country Health Information Platform
DHIS2	District Health Information Software 2
DLS	Diagnostics and Laboratory Services
ECSS	ESPEN Collect Support Services
EPR	Emergency Preparedness and Response
ESPEN	Expanded Special Project for the Elimination of Neglected Tropical Diseases
FCDO	Foreign, Commonwealth & Development Office (United Kingdom)
GPW13	Thirteenth General Programme of Work
HSS	Health Systems Strengthening
HMIS	Health Management Information Systems
HQ	Headquarters
IU	Implementation units
IVM	Ivermectin
JAP	Joint Application Package
LF	Lymphatic filariasis
LSHTM	London School of Hygiene & Tropical Medicine
MCATs	Multi-Country Assignment Teams
MDA	Mass drug administration
MMDP	Morbidity management and disability prevention
NGOs	Non-governmental Organizations
NNN	NTD NGO Network
NPO	National Professional Officer
NTD	Neglected Tropical Diseases
OEM	Onchocerciasis elimination mapping
ONCHO	Onchocerciasis

PC-NTDs	Preventive chemotherapy neglected tropical diseases
PHP	Public Health Problem
PZQ	Praziquantel
RPRG	Regional Programme Review Group
SCH	Schistosomiasis
SCM	Supply chain management
STAG	Strategic and Technical Advisory Group
STH	Soil-transmitted helminthiasis
TAS	Transmission assessment surveys
TCC	The Carter Center
TIS	Trachoma Impact Survey
TSS	Trachoma surveillance survey
TT	Trachomatous Trichiasis
TVD	Tropical and Vector-Borne Disease
UHC	Universal Health Coverage
UHC/CND	Universal Health Coverage, Communicable and Non-Communicable Diseases
UHP	UHC-Healthier Populations
UK	United Kingdom
UN	United Nations
USAID	The United States Agency for International Development
WASH	Water, Sanitation & Hygiene
WCO	WHO Country Office
WHA	World Health Assembly
WHO/AFRO	World Health Organization Regional Office for Africa
WHO/EMRO	World Health Organization Regional Office for the Eastern Mediterranean

SUMMARY

The year 2020 was an unprecedented year characterised by uncertainties, as the world made efforts to combat the COVID-19 pandemic. The pandemic response has taught us how much we are interlinked and the need for integrated health programmes and responses. The year 2021 has also begun with a significant setback for the NTD community, particularly in the African region, due to the early interruption of the UK FCDO funding to the ASCEND project, which was providing support to over 1,800 implementation units across Africa. Although some big donors, Bill and Melinda Gates Foundation (BMGF), the Children's Investment Fund Foundation (CIFF) and the ELMA Foundation have joined forces to mitigate the impact of the temporary interruption of funding from the UK FCDO, there is a growing need to better monitor funding availability across the African region to ensure that resources are allocated where they are needed most.

In November 2020, Member States joined forces at the seventy-third World Health Assembly to endorse a new road map for neglected tropical diseases (NTDs) 2021 – 2030. The new road map provides targets and milestones for the control, elimination and eradication of NTDs. The hallmark of the NTD road map 2021-2030 is integration: integration among NTDs, integration with the health system and related sectors. With this spirit, the World Health Organization African Region is implementing integration. True and lasting integration requires structural and functional arrangements. Furthermore, the new NTD Roadmap 2021 – 2030 is putting quality, reliable and integrated data in the centre of all decisions. NTD programmes and stakeholder must make their decisions on the implementation of interventions and surveillance based on data evidence. For this, better tools and platforms are needed for guiding and supporting NTD country programmes and stakeholders in the pathway towards the control and elimination of NTDs.

WHO/AFRO sees the importance of integration across diseases and programmes. There are lessons and best practices that can be shared among diseases and programmes. ESPEN NTD Portal is an example of pursuing data integration across all preventive chemotherapy NTDs (PC-NTDs). ESPEN established the NTD Data Portal in April 2017 with the purpose of making technical resources for planning and decision-making easily available to country NTD Programmes and stakeholders. Nowadays, the ESPEN NTD Portal has become the largest open-access NTD data repository that provides sub-national level data of preventive chemotherapy interventions and monitoring and evaluation activities. This experience can be expanded to the case management NTDs (CM-NTDs) and other diseases such as malaria, HIV/AIDS and tuberculosis.

To harness these experiences and bridge cross learning among different disease programmes, communicable and non-communicable diseases are brought under the same cluster and form the Universal Health Coverage, Communicable and Non-Communicable Diseases (UHC/CND or UCN), where ESPEN belongs. This new structure of the WHO Regional Office for Africa brings a unique opportunity to fully implement the integration envisaged in the NTD road map 2021-2030. Within the Team of Tropical and Vector-Borne Disease (TVD), it provides the structural support for NTD full integration and

collaboration with communicable and non-communicable diseases as well as with other clusters contributing to Universal Health Coverage, such as UHC/Life course (ULC) and UHC/Healthier Populations (UHP), and the Emergency Preparedness and Response (EPR) Cluster in charge of humanitarian and epidemic response. ESPEN will also foster its participation in Antimicrobial Resistance (ARM) monitoring and Diagnostics and Laboratory Services (DLS), these two teams being under the supervision of the Assistant Regional Director (ARD).

It is hoped that the initiative taken at the WHO/AFRO level will galvanize the integration of NTDs and other communicable and non-communicable diseases at country level and will contribute to the achievements of the NTD Roadmap 2021-2030 targets and goals, through the implementation of national NTD Master Plans, and free Africa of NTDs.

The meeting was attended by 337 and 322 registered participants, on the first and second day respectively, from WHO/HQ, WHO/AFRO, WHO/EMRO, Programme managers from the Ministry of Health, Country NPOs, and partners.

Sessions: highlights

Opening Remarks

- Dr Amir B Kello, acting ESPEN Team leader, pointed out that this was the first PMM meeting that will put emphasis on data management in the context of the new NTD roadmap. Thus, second day's meeting was going to focus entirely on data management and presenting new tools and platforms to guide NTD country programmes decision and planning.
- Dr Akpaka Kalu, TVD team leader and acting UCN Director, started by explaining that December 2021 was the end of WHO/AFRO planning period for the biennium plan, which will be followed by a transition to a new biennial plan which will extend until 2023. It is also a time for the transformation, the required organizational and rationale changes at the WHO/AFRO are finalized and made operational.
- *"The 2030 NTD Roadmap represents a paradigm shift in strategic approaches to addressing entities - from focus on process to impact orientation, from siloed disease specific programs to holistic cross cutting approaches, including integration across entities, as well as from externally driven agenda to country ownership and financing with NTDs integrated in national health plans and budgets"*, remarked Dr Kalu.
- WHO/AFRO UCN has adopted three guiding principles: i) integration across programmes and clusters through the health systems pillars and sub-groups of populations across the life course, ii) the mainstreaming health services, and iii) prioritizing improving analytics to inform strategy public health actions, namely fostering data use for public health action.
- ESPEN Data Portal is an example of data integration across all the preventive chemotherapy entities. The UCN department is planning to expand the ESPEN platform

to ensure that other diseases, non-communicable and communicable diseases, are integrated.

- We need to leave no one behind also concerning analytics and data management capacities within country programmes. WHO/AFRO is committed to build capacities on analytics and GIS technologies in the African region.

Session 1: The 2030 NTD Roadmap & WHO/AFRO-UCN restructuring for better country support

- Dr Gautam Biswas, who is acting as Director of the NTD Department on behalf of the Dr Mwele Ntuli Mwalecela, started by acknowledging the tremendous progress made in the last few years towards the control and elimination of NTDs. As a result of these interventions 600 million people are now no longer at risk or no longer require NTD interventions. By 2020, 42 NTD endemic countries had eliminated at least one NTD and in 2021 one more country has joined this group.
- The NTD road map has been formulated over the Sustainable Development Goals (SDG), which already include a target for achieving a 90% reduction on the people who require interventions against the NTDs, which implies a reduction of 75% burden (DALYs) caused by the NTDs.
- The NTD road map has been built around 10 cross-cutting indicators and 22 disease specific indicators, which will allow us to track the progress.
- One hundred countries should have eliminated at least one NTD by 2030 and two NTDs, yaws and Guinea worm, should have been eradicated.
- The new NTD road map lays on three major pillars: i) accelerate the programmatic actions, ii) intensity cross-cutting approaches in three areas: integration of NTD programmes and interventions, mainstream, namely putting NTD in the health system instead of being treated through vertical programmes, and coordination with other sectors such as WASH, vector control and disease programmes such as malaria, mental health, maternal-child care, and iii) country ownership, which means that country is in the centre of the interventions.
- There are also some companion documents to the NTD road map 2021 – 2030 such as the sustainability framework, the M&E framework and updated strategy on WASH and NTDs.
- Dr Akpaka Kalu, TVD team leader and acting UCN Director, presented the organigram for the WHO Regional African office, with a DPM (Director, Programme Management) to which three directorates are reporting, including the UHC/CND.
- The UCN cluster has adopted the global mission of reducing burden of diseases in the WHO African region.
- Using appropriate analytics is needed to inform strategic control interventions and then direct the investment in such a way as to maximize investment efficiency, reduce inequities and enhance impact on the diseases.
- The UCN has defined four strategic objectives: i) leadership, coordination, partnership and resource mobilization for disease control, ii) development of WHO disease control

technical products, services and tools including adoption of new technologies and innovations, iii) generation and use of strategic information for action including optimizing investment and iv) technical support in deployment of WHO technical products and services and institutional capacity building including support to national disease programmes and regulatory authorities.

- The UCN cluster is organized in four teams mostly around diseases: HTH (HIV, TB and hepatitis), TVD & ESPEN, NCD (non-communicable diseases) and VPD (vaccine preventable diseases).
- There are two new cross-cutting teams, which are transversal to the disease specific teams: the Strategic Planning and Policy Office, intended to provide strategic expertise to enhance policy coherence, and the Precision Public Health Metric Office, intended to support generation of strategic information for disease control action including knowledge informed by data science, public health informatics, and research and innovations.
- WHO has decentralized our technical support and created the MCATs (multi-country assignment teams) in 11 locations, in order to bring WHO technical support closer to countries.
- Dr Spes Ntabangana introduced the role of the new MCATs, which is to bring closer the WHO expertise to the member states, and support technically, strategically and in real time the member states according to their priorities and needs.
- They are intended to cover 6 programmatic domains, covering 11 geographical areas (group of countries), and in multiple diseases/health areas always following an integrated approach.

Session 2: NTD Roadmap 2021-2030: disease specific targets

- This session was split into two main parts, the first one consisted of presentations by PC-disease-specific targets, and the second one on key questions related to challenges and opportunities for the five PC NTDs and the Laboratory.
- In 2020, the total population requiring MDA for onchocerciasis was estimated to be 240.1 million scattered in 1793 Implementation units (IUs). Only four countries have been verified as having eliminated the transmission of onchocerciasis, namely Colombia in 2013, Ecuador and Mexico in 2014, and Guatemala in 2016.
- In 2020, the total population requiring MDA for onchocerciasis in the African region was estimated to be 239.250 million scattered across 1763 IUs. The endemicity status of onchocerciasis is yet to be confirmed in Mozambique, Kenya, and Rwanda.
- Lymphatic filariasis is endemic in 72 countries across the five WHO regions with an estimated population of 863.1 million scattered across 2207 IUs. A total population of 693 million no longer require MDA globally as a result of the successful implementation of WHO-recommended interventions. As of 2020, 17 countries worldwide were validated as having eliminated lymphatic filariasis as a PHP.
- In the African region, 32 countries are co-endemic for LF and onchocerciasis of which 10 are co-endemic with loiasis. A total of 339.17 million people in 1,775 IU required

MDA in 2020. Togo and Malawi were validated as free of LF as a PHP in 2017 and 2020.

- In the African region, Benin, Botswana, Burundi, Guinea, Botswana, Sao Tome & Principe, and Togo, are some of the countries that have achieved the 2020 target of reaching over 75% school aged children in the national coverage for preventive chemotherapy against STH.
- In 2020, thirteen countries in the African region reported having delivered treatments to pre-school aged children for STH, representing 9.2% of the target population, with a coverage and 44% for STH for 46.6% for SCH. In 2020, 14.5% of adults were reached with the treatments for schistosomiasis.
- ESPEN has developed community level data analysis optimization tool for more targeted interventions against SCH, which is now part of the joint application package.
- In 2021 a number of countries started planning for *Taenia solium* control, and especially in areas where these overlaps with schistosomiasis and that ESPEN looks forward, to scaling up these activities in 2021.
- Globally, 44 countries are known to be endemic for trachoma and an estimated 136 million people live in at-risk areas. 1.9 million are visually impaired or irreversibly blind due to trachoma. To date, 11 countries have been validated to have eliminated trachoma as a PHP. That includes two countries in the African Region (i.e., Ghana and the Gambia).
- In the African region, an estimated 116 million people live in at-risk areas, which represents 85% of the global burden. Twenty-six countries are known to be endemic for trachoma in the region. Among these, Ethiopia stands out as it has 50% of the global and 58% of the regional burden of trachoma.
- Togo has claimed to have eliminated trachoma and its dossier is still under review. Ghana (2018) and the Gambia (2021) have been validated to have eliminated trachoma as a public health problem.
- In 2020, only 4 endemic countries in the African Region have achieved 100% geographic coverage for trachoma MDA.
- Major end game challenges for onchocerciasis and LF are: 1) high dependency on external financial supports, (2) difficult access to some communities/settings making implementing of interventions very challenging, (3) poor ownership of programmes by countries, and (4) poor cross border collaboration between countries. In terms of opportunities, it is worth mentioning: (1) availability of donors willing to support financially programs, (2) availability of technical stakeholders, (3) presence of structures such as NNN, GAELF and ESPEN to support and guide countries, (4) presence of research groups working on NTD modelling and research institutions ready to support countries and (5) pharmaceutical firms committed to donating required medicines.
- The following challenges and opportunities were identified for schistosomiasis and STH, (1) the availability of resources and essential medicines for SCH and STH, (2) the need for the refinement of the population requiring MDA, (3) data inadequacy for SCH

and STH, and (4) the availability of a dedicated data team at ESPEN level to support countries.

- For trachoma, major challenges are (1) the persistence of TF in children in some of the endemic districts, (2) hard-to-reach populations such as refugees, nomadic populations, internally displaced populations, (3) cross border issues with migratory populations, (4) challenges in finding the last cases of TT in endemic districts that have achieved the TF elimination threshold, (5) post-operation trichiasis issues, and (6) security issues.
- The ESPEN Reference laboratory is playing a major role in the elimination of NTDs through different actions: (1) the harmonization and dissemination of Laboratory standard operating procedures (SOPs), (2) procurement of laboratory supplies and reagents, (3) building lab capacity, (3) support countries in the prospection of *Simulium* spp breeding site, entomological and epidemiological field surveys, and (4) the establishment of quality assurance system with the support of other stakeholders.

Session 3: NTD country programmes joining forces: Kikundi CoP

- Dr George Kabona, current chair of the Kikundi CoP platform, introduced all the attendees to the recently created Kikundi NTD Community of Practice (CoP) project. This CoP is oriented to create a common space for NTD programme managers to share their experiences, provide access to new data resources and trainings, and ultimately promoting inter-country liaison.
- Kikundi CoP is intended to foster collaboration between NTD programmes and make it possible for them to work together on solving common problems related to the implementation of NTD interventions and the management of challenges.
- The Kikundi leadership structure comprises three pillars: the leadership council, the development team, and the advisory committee.
- The leadership council is formed by at least 5 programme managers, and a maximum of 10, and the key roles include having workshops with the development teams, provide feedback to the development team, participate in quarterly meetings, review metrics on website uptake, and represent CoP in international meetings.
- The advisory committee comprises key African institutions with expertise in NTD, and knowledgeable of the challenges faced by programme managers. Among its roles, revising the metrics on website use, provide advice to the programme managers participating from the CoP and Kikundi leadership committee.
- Since the launching of Kikundi there have been 41 updates about programme manager successes, 95 resources shared, and 73 forum discussion shared through the platform.
- Kikundi has given programme managers access to professional development through a suite of online courses such as the course on leadership and management in health, organized by the University of Washington.
- Kikundi has supported programme managers with grant applications, and in November 10 programme managers participated in a structured visit to Rwanda and took part in some activities.

- Kikundi also offers virtual “community conversations”, which are quarterly meetings so programme managers can discuss topics of importance and get advice from one another. Two community conversations have been held since the launch of Kikundi: restarting NTD programme during the CIVOD19 pandemic, and the impact of the FCDO funding cuts on country NTD programme activities.
- Kikundi CoP provides an opportunity where his voice can be heard and join other programme managers’ voices. They can discuss programmatic challenges and support each other.

Session 4: Funding gaps and the ESPEN gaps analysis tool

- In April 2021, a major donor, the UK Foreign, Commonwealth & Development Office (FCDO) announced the early interruption of funding to its flagship project targeting NTDs, the Ascend project. This project was supporting a variety of interventions across sub-Saharan African, and other regions in the world, including mass drug administration, monitoring and evaluation and management of morbidity cases.
- Ascend project were covering one thousand eight hundred and fifty-eight implementation units.
- A first preliminary exploratory analysis was conducted by ESPEN to determine the total population requiring treatment for PC-NTDs in areas that were covered by the Ascend project. Using historical data on MDA interventions, ESPEN has made projections on treatments and survey needs until 2030, based on some assumptions on the outcome of MDA interventions or the results of impact assessment surveys.
- Based on ESPEN projections, in areas where Ascend project supported interventions against lymphatic filariasis, 113 million individuals were estimated to need MDA in 2021 and 101M in 2022. A deeper analysis was conducted later to ascertain what fraction of this estimated population in need was covered by other partners and what might be left unattended.
- ESPEN also estimated the medicines that had been provisioned and shipped to the countries and areas supported by ASCEND programme in 2021 and 2022.
- At the time the UK FCDO announced the interruption of funding to the ASCEND project, over 230 million tablets had been delivered to countries supported by the ASCEND project, and over 260 million were pending to be shipped by June 2021 so that they could be delivered in the MDA rounds planned for the second half of the year.
- Looking at the country stock, we estimated that 106 million tablets were at risk to expire in 2021 if scheduled MDA rounds were not implemented.
- The first stage of the analysis consisted in developing a bespoke user-friendly MS Excel-based tool which allowed for a quick review of pre-populated data extracted from ESPEN projections at the level of the implementation units and broken down by type of activity.
- Country programmes were expected to revise and validate the projections, confirm whether the expected MDA interventions have been taking place and if there was funding to cover the forecasted interventions.

- Whilst increased commitment is necessary from affected countries to sustain and fund national control plans, there is also a clear urgency for having better tools to closely monitor that all the endemic areas are properly and timely covered. Dr Cano presented a framework in which ESPEN is working on to improve the monitoring of country work plans and funding availability.
- Improving two existing tools, the Annual Working Plan form, which is part of the Joint Application Package, and upgrade the Tool for integrated Planning and Costing, also known as TIPAC, will allow us to develop a more efficient framework to monitor scheduled NTD interventions.
- The Annual Working Plan could be enhanced if it were collecting the information at the implementation unit level.
- Indicators should be grouped by topic: Coordination, training and logistics, drug distribution, surveys and MMDP activities, and a separate spreadsheet should be set up for each topic and planning and costing made at the implementation unit level. Producing this information may be very time-consuming and implies a massive work, when this is done manually. For this reason, we are suggesting coupling this with an improved version of the TIPAC tool.

Session 5: NTD resources for enhanced planning

- The ESPEN Collect Support Services (ECSS) is a system to support countries in conducting surveys on LF, Onchocerciasis, STH and SCH.
- There has been a change in the onboarding workflow. In addition to the protocol, a country now needs to include a clearance from the country ethical board or a document giving a waiver. The protocol with the country authorization will then be submitted to the WHO/AFRO Ethical Review Committee for clearance.
- Since its inception in 2018, ECSS has supported 72 surveys in 27 countries where more than 3,760 sites have been surveyed.
- There was an increased interest in ECSS in 2021 when 54% of the overall support has been provided. Mr Yumba presented how ECSS allows integration of the survey results into national databases, either through an integration engine or an API.
- Countries submit regularly to WHO/AFRO/ESPEN four files that make up the JAP: (i) the Joint Request for Selected Medicines (JRSM), the Joint Reporting Form (JRF), the Epidemiological Data Reporting Form (EPIRF) and the Annual Workplan (AWP). The files are reviewed by WHO at country, regional and headquarters levels.
- ESPEN has developed an online application to upload the submission of JAP files and monitor their review, the JAP upload tool.
- The JAP upload tool allows to submit and manage files, communicate, monitor the submission and review.
- In 2021, ten (10) countries piloted the tool by submitting at least 1 file (Angola, Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Ethiopia, Gabon, Malawi, Senegal, Togo). In 2022, ESPEN will organize briefing sessions in order to expand its use.

- The ESPEN NTD Portal is an electronic platform designed to enable health ministries and stakeholders to share and exchange subnational programme data, in support of the NTD control and elimination goals.
- ESPEN NTD Data Portal is intended to be the most comprehensive data repository for mapping, impact surveys and records of preventive chemotherapy intervention.
- The ESPEN Portal has expanded to include comprehensive suite a dashboard designed to better track roll out of interventions and impact to allow better informed decision-making.
- ESPEN has also developed an analytical dashboard with projections of treatment and surveys need for each disease until 2030.
- The Country Health Information Platform (CHIP) uses official annual reporting forms (JAP & TEMF) to produce a multi-year interactive dashboard for national NTD programmes.
- CHIP comprises three modules: country page showing co-endemicity status, treatments and surveys module and WASH/NTD data merge module.
- Mr Modeste Tezembong (SCM officer in ESPEN) presented on NTD supply chain tools: the Goods receipt note (GRN), the stock card, the physical inventory report form for panning MDA, the NTD stock management tool (SMT) and the district consumption reporting tool (DCT).
- The Stock Control Card (SCC) should be used on a daily basis. It allows country programmes to know the number of tablets of medicine received, distributed, lost, balance, expiry date, manufacturer, lot number, among other indicators.
- The Stock Management Tool (SMT) is an Excel-based template developed by ESPEN to support planning and use of all medicines donated for PC-NTDs. It can be used at national and sub-national level.
- The NTD roadmap has for the first time set targets on water, sanitation and hygiene. There is also a new global strategy on WASH to combat NTDs that is a companion document to the NTD roadmap.
- The WASH data available on the ESPEN NTD Data Portal can help bring together information on the burden of NTDs and access to water and sanitation services at the district level and present it in a way that supports decision making and enhance accountability of service providers.
- The CHIP visualization dashboard also includes a module to interact with the WASH/NTD data, providing an indicator for the need of intensified intervention based on WASH quality and NTD-specific endemicity.

Session 6: Other information sources: using modelling data to fill information gaps and forecast intervention needs

- Based on projections developed by ESPEN based on MDA data reported by NTD programmes, the number of assessment surveys needed for the coming 5 years in the African region for the different PC-NTDs is quite significant. These projections raise some key questions: how should we best prioritize where to survey first given limited

resources? are there more efficient (cheaper) survey strategies that will give reliable results? and how can we make the most of data from these surveys to make better decisions?

- Geospatial modelling is a collection of statistical methods that are used to map, understand and predict disease patterns at fine spatial scales, by exploring how similar survey observations are to those collected nearby and/or associations with environmental factors.
- Geospatial modelling approaches have been used in the past to better understand the distribution and risk of NTD diseases. An example is the REMO mapping for onchocerciasis, and the utilization of geostatistical methods to outline the geographical risk and distribution on unmapped locations.
- Risk maps are generated using existing data. These are used to tell us how many survey locations we need to visit for the impact assessment. Second, new risk maps are generated from impact assessment survey data. These can be used to determine probability of exceeding a prevalence threshold for any spatial unit.
- They provide us with better and cheaper tools for M&E: smarter selection of survey locations, increased precision, and reduced sample sizes, better predictive ability, and data visualizations (including co-endemicities, overlays). They also contribute to more efficient, evidence-informed programming: leverage existing data, prioritisation of areas according to risk, ability to make decisions at varying spatial scales, and predict hotspots and identify inequities.
- Prof Hollingsworth talked about the application of transmission modelling to guide country decision on MDA and surveys. Transmission modelling is a method for simulating the impact of interventions on the transmission of NTD.
- The NTD Modelling Consortium worked with national programmes, and WHO and ESPEN, to identify common questions and scenarios concerning the impact of Covid-19 pandemic on the control and elimination of PC-NTDs.
- The Consortium has tried to do that through two routes. First, making their results immediately applicable and accessible at the sub-national level. For this, in partnership with ESPEN and LSHTM (Dr Pullan's group) they have combined geospatial modelling with transmission modelling and developed web application tools to make results accessible (NTD Prevalence Simulator). Second, they are also trying to reverse that model that was presented in terms of global questions down to national programmes and being responsive to questions that national programmes have.

Session 7: Initiatives to improve in-country data literacy: ESPEN NTD Training pack, CHAI project

- ESPEN is fully committed to develop in-country capacities and skills for a comprehensive utilization of all the data and tools available in the ESPEN Data Portal.
- MDA interventions are expected to scale down in the coming years as many countries have complied with the expected number of effective MDA rounds. But this also implies that more surveys are needed to confirm that MDA interventions can be stopped.

- In addition, because of changes on the final goals established in the new Roadmap for NTDs, new areas may need to be remapped, as is the case with onchocerciasis. Also, the endemicity maps for other PC-NTDs such as schistosomiasis need to be completed. More importantly, because of the focality and spatial heterogeneity in the transmission of this disease, there is a clear need to move the interventions from district level to sub-district level (community health areas). This implies that for many areas there is not enough data evidence to ascertain the endemicity status, therefore more mapping surveys are needed to fill these gaps.
- Dr Cano also mentioned some of the organizational challenges NTD country programmes are facing such as, for example: lack of comprehensive database systems; insufficient in-country skills to manipulate and analyse NTD data; significant turn-over within the NTD teams quite often leads to “loss of institutional memory”; not having access to complementary sources of data and data from previously existing programmes (i.e., APOC programme), and insufficient coordination with stakeholders (and vice-versa).
- Dr Cano then discussed how the utilization of the available tools and resources under the ESPEN NTD Data Portal, especially the new analytical dashboards, could help NTD country programmes to overcome some of the mentioned programmatic and organizational challenges.
- The dashboards have been purposely designed to support national programmes to readily access and use their data, make better-informed decisions, and distribute resources more efficiently.
- Finally, Dr Cano briefly presented ESPEN plan to develop a training pack for programme and data managers to make the most of resources and tools available at the ESPEN NTD Portal.
- Dr Arnaud Le Menach, Director of the Malaria Analytics, Surveillance and Technology team at the Clinton Health Access Initiative (CHAI), presented a new initiative led by this institution to promote the use of data and modelling to inform NTD programme decision making.
- CHAI was created in 2002 with the aim at working at the service of governments to strengthen their health systems.
- CHAI work to improve health systems and transfer skills and technology onto government staff through operational and management support.
- CHAI’s technical approach to promote the use of data at country level is at two level. First one is at country level, and it would start with groundwork to get their technical staff integrated within the NTD programmes, defining the scope of the support and making the planning, and followed by an implementation piloting. In collaboration with local NTD programme partners, they evaluate the data access, level of data system integration, availability of analytical dashboards and access to the data, and finally promote the data use through the routine data review and response, and development of evidence-based plans and operations.
- Dr Le Menach mentioned that the project is to be implemented in Sub-Saharan Africa, focusing on the 5 PC-NTDs and initially two countries will be targeted, Kenya and Benin,

although it will likely extend to another large African country between Nigeria, Ethiopia or DRC.

- It is a three-year project, and groundwork is expected to last 6-12 months, with the implementation of intensified activities at central and/or at sub-national level between March 2022 and September 2024. The project will establish a collaborative partnership with NTD programmes and relevant government units (e.g. HMIS).

BACKGROUND AND RATIONALE

Following the release of the WHO NTD Road Map 2021-2030 in July 2020, and endorsement by the Member States during the Seventy-third World Health Assembly (WHA73) held in November 2020, WHO/AFRO has since worked with Member States in the region to present the WHO/AFRO *National Master Plan Development Framework*. In the past year, NTD programmes in the Region have embarked on developing their third-generation national master plans for the period 2021-25, in line with the NTD Roadmap 2030. In addition, the WHO/AFRO has undergone a functional review and restructuring country and regional offices for a better alignment with the Global Transformation Agenda and defined Thirteenth General Programme of Work or GPW13 targets. This transformation of regional and country WHO offices is intended to seek for synergies between programmes and departments what in turn may help promote the development of more integrated NTD master plans for the period 2021-2025.

Through the Expanded Special Project for the Elimination of NTDs (ESPEN), the WHO Regional Office for Africa, working closely with NTD country programmes and partners, developed its [online portal](#), a user-friendly platform that allows key stakeholders to access and use sub-national NTD data. The consolidated repository hosts data shared by health ministries through the *Joint Application Package* reporting system and provides a detailed ongoing picture of the status of NTD programmes targeting PC-NTDs. Information is linked at the implementation unit level and can be freely accessed, enabling better tracking of progress, supporting cross-disease coordination, and facilitating comprehensive forward planning. Through the portal, users can readily view, and download validated, reliable longitudinal data and maps for planning and reporting purposes. To complement the existing suite of maps and datasets, ESPEN have now developed interactive dashboards detailing both **current progress** and **projections for the next 10 years** at the level of implementation. Using historical data compiled under the ESPEN data repository, we have forecasted when MDA interventions will be needed, what type of MDA strategy should be implemented (considering co-endemicity), and when impact assessment should be conducted, to achieve the goals established by the new 2021-2030 Roadmap for the Elimination of NTDs. **These resources can greatly support completion of both National NTD Masterplans, and Annual Work Plans.**

To this end, ESPEN convened the Fourth Regional NTD Programme & Data Managers' meeting to present the new technical support structures at WHO/AFRO,

updated disease specific targets, guidance and tools, and new innovative tools in data use through the following key sessions:

Day 1:

- The WHO/AFRO-UCN restructuring for better country support
- NTD Roadmap 2021-230: renewed disease specific targets
- NTD country programmes joining forces: Kikundi CoP
- Monitoring funding gaps: working on a dynamic tool to follow up on funding availability

Day 2:

- NTD resources for enhanced planning:
 - Data collection: NTD Collect Services
 - Data submission: JAP Upload tool
 - Data analytics: NTD Portal Analytic dashboards
 - Progress in piloting the CHIP¹ platform
 - Medicine monitoring: NTD Supply Chain Management tool
 - WASH/NTD data file
- Other information sources: using modelling data to fill information gaps and forecast intervention needs.
- Initiatives to improve in-country data literacy: ESPEN NTD Training pack, CHAI² project

The Regional NTD Programme and ESPEN held the fourth NTD Regional Programme and Data Managers meeting at this defining moment.

OBJECTIVES

General objective

The general objective of this fourth meeting on PC-NTDs was to introduce the new technical support structures at WHO/AFRO to NTD country programmes and stakeholders; to discuss renewed disease specific targets for the African region as included in the NTD Roadmap 2021-2030; and to present new guidance tools and resources intended to help NTD programmes better plan their interventions for the coming years.

¹ Country Health Information Platform: a NTD database/reporting tool that utilizes the ESPEN Portal's application programme interface (API) to pull all current and past district level data for the five PC-NTDs.

² Clinton Health Access Initiative: granted funding to promote use of data and modelling to inform NTD programme decision making

Specific objectives

- Brief NTD country programmes and stakeholders on the restructuring at WHO/AFRO, which are directly related to NTD management.
- Revise the renewed NTD regional goals, targets, priority interventions, roles and responsibilities of various actors for the regional NTD implementation framework for the period 2021-2030.
- Present new initiatives to enhance communication and coordination between NTD programmes across Africa.
- Introduce new platforms and resources put in place to improve in-country capacities to monitor progress towards the control and elimination of PC-NTDs and to guide NTD programmes to design their future workplans.

Expected outcomes

- The status of establishment of country coordination mechanisms in Member States are reviewed and best practices proposed for use to consolidate the structures already in place in countries, to sustain the current momentum into the next decade to ensure elimination of NTDs
- NTD country programmes are fully acquainted of the renewed disease specific goals so that they can complete their national NTD Master Plans for the period 2021-2025 according to these updates.
- NTD programme managers are introduced on new developed coordination platforms intended to improve NTD programmes coordination and in-country management capacities.
- NTD programmes and data managers are becoming familiar with new resources and platforms intended to facilitate monitoring and follow-up of PC related interventions and to guide them through the development of their NTD Master Plans for the period 2021-2025.

PARTICIPATION

All NTD stakeholders working in or for Africa including MoH NTD Programme Managers as primary participants, WCO NTD Focal Points, NTD donors and implementing partners, experts, scientists and PC-RPRG members were invited.

- WHO NTD staff at HQ, AFRO and WCO in Africa region, including 5 countries in WHO/EMRO that are under ESPEN umbrella, namely Egypt, Djibouti, Somalia, Sudan and Yemen.
- NTD Programme and Data Managers.

- NTD Donors and implementing partners.

The meeting was attended by 337 and 322 registered participants, on the first and second day respectively, from WHO/HQ, WHO/AFRO, WHO/EMRO, Programme managers from the Ministry of Health, Country NPOs, and partners. We had 208 participants on the first day and 145 on the second day who were logged in for the whole session.

OPENING REMARKS

The first day of the Programme Managers Meeting (PMM) was opened by the current acting ESPEN Team Leader, Dr Amir Bedri Kello, who greeted all the attendees on behalf of the WHO/AFRO and ESPEN team to the event and presented the specific objectives for the virtual meeting and agenda for the two days' meeting. He welcomed the facilitators for the first day's sessions, and briefly mentioned the title and general objectives for the sessions. He also pointed out that this was the first PMM meeting that will put emphasis on data management in the context of the new NTD roadmap. Thus, second day's meeting was to focus entirely on data management and presenting new tools and platforms to guide NTD country programmes decision and planning. He also mentioned the relevance of relying on new sources of data to make programmatic decisions such as modelling data. For this, there was a session led by Dr Rachel L Pullan and Dr Deirdre Hollingsworth presenting new developments in NTD modelling and applicability for country programmes. Day two will be closed by a brief wrap up and final remarks, followed up by a farewell programme to Dr Maria Rebollo Polo, former ESPEN Team Leader who is leaving the ESPEN coordination.

Dr Kello then introduced Dr Akpaka Kalu, TVD team leader and acting UCN Director at that time, who delivered the opening remarks on behalf of the UCN Director, Dr Benido Impouma.

Dr Akpaka Kalu introduced the topic to be discussed in the first session, the transformative agenda for the WHO/AFRO-UCN department and the impact of these changes on the country support in the context of the new 2030 NTD Roadmap. He started by explaining that December 2021 was the end of WHO/AFRO planning period for the biennium plan, which will be followed by a transition to a new biennial plan which will extend until 2023. It is also a time for the transformation, the required organizational and rationale changes at the WHO/AFRO are finalized and made operational. Dr Kalu mentioned that we are stepping into a decade for the elimination of some NTDs. He talked about the 20 diseases included under the groups of NTDs, the huge burden that these diseases are posing to the most vulnerable and poor communities, and how the new 2030 NTD Roadmap has established the goal to achieve the elimination of some of these diseases.

“The 2030 NTD Roadmap represents a paradigm shift in strategic approaches to addressing entities - that is a shift from focus on process to impact orientation, from siloed disease specific programs to holistic cross cutting approaches, including integration across entities, as well as from externally driven agenda to country ownership and financing with NTDs integrated in national health plans and budgets”, remarked Dr Kalu.

The NTD Roadmap reflects the strategic direction not only for the NTD team but for the entire communicable and non-communicable disease control department. WHO/AFRO UCN department is moving towards a framework focusing on disease burden reduction, which is to be achieved through enhanced organizational plans. In line with this disease control transformation in the region, WHO/AFRO UCN has adopted three guiding principles: i) integration across programmes and clusters through the health systems pillars

and sub-groups of populations across the life course, ii) the mainstreaming health services, and iii) prioritizing improving analytics to inform strategy public health actions, namely fostering data use for public health action. ESPEN Data Portal is an example of data integration across all the preventive chemotherapy entities. ESPEN established the data portal in April 2017 with the purpose of making technical resources for planning and decision making easily available to country programmes and stakeholders. The UCN department is planning to expand the ESPEN platform to ensure that other diseases, non-communicable and communicable diseases, are integrated. This is a long-term vision. In a short-term, ESPEN Portal should expand to case management NTDs and then, expand its scope to include data on other diseases such as malaria, HIV and tuberculosis. The COVID19 pandemic has taught us how important it is to integrate health programmes and responses, and how much we are interlinked. Also, the early interruption of the UK FCDO funding has shown us how important is the integration of programmes and that there is a great need to better monitor funding availability across Africa to ensure that resources are allocated where they are most needed.

The introduction of a new technical support structure in WHO/AFRO will enable us to facilitate the achievement of the disease specific targets for the African region in line with the 2030 NTD Roadmap. The current meeting will focus on new data tools and resources intended to support NTD programmes in making better programmatic decisions, and how data should drive the development of new Master Plans and monitoring of control interventions. There is also a need to strengthen NTD programmes integration and ensure country ownership of NTD programmes. Finally, we need to leave no one behind also concerning analytics and data management capacities within country programmes. WHO/AFRO is committed to build capacities on analytics and GIS technologies in the African region. Going into the future, we hope to support countries with solutions that will help address inequity and improve investment efficiency.

The opening remarks were followed by a presentation made by Elia Muhima in French with some housekeeping notes regarding the use of the meeting platform (Zoom) and interpreter options available (English, French and Portuguese). He also informed that the presentations will be shared with all those that registered for the event.

Day 1- Session1: The 2030 NTD Roadmap & WHO/AFRO-UCN restructuring for better country support

Moderator: Dr Amir Bedri Kello

Context

In November 2020, Member States joined forces at the seventy-third World Health Assembly to endorse a new road map for neglected tropical diseases (NTDs) 2021 – 2030. The road map provides targets and milestones for the control, elimination and eradication of NTDs. The hallmark of the NTD road map 2021-2030 is integration: integration among NTDs, integration with the health system and related sectors. With this spirit, the World Health Organization African Region is implementing integration. True and lasting integration requires structural and functional arrangements. Furthermore, the new NTD Roadmap 2021 – 2030 is putting quality, reliable and integrated data in the centre of all decisions. NTD programmes and stakeholder must make their decisions on the implementation of interventions and surveillance based on data evidence. For this, better tools and platforms are needed for guiding and supporting NTD country programmes and stakeholders in the pathway towards the control and elimination of NTDs.

WHO/AFRO sees the importance of integration across diseases and programmes. There are lessons and best practices that can be shared among diseases and programmes. ESPEN NTD Portal is an example of pursuing data integration across all the so-called preventive chemotherapy NTDs (PC-NTDs). ESPEN established the NTD Data Portal in April 2017 with the purpose of making technical resources for planning and decision-making easily available to country NTD Programmes and stakeholders. Nowadays, the ESPEN NTD Portal has become the largest open-access NTD data repository that provides sub-national level data of preventive chemotherapy interventions and monitoring and evaluation activities. This experience can be expanded to the case management NTDs (CM-NTDs) and other diseases such as malaria, HIV/AIDS and tuberculosis.

To harness these experiences and bridge cross learning among different disease programmes, communicable and non-communicable diseases are brought under the same cluster and form the Universal Health Coverage, Communicable and Non-Communicable Diseases (UHC/CND or UCN), where ESPEN belongs. This new structure of the WHO Regional Office for Africa brings a unique opportunity to fully implement the integration envisaged in the NTD road map 2021-2030. Within the Team of Tropical and Vector-Borne Disease (TVD), it provides the structural support for NTD full integration and collaboration with communicable and non-communicable diseases as well as with other clusters contributing to Universal Health Coverage, such as UCH/Life course (ULC) and UHC/Healthier Populations (UHP), and the Emergency Preparedness and Response (EPR) Cluster in charge of humanitarian and epidemic response. ESPEN will also foster its participation in Antimicrobial Resistance (ARM) monitoring and Diagnostics and

Laboratory Services (DLS), these two teams being under the supervision of the Assistant Regional Director (ARD).

It is hoped that the initiative taken at the WHO/AFRO level will galvanize the integration of NTDs and other communicable and non-communicable diseases at country level and will contribute to the achievements of the NTD Roadmap 2021-2030 targets and goals, through the implementation of national NTD Master Plans, and free Africa of NTDs.

Report of the session

Dr Kello introduced the first facilitator from WHO-Headquarters (Geneva), Dr Gautam Biswas, who is acting as Director of the NTD Department on behalf of the Dr Mwele Ntuli Mwalecela. Dr Biswas has been invited to attend this meeting to give a brief talk about the new NTD Roadmap for 2021 – 2030, and present what makes it different from the previous road map.

Dr Biswas started by acknowledging the tremendous progress made in the last few years towards the control and elimination of NTDs. He brought up the milestone of 1 billion people having received treatment against at least 1 PC-NTD, which means that one in every six people in the world have benefited from these interventions. He regretted the drop in the coverage of these interventions in 2020 due to the COVID-19 pandemic. Furthermore, as a result of these interventions 600 million people are now no longer at risk or no longer require NTD interventions. By 2020, 42 NTD endemic countries had eliminated at least one NTD and in 2021 one more country has joined this group. The new roadmap has been built around the experience and the progress that began with the first roadmap, and also understanding the challenges and the lessons learnt. Dr Biswas thanked country programmes, implementing partners and other stakeholders; the pharmaceutical industry which came forward to donate the medicines used for the MDA interventions, the foundations, donors and other development agencies, the academia, and NGOs. The local communities in endemic areas have also been instrumental for all the achievements and progress made. Dr Biswas also mentioned that the goals established in the previous road map were not fully achieved by 2020.

The new NTD road map is the result of a 2-year consultative period during which many actors have contributed and provided their inputs, and therefore it should not be considered the WHO road map but a global road map. It was endorsed by the WHA in November 2020 and in January 2021 was formally launched. It is now available in 6 UN languages, also on the WHO websites and a useful app has been created to navigate through its content. The NTD road map has been formulated over the Sustainable Development Goals (SDG), which already have a target for achieving a 90% reduction on the people who require interventions against the NTDs, which implies a reduction of 75% burden (DALYs) caused by the NTDs. The NTD road map has been built around 10 cross-cutting indicators and 22 disease specific indicators, which will allow us to track the progress. One hundred countries should have eliminated at least one NTD by 2030 and two NTDs, yaws and Guinea worm, should have been eradicated.

The new NTD road map lays on three major pillars. First pillar is to accelerate the programmatic actions. We need to push and accelerate the progress made to reach the goals that have been set by 2030, which includes progress around technical areas: the scientific understanding of the disease, effective interventions through new diagnostics and new treatments, the strategy to deliver interventions, and increasing funding advocacy and other things which will enable us to implement the programmes. The second pillar is to intensify cross-cutting approaches in three areas: integration of NTD programmes and interventions, mainstream, namely putting NTD in the health system instead of being treated through vertical programmes separately to other health entities, and coordination with other sectors such as WASH, vector control and disease programmes such as malaria, mental health, maternal-child care. The third pillar is country ownership, which means that country is in the centre of the interventions, and they are the ones who plan according to their needs and the resources. Partners and stakeholders are to support the countries in the interventions of the country plan. Sustainability of the programmes is also critical, and it must be secured through domestic financing as much as they also benefit from the external financing. The new NTD roadmap analyses where will be the main gaps in reaching the goals set by 2030. There are four cross-cutting areas related to potential gaps: diagnostic, monitoring and evaluation, access and logistics, and advocacy and funding.

There are also some companion documents to the NTD road map 2021 – 2030 such as the sustainability framework, the M&E framework and updated strategy on WASH and NTDs. WHO is also working on an investment case for NTDs. Furthermore, an NTD research and development proven blueprint, a One-Health approach to NTDs and guidelines on an enhanced supply chain, are things that have been identified in the new road map as major gap areas to work on.

Finally, Dr Biswas talked about the NTDs in the context of the COVID19 pandemic, recognising the impact that it has had on the health systems and in particular on the NTD interventions. PC intervention has been one of the most affected interventions. We have seen countries changing the strategies and now PC interventions are peaking up, though it should make it to an extent that we do not lose the momentum we got to before the COVID19 pandemic began. Dr Biswas closed his remarks by emphasising that the integration of NTD interventions in the primary health care has been critical for carrying on with the interventions in the context of the COVID19 pandemic. Dr Kello thanked his intervention and introduced the next topic. Dr Kalu was to present on the restructuring of the UCN department, the creation of MCATs, the new technical support structures and its implications for the implementation of the new NTD road map.

Dr Kalu supported his intervention with a PowerPoint presentation introducing the re-structuring of the UCN department: UCN Transformation, enhancing investments efficiency, reducing inequity & improving interventions impact. The UCN department focuses its work on communicable and non-communicable diseases (UHC/CND). Dr Kalu presented the organigram for the WHO Regional African office, with a DPM (Director, Programme Management) to which three directorates are reporting, including the

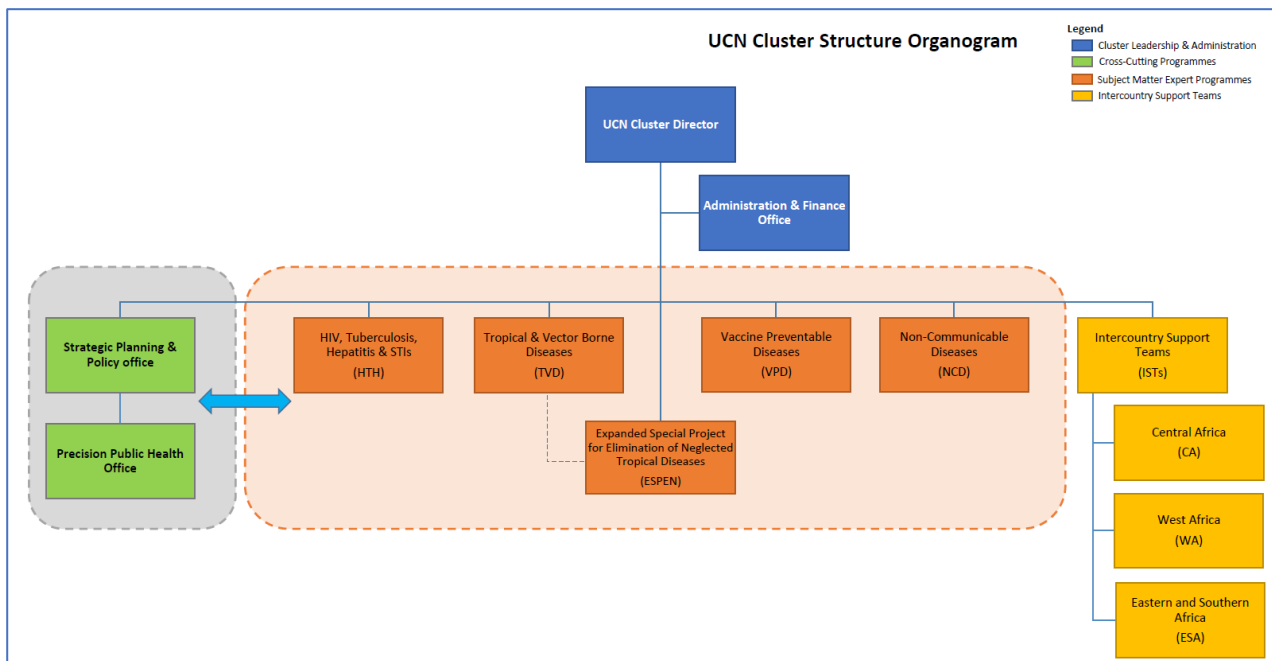
UHC/CND. The objective of the UHC/CND is to reduce the impact of communicable and non-communicable diseases. All the three directorates contribute the UHC and the organizational outputs such as the output 1.1.2 (*Countries enabled to strengthen their health systems to deliver on condition and disease specific service coverage*).

The UCN cluster has adopted the global mission of reducing burden of diseases in the WHO African region. UCN cluster focus is not coverage interventions or access to health services, or quality of care, as they are means to an end, which is reducing the burden of diseases. All these areas are to be enhanced with the purpose of reducing disease burden. There is a strategic approach, namely how we do “things”: using WHO technical products and services, and generation of knowledge through appropriate analytics to inform strategic disease control interventions for priority populations and guide disease control agenda setting and investment in member states. Using appropriate analytics is needed to inform strategic control interventions and then direct the investment in such a way as to maximize investment efficiency, reduce inequities and enhance impact on the diseases. The UCN has defined four strategic objectives: i) leadership, coordination, partnership and resource mobilization for disease control, ii) development of WHO disease control technical products, services and tools including adoption of new technologies and innovations, iii) generation and use of strategic information for action including optimizing investment and iv) technical support in deployment of WHO technical products and services and institutional capacity building including support to national disease programmes and regulatory authorities.

UCN has adopted guiding principles around integration, mainstreaming people-centred health services, and prioritizing and improving analytics to inform strategic public health action.

After having defined objectives and guiding principles, we need to organize to deliver. The UCN cluster is organized in four teams mostly around diseases: HTH (HIV, TB and hepatitis), TVD & ESPEN, NCD (non-communicable diseases) and VPD (vaccine preventable diseases). These subject matter teams are focused on providing leadership and technical support in developing and deploying WHO control tools, as well as providing institutional capacity building support on these matters. There are two new cross-cutting teams, which are transversal to the disease specific teams: the strategic planning and policy office, intended to provide strategic expertise to enhance policy coherence, and the precision public health metric office, intended to support generation of strategic information for disease control action including knowledge informed by data science, public health informatics, and research and innovations.

Dr Kalu has presented the organigram for the UCN cluster that will be operative starting January 1, 2022 (see below).



UCN disease specific teams are aligning their work plans to the four strategic objectives defined for the cluster. He has shown an example of a work plan defined by the malaria team aligned with cluster main strategic objectives.

The priorities going forward intended to find solutions for enhanced efficiency and impact are:

- Precision public health towards enhanced disease burden reduction.
- Rapid deployment of new tools/innovation for disease control including vaccines and drugs.
- Rapid uptake and deployment of WHO technical products.
- Institutional capacity building, a domestication of WHO technical support for disease control.

Member states in the region are expected to deploy e-platforms for sub-national stratification of communicable and non-communicable diseases and e-platform for programme reviews and strategic planning. We have had issues to deploy WHO tool and they are not implemented up to more than 10 years. That's no longer feasible. We aim to rapidly deploy new tools and innovations, as we have learnt from COVID19 pandemic. We also need to evaluate our systems for delivery of disease control and commodities, and finally we need to build capacities within member states to deploy the new WHO tools. In this regard, UCN cluster vision is to work with one or two institutions per country to implement WHO capacity building plans under WHO oversight. That's the reason why WHO has decentralized our technical support and created the MCATs (multi-country assignment teams) in 11 locations, in order to bring WHO technical support closer to countries. This MCATs also aim at strengthening capacities in the WHO Africa Region for use of analytics to drive stratification mapping, and identification of communities to be prioritized. They are organized by language groups, and they cover a number of countries.

Dr Kalu intervention finished with the introduction of the MCATs.

Dr Kello introduced the next facilitator Dr Spes Ntabangana, who presented the MCATs and the new role these Multi-Country Assignment Teams are to play in the Region. She presented her experience working at the node covering Algeria, Mauritania and Senegal.

Dr Ntabangana introduced the role of the new MCATs, which is to bring closer the WHO expertise to the member states, and support technically, strategically and in real time the member states according to their priorities and needs. They are intended to cover 6 programmatic domains, covering 11 geographical areas (group of countries), and in multiple diseases/health areas always following an integrated approach. These MCATs are to be part of the country teams, which enables a close supervision of the local teams and more efficient support.

The programmatic areas that these MCATs are going to cover are:

1. HIV, TB & hepatitis.
2. Tropical & Vector borne diseases.
3. NCD prevention & control.
4. Health financing.
5. Nutrition.
6. RMNCH (reproductive, maternal, neonatal and child health care)

There are some countries that are not covered by the MCAT: Ethiopia, Nigeria and DRC, as large countries, CAR and South Sudan because of the emergency situation, and Republic of the Congo, as it is hosting the WHO Africa regional office.

Finally, Dr Ntabangana presented the terms of references for the MCAT which includes:

- Collecting the data and the strategic information for the VBD.
- Development of the strategic documents for the VBD based on evidence.
- Strengthen inter- and intra- sectorial relationship for an effective multisectoral coordination.
- Supporting the resource mobilization for the funding of pluriannual plans.
- Improvement the establishment of cross-border coordination.
- Identify, documenting and sharing successful experiences, best practices and study the impact cases.
- Coordinating and facilitating the interaction between the different supporting levels (WHO-AFRO, WHO-HW, WCO) and different stakeholders (civil society, academy, etc).
- Promote and facilitate the south-south cooperation.
- Close collaboration e integration of the technical support.

Day 1- Session 2: NTD Roadmap 2021-2030: disease specific targets

Moderator: Dr Lamine Diawara

Context

The NTD road map provides targets and milestones for the control, elimination and eradication of NTDs. The hallmark of the NTD road map 2021-2030 is integration among NTDs, integration with the health system and related sectors. With this spirit, ESPEN recognised that lasting integration requires structural and functional arrangements and is supporting countries to ensure integration at all levels of the programmatic approaches, within the 3rd generation NTD Master Plans.

Report of the session

This session was split into two main parts, the first one consisted of presentations by PC-disease-specific targets, challenges and opportunities and the second one on key questions related to the five PC NTDs and the Laboratory.

Sub-session #1:

During the first sub-session, the focal persons in charge of Trachoma, Onchocerciasis and Lymphatic, and Schistosomiasis and Soil-transmitted helminthiasis (STH) presented on the status of these diseases globally and within the WHO African region.

Onchocerciasis and Lymphatic filariasis

Dr Didier Bakajika, medical officer for onchocerciasis and lymphatic filariasis (LF), presented on the burden of each disease at the global and regional level, (2) the status of mass drug administration status (MDA) as well as of LF morbidity management and disability prevention in the WHO African region and the 2030 NTD roadmap milestones and targets for each of the disease. For Onchocerciasis, he mentioned that the disease is globally endemic in 30 countries across three WHO regions namely AFRO, EMRO and PAHO. In 2020, the total population requiring MDA was estimated to be 240.1 million scattered in 1793 Implementation units (IUs). Only four countries have been verified as having eliminated the transmission of onchocerciasis namely Colombia in 2013, Ecuador and Mexico in 2014, and Guatemala in 2016. The WHO African region is the most affected with 26 out of 30 endemic countries of which 10 are co-endemic with loiasis mainly in central Africa. In 2020, the total population requiring MDA in the region was estimated to be 239million scattered across 1763 IUs. The endemicity status of onchocerciasis has to

be confirmed in Mozambique, Kenya, and Rwanda. In terms of MDA status in the region, the treatment was initiated but not at scale-up in 4 countries, it is scaled up in all IUs in 20 countries and stopped in at least one focus in four countries.

For lymphatic filariasis, the disease is endemic in 72 countries across the five WHO regions with an estimated population of 863.1 million scattered across 2207 IUs. A total population of 693 million does no longer require MDA globally as a result of the successful implementation of WHO-recommended interventions. As of 2020, 17 countries worldwide were validated as having eliminated lymphatic filariasis as a public health problem. In the African region, 32 countries are co-endemic for LF and onchocerciasis, of which 10 are co-endemic with loiasis. A total of 339.17 million people scattered in 1775 IUs required MDA in 2020. With regards to MDA status, only one country in the region has not implemented MDA yet, 9 have launched MDA but not at scale, 22 have scaled-up MDA in all IUs of which 16 have stopped MDA at least in one IU. Togo and Malawi were validated in 2017 and 2020 as free of LF as a public health problem. With regards to MMDP, 26 countries reported data on hydroceles and lymphoedema and only 4 reported on the administration of essential packages of care as recommended by WHO. The facilitator concluded his presentation with onchocerciasis and LF targets and milestones highlighted in the 2030 NTD road map. For onchocerciasis, the target by 2030 is to stop MDA in at least one focus in 34 countries, to stop MDA in 100% population in at least 16 countries and validate at least 12 countries while no population is expected to require MDA in 2030 and 58 countries are targeted for elimination as a public health problem.

Schistosomiasis and soil-transmitted helminthiasis

Dr Mwinzi mentioned that the countries that had achieved the 2020 target of reaching over 75% school aged children in the national coverage for preventive chemotherapy against STH among Benin, Botswana, Burundi, Guinea, Botswana, Sao Tome & Principe, and Togo. Equatorial Guinea and South Africa crossed the decade yet to start MDA for schistosomiasis. Covid-19, among other challenges, made many of the countries in the region not able to achieve this 75% treatment coverage, what remains our great challenge as we step into the decade of schistosomiasis and STH elimination as a public health problem in the Africa region. In 2020, thirteen countries reported having delivered treatments to pre-school aged children for STH, representing 9.2% of the target population, with a coverage and 44% for STH for 46.6% for SCH. 14.5% of adults were reached with the treatments for schistosomiasis.

The impact from the COVID-19 pandemic in 2020 was most severe among preschool age children targeted for treatments for SCH where the coverage dropped from 53.3 million children reached in 2019 to only 7.4 million in 2020.

In the NTD roadmap 2021-2030, countries are urged to commit to eliminating schistosomiasis and STH as public health problems in their endemic settings by ensuring that we no longer have heavy or moderate parasite burdens among target populations, and

where feasible interruption of transmission of schistosomiasis. To achieve these targets, ESPEN is addressing one of the main challenges in the past decade that was lack of adequate data for decision making at community levels. To this end, ESPEN has developed community level data analysis optimization tool, which is now part of the joint application package. It has helped to refine the data gap for further mapping planning, improve the micro targeting of preventive chemotherapy and other individuals such community levels to increase coverage.

Dr Mwinzi expressed enthusiasm for the new schistosomiasis guidelines, which are tailored to make it easier to achieve our goals, scheduled to be launched in the following year 2022, and emphasized the need to integrate schistosomiasis and STH into interventions more into primary health care and strengthen intermediate host control. She reported that in 2021 a number of countries started planning for *Taenia solium* control, and especially in areas where these overlaps with schistosomiasis and that ESPEN looks forward, to scaling up these activities in 2021. Dr Mwinzi expressed appreciation for those countries that have developed assessment protocols, using the draft WHO tools.

Trachoma in the African Region

Dr Kello, Medical Officer for Trachoma with WHO/AFRO ESPEN presented on the disease specific targets, challenges & opportunities on trachoma. He stated that trachoma is the leading infectious cause of blindness in the world. Globally, 44 countries are known to be endemic and an estimated 136 million people live in at-risk areas. 1.9 million are visually impaired or irreversibly blind due to trachoma. To date, 11 countries have been validated to have eliminated trachoma as a public health problem. That includes two countries in the African Region (i.e., Ghana and the Gambia).

He emphasised the fact that the African Region is disproportionately affected by trachoma. An estimated 116 million people live in at-risk areas, which represents 85% of the global burden. Twenty-six countries are known to be endemic for trachoma in the region. Among these, Ethiopia stands out as it has 50% of the global and 58% of the regional burden of trachoma. Currently, 26 countries are endemic for trachoma and are known to require intervention, 15 countries thought to be non-endemic, 3 countries may require intervention and investigations are needed to establish endemicity (these are Angola, Botswana and Namibia). Togo has claimed to have eliminated trachoma and its dossier is still under review. Ghana (2018) and the Gambia (2021) have been validated to have eliminated trachoma as a public health problem. In 2020, only 4 endemic countries in the African Region have achieved 100% geographic coverage for trachoma MDA. Whereas 14 countries did not achieve 100% GC. It is encouraging to see that 9 endemic countries have achieved the elimination threshold for TF and have stopped MDA for trachoma. When it comes to the required treatment coverage of 80%, only two countries have achieved that at the national level – demonstrating the need for improved MDA in the endemic countries.

The 2030 NTD Roadmap global disease-specific targets for trachoma states that the target for the number of countries validated for elimination of trachoma as a public health problem in 2020 was 10, 28 are expected to be validated by 2023, 43 by 2025 and 66 by 2030.

Sub-session #2:

In this sub-session, the moderator asked the following questions to disease-specific focal persons and the acting head of the ESPEN Team Lab in Ouagadougou.

To Dr Didier Bakajika - *What are the end game challenges and opportunities for onchocerciasis and lymphatic filariasis?*

Taking the floor, Didier presented first the challenges followed by opportunities. He split challenges into common for both diseases and specific for each of the diseases. In terms of common challenges for both filariasis, he highlighted a few of them due to time constraints such as (1) programmes depending mainly on external financial supports, (2) difficult access to some communities/settings making implementing of interventions very challenging, (3) poor ownership of programmes by countries, (4) poor cross border collaboration between countries, which can delay the validation and elimination process. In terms of specific challenges, he highlighted the following challenges for onchocerciasis, (1) onchocerciasis and loiasis co-endemicity in some settings in Africa, (2) very high serological and epidemiological thresholds for stopping MDA, (3) poor technical capacity of programs personnel on new epidemiological and entomological guidelines, (4) lack of updated entomology manual. For lymphatic filariasis, he mentioned (1) hotspot settings in some countries, (2) poor health systems in providing essential packages of care for MMDP, (3) poor technical capacity in the implementation of the two pillars of the LF program in some countries, (4) poor collaboration and coordination between the LF program and other programs such as WASH, Malaria to name a few of them.

In terms of opportunities, he mentioned (1) availability of donors willing to support financially programs, (2) availability of technical stakeholders, (3) presence of structures such as NNN, GAELF and ESPEN to support and guide countries, (4) presence of modelling groups and research institutions ready to support countries and finally (5) pharmaceutical firms committed to donating required medicines as long as they are needed by countries to eliminate NTDs

To Dr Pauline Mwinzi - *What are the end game challenges and opportunities for schistosomiasis and soil-transmitted helminthiasis?*

Taking the floor, Dr Pauline highlighted the following challenges and opportunities for schistosomiasis and STH, (1) the availability of resources and essential medicines for SCH and STH, (2) the need for the refinement of the population requiring MDA, (3) data

inadequacy for SCH and STH, and (4) the availability of a dedicated data team at ESPEN level to support countries.

To Dr Amir Kello - *What are the end game challenges as more and more trachoma endemic countries are nearing the elimination targets and what are the opportunities?*

The following were the challenges highlighted by Dr Amir Kello for trachoma (1) the persistence and/or recrudescence of TF in children in some of the endemic districts, (2) hard-to-reach populations such as refugees, nomadic populations, internally displaced populations, (3) cross border issues and population movement, (4) challenges in finding the last cases of TF in endemic districts that have achieved the TF elimination threshold, (5) post-operative trichiasis issues, and (6) security issues rendering difficult the implementation of activities and submission of the dossier by some countries.

To Dr Adjami (ESPEN Reference Laboratory) - *What roles could the ESPEN laboratory play in the elimination of NTDs?*

Taking the floor, Dr Aime Adjami, the acting ESPEN Team Lab in Ouagadougou recognized the role of the Lab in the elimination of NTDs. He highlighted the following roles the ESPEN Lab will play in the elimination of NTDs, (1) the harmonization and dissemination of Laboratory standard operating procedures (SOPs), (2) procurement of laboratory supplies and reagents, (3) building lab capacity in some countries within the region, (3) support countries in the prospection of *Simulium* spp breeding sites, entomological and epidemiological field surveys, and (4) the establishment of quality assurance system with the support of other stakeholders.

Day 1- Session 3: NTD country programmes joining forces: Kikundi CoP

Moderator: Dr Amir Bedri Kello & Dr Karsor Kollie

Context

In 2020, a Community of Practice was developed to connect Neglected Tropical Disease (NTD) Program Managers (PMs) in Africa. The Community of Practice (CoP), named Kikundi, provides a collaborative platform for participants to share, learn, and work together on solving common NTD program implementation and management challenges. Kikundi is intended to foster professional development, pride and identity, community-based decision-making, access to technical expertise, and networking. The primary objective of Kikundi is to develop a strong, digitally supported CoP for African NTD PMs, providing a platform through which participants can learn from one another in-person or online and collaborate in the pursuit of reaching national and global NTD benchmarks. Membership of Kikundi is restricted to NTD Program Managers or equivalent individuals with leadership and decision-making capacity within the national level of the Ministry of Health's NTD program in Africa. Kikundi is guided by a Leadership Council of PMs who provide input into key Kikundi activities and decisions.

Facilitators

Dr George Kabona (MD, MMed).

NTD Programme Manager, Ministry of Health Community Development, Gender, Elderly and Children of Tanzania. A former Iringa Regional NTD Program coordinator, Dr. Kabona serves as NTD Programme Manager at the Ministry of Health in Tanzania. Dr. Kabona has worked tirelessly to promote the need for reliable NTD program support from the Government. He has more than ten years of experience serving as a National Trachoma Elimination Programme Technical Advisor. He provides strategic leadership on technical, policies, programmes, and plans for all PCT and non-PCT NTDs sections within the NTD Programme. As a Program Manager for NTD Program, he is the primary contact and a link between the government and Partners/Donors regarding NTDs in the country. He oversees the implementation of the Neglected Tropical diseases control and elimination activities at all levels.

Dr Tuduetso Molefi (MBChB, DTMH)

Dr. Molefi is the NTD Programme Manager at the Ministry of Health and Wellness, Botswana. Dr. Molefi spent 13 years working in the public health sector in Botswana, 5 of which has been spent as NTD Program Manager. She provides strategic leadership as well oversees the implementation of all Neglected Tropical Diseases control and elimination activities.

Report of the session

Dr Kello presented the aim of the third session, which was to introduce to all the attendees the recently established Kikundi NTD Community of Practice (CoP) project. This CoP is oriented to create a common space for NTD programme managers to share their experiences, provide access to new data resources and trainings, and ultimately promoting inter-country liaison. He introduced Dr George Kabona, current chair of the Kikundi CoP platform.

Dr Kabona greeted all the attendees at the meeting, thanked the organizers for the invitation, and introduced himself as the coordinator of the Tanzania NTD programme and chair of the Kikundi CoP.

Kikundi CoP is a community of practice developed to support NTD programme managers in Africa. It provides participants with a platform to learn and to share experience on control, elimination and M&E in the field of NTD. It is intended to foster collaboration between NTD programmes and make it possible for them to work together on solving common problems related to the implementation of NTD interventions and the management of challenges. It is also intended to promote community-based decision making the participants' access to technical expertise. *Kikundi* name was assigned by programme managers through a baseline survey and means “group” in Kiswahili language. The Kikundi leadership structure comprises three pillars: the leadership council, the development team and the advisory committee. In the development team, there are three international institutions: the University of Washington, the University of Global Health Equity (Rwanda) and the company Manta Ray Media (UK) that has developed the Kikundi website. Dr Kabona introduced the members of the leadership council, which is formed by at least 5 programme managers, and a maximum of 10, from Angola, Botswana, Liberia, Rwanda, Mali, Ethiopia, Tanzania, and The Gambia. The membership term for being part of the council is one year. The key roles for the council include having workshops with the development teams, provide feedback to the development team, participate in quarterly meetings, review metrics on website uptake, and represent CoP in international meetings. The advisory committee comprises key African institutions with expertise in NTD, and knowledgeable of the challenges faced by programme managers. Currently, there are representatives from ITI, FHI360, iCHORDS, EDCTP and RTI. Among its roles, revising the metrics on website use, provide advice to the programme managers participating from the CoP and Kikundi leadership committee. They participate in the bi-annual meetings, which is meant to review the end user metrics and inform about new resources and opportunities when available.

The Kikundi CoP is supported by a development team and funded by the BMGF. There are only two facilitators from the University of Washington and the University of Global Health Equity in Rwanda that have access to the Kikundi CoP web platform. They are supporting that the platform is operative and functional and help create and upload new contents to the website.

Then, Dr Kabona presented the key features of the Kikundi platform which are:

- Collaboration: programme managers can learn from one another. They have discussion forum, direct messaging and group messaging.
- Even & Resources: promote key NTD events, and links to and summarize essential NTD documents and partner websites.
- Professional Equipment: NTD leadership certificate, organized by the University of Washington, and professional development course, and link to webinars and seminars.
- External Support: connect programme managers to professional development support, when challenges cannot be resolved within the Kikundi CoP.
- In-person engagement: structured learning sites, etc.

At this point, Dr Kabona passed the floor on Dr Tuduetso Molefi, who continued with the presentation on the Kikundi CoP by presenting the progress to date. Kikundi has achieved to engage 36 programme managers representing 24 countries. All National NTD coordinators in Africa have been invited to join Kikundi. Since the launching of Kikundi there have been 41 updates about programme manager successes, 95 resources shared, and 73 forum discussion shared through the platform. Kikundi has given programme managers access to professional development through a suite of online courses such as the course on leadership and management in health, organized by the University of Washington, and the course on monitoring and evaluation in global health, scheduled by January 25, 2022. These are certified courses and so far, 15 have enrolled in the leadership and management in health course.

Kikundi has supported programme managers with grant applications such as the African scientist small grant applications, or the current Global Grand Challenges and COR-NTD grants applications. Programme managers are also sharing their experience on grant applications, and they provide feedback to one another about their proposal and there is an internal reviewer that read applications in full and provide recommendations.

In November 10 programme managers participated in a structured visit to Rwanda and took part in some activities including vector surveillance field observations, a workshop on research protocol development, MMDP field observation, community and school MDA observation and participate in Rwandan NTD Technical Working Group. Dr Molefi read some of the positive comments from programme managers attending this visit.

Kikundi also offers virtual “community conversations”, which are quarterly meetings so programme managers can discuss topics of importance and get advice from one another. Programme managers are invited to propose topics for discussion and one programme manager leads each conversation each time. Two community conversations have been held since the launch of Kikundi: restarting NTD programme during the CIVOD19 pandemic, and the impact of the FCDO funding cuts on country NTD programme activities. Action items from these meetings include a paper drafted by programme managers in collaboration with researchers from the University of Washington on relaunch

of NTD activities during the COVID19 pandemic and a joint letter on the FCDO funding cuts.

Dr Molefi passed the floor to Dr Karsor Kollie to go through the discussion and closing of the presentation. He mentioned that in the first 7 months since its launch, Kikundi has started to build professional connections amongst programme managers and develop opportunities for programme managers to develop their targeted professional development skills. Dr Kollie led his final discussion around two questions that he asked to the audience:

“What else should Kikundi strive to achieve this year?”

“How else would you measure success of the CoP?”

He also asked questions from the audience to the presenters, Dr Kabona and Dr Molefi:

“What do you think are the things that have motivated programme managers to join this CoP, and for you to join too?”

“Can you summarize what are the criteria for programme managers to join the Kikundi CoP and benefit from the courses offered within the platform?”

Dr Kabona said that the Kikundi CoP provides an opportunity where his voice can be heard and join other programme managers' voices. They can discuss programmatic challenges and support each other. Programme managers did not have this opportunity before Kikundi CoP launch. They can discuss all these things before going to donors or external partners. They are also hearing and learning from people that know what is happening in the field. They can discuss the practical application of guidelines and protocols and hear from others' experiences on their implementation. They can also prioritize challenges, foster cross-border collaboration, etc. A major motivation is a potential for mobilizing resources, in terms of funding as well as capacity building. Kikundi CoP also counts on a very competent technical advisory committee to which you can take your ideas, questions, and get proper advice. Also, having part of the same entity allows other organizations to support all the programme managers part of the Kikundi CoP to address the common challenges.

Dr Molefi answered the second question about the criteria for programme managers to join the Kikundi CoP. Dr Molefi insisted that Kikundi CoP is an information-sharing platform, where the team can come together and discuss issues that are pertinent to them. It is also a safe space where to learn from one another. New NTD programme managers can learn from the most experienced ones. For instance, Botswana is a very young programme that can learn from Tanzania, which has been running for quite a long time. It is also a platform where programme managers can collaborate across countries on research topics, come up with ideas to solve problems, discuss potential innovations to put

in place, etc. Kikundi CoP also provides an opportunity for professional development, so it is a very useful platform for programme managers to get new knowledge and skills on the management of NTD programmes.

Q&A

- ***Is it possible for KIKUNDI to include coordinators of countries that have integrated programme with one programme manager and several coordinators for other diseases such as SCH, ONCHO AND LF?***

(Dr Molefi live answered) *There are disease-specific coordinators within the Kikundi CoP platform, which are not necessarily programme managers. They won't be able to take part in some of the activities which are intended for programme managers, but they are welcome to join the CoP.*

(Answer Q&A chat) *Yes, Kikundi allows for a national coordinator as well as several different disease focal points. We give the discretion to decide to the national NTD coordinator.*

Chat

(Jusufu Paye) *Hello everyone. Program Managers who would like to join Kikundi can reach out to us @ hello@kikundi.org*

(Jusufu Paye) *The website of Kinkundi is <https://www.ntdcop.org/>*

(Achille Kabore) *Might be critical for PMs to build capacity for domestic resource mobilization for NTDs through the Kikundi initiative. Sharing of experience across countries and special courses could be very beneficial*

(Jean MBONIGABA) *@Achile kabore: Sure, last field visit we learned many initiatives for domestic resource mobilization and integration within other country initiatives! Kikundi has been very very useful - a great learning & sharing platform*

(Jean MBONIGABA) *@Drs George, tudu & Karsor: Thank you very much for this great presentation! Kikundi has been fantastic to me since I joined in terms of professional & personal dvpt. I would encourage all PMs to join those who did not yet done!*

(Jusufu Paye) *National Program Managers can nominate disease-specific Focal points who have national-level roles to join Kikundi.*

(Kikundi UGHE) Si vous avez d'autres questions et que vous souhaitez rejoindre la plateforme, vous pouvez nous contacter à l'adresse suivante : kikundi@uw.edu (courriel privilégié)

(Kikundi UGHE) Se tiver mais perguntas e quiser juntar-se à plataforma, pode contactar-nos através de kikundi@uw.edu (e-mail preferido)

Dr Kollie closed the session stressing that disease-specific coordinators are welcome to join the Kikundi CoP although it has been mostly set up for programme managers.

Day 1- Session 4: Funding gaps and the ESPEN gaps analysis tool

Moderator: Dr Pauline Mwinzi

Context

In April 2021, the UK government's Foreign, Commonwealth & Development Office (FCDO), announced an early interruption of its financial support to NTD programmes affecting up to 22 countries in the African region. WHO together with other key partners such as the Bill & Melinda Gates Foundation (BMGF), the Children's Investment Fund Foundation (CIFF), the ELMA Foundation, the END Fund, and USAID have convened multi-stakeholder discussions on filling the urgent gaps, and requested WHO to conduct a thorough analysis of the funding gaps resulting from the FCDO withdrawal.

ESPEN has worked closely with the country NTD programmes, as well as the International Trachoma Initiative (ITI) and the ASCEND programme data team to compile all available data for the areas that were to be supported by ASCEND partners (Sightsavers and Crown Agents) in 2021 and 2022 at the implementation unit (IU) level. ESPEN developed an Excel-based tool intended to collect updated information from country programmes and partners on the MDA and MMDP (morbidity management and disability prevention) interventions and planned survey needs affected for the early interruption of ASCEND project. The tool also sought to collect information on partners that have quickly responded to this early-withdrawal and allocate resources to mitigate its impact. These pre-populated country Excel workbooks were organized to collect the latest updates on gaps for five diseases (i.e. lymphatic filariasis, onchocerciasis, schistosomiasis, soil-transmitted helminthiasis, and trachoma) in 2021 and 2022. The country workbooks have been shared and reviewed with programme and data managers from affected countries and WHO country officers. Fourteen virtual meetings with the country teams were organized in July to present them for updating and validation. This initiative has been extended to the rest of the African region and areas not covered by the ASCEND project, and in the coming weeks, country programmes will receive updated workbooks to collect information on funding availability and allocated resources to comply with the needed interventions.

Early interruption of the UK FCDO funding, implemented through ASCEND programme, has showed how reliant most of NTD programmes in the African region are on external funding to implement their planned interventions. Whilst increased commitment is necessary from affected countries to sustain and funding national control plans, there is also a clear urgency for having better tools to closely monitor that all the endemic areas are properly and timely covered.

Facilitators

Dr. Jorge Cano is working as Surveillance Officer at the Expanded Special Project for the Elimination of NTDs in the WHO-AFRO regional office. He holds a PhD in Epidemiology

and, MSc postgraduates training in Public Health and Parasitology and in Cartography, Remote sensing, and Spatial Analysis. Previously worked as Assistant Professor at the London School of Hygiene & Tropical Medicine in the field of geospatial modelling of NTD infections, focusing his research in lymphatic filariasis, onchocerciasis, STH infections, schistosomiasis, and more recently in podoconiosis, Buruli ulcer and mycetoma.

Mr Emmanuel Habets is working as a consultant for AFRO in the field of data analysis and data system. He holds a MSc in geographic sciences (GIS, mapping and spatial analysis). He previously worked with the French Mapping Agency (IGN), OCHA in Cameroon and WHO in Yemen.

Report of the session

Dr Kello apologised for the problems with French-English interpretation, that was non-functional for part of the previous session. He then handed over to Dr Pauline Mwinzi who was going to moderate the fourth session.

Dr Mwinzi introduced the topic to be presented in this session: funding cuts and the tool that ESPEN has developed to monitor the impact of these funding cuts. She mentioned NTD country programmes have had to face two big challenges in the past two years: COVID19 pandemic and funding cuts, especially the early interruption of the ASCEND project, the UK FCDO flagship NTD project. Following this interruption ESPEN has been working closely with country programmes, implementing partners and key donors to analyse the gap and discuss jointly ways of finding sources to cover these funding gaps. This session is intended to present a summary of the analysis led by ESPEN in collaboration with country programmes and some stakeholders. Dr Mwinzi introduced the facilitators for this session, Dr Jorge Cano and Emmanuel Habets.

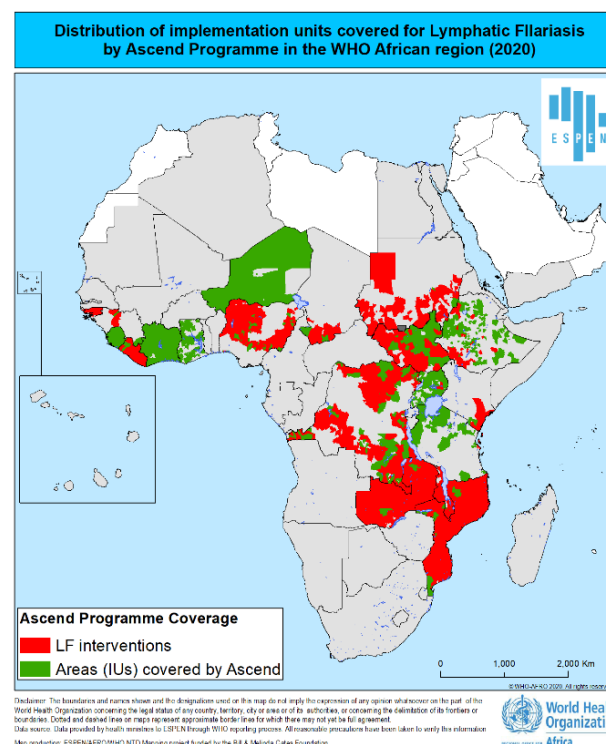
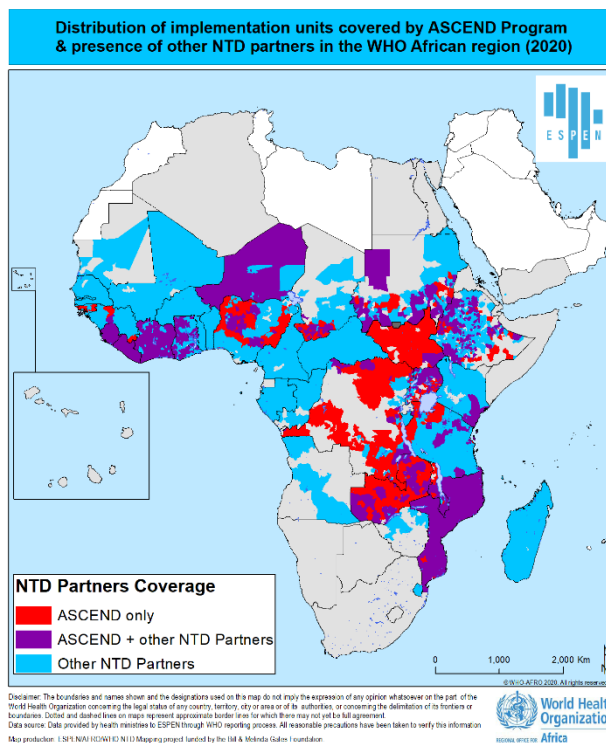
The presentation had been pre-recorded and started with Dr Cano presenting the background of the funding gap analysis and some summary outcomes resulting from this analysis. Dr Cano introduced the objective for this presentation which is to briefly present some outcomes related to the funding gap analysis that ESPEN have conducted because of the early interruption of the UK FCDO funding to the ASCEND project announced in April this year. With the involvement and support of ASCEND partners (Sightsavers and Crown Agents), NTD team in Geneva, the data team at International Trachoma Initiative, and other key partners, ESPEN conducted a quick assessment of the impact of this withdrawal on the countries and areas supported by the ASCEND project for the interventions scheduled in 2021 and 2022.

First part of the presentation provided a glimpse of the figures and estimates of the impact of the interruption of the ASCEND project in the African region, particularly related to PC-NTD programmes. Then, Mr Habets introduced the funding gap analysis led by ESPEN in collaboration with many partners and affected country programmes to determine what activities and areas were to be impacted by the interruption of the ASCEND project in 2021 and 2022. Finally, Dr Cano presented a proposal to improve some existing tools

and forms in order to develop a more efficient framework to monitor funding availability and completion with scheduled NTD interventions in the future.

Many NTD programmes rely on external partners and donors to implement their interventions. Drug donation is conditioned to have resources to implement the distribution of the donated medicines. In April 2021, a major donor, the UK Foreign, Commonwealth & Development Office (FCDO) announced the early interruption of funding to its flagship project targeting NTDs, the ASCEND project. This project was supporting a variety of interventions across sub-Saharan African, and other regions in the world, including mass drug administration, monitoring and evaluation and management of morbidity cases. Their PC-NTD related interventions were implemented through two organizations: Sightsavers and Crown Agents, partnering with NTD programmes of selected countries. Overall, they were covering one thousand eight hundred and fifty-eight implementation units. Many of these areas did not have other implementers or donors supporting national NTD programmes. In the map those areas are highlighted in red.

A first preliminary exploratory analysis was conducted to determine the total population requiring treatment for PC-NTDs in areas that were covered by the ASCEND project. We used the projections that ESPEN has developed based on all the historical data concerning mass drug administration (MDA) and survey data compiled since 2013. Using this historical data, we have made projections until 2030, based on some assumptions on the outcome of MDA interventions or the results of impact assessment surveys. The map below shows the areas where the ASCEND programme was supporting interventions targeting lymphatic filariasis. ASCEND was supporting LF activities in 830 implementation units. Based on our projections, in those areas 113 million individuals were estimated to need MDA in 2021



and 101M in 2022. A deeper analysis was conducted later to ascertain what fraction of this estimated population in need was covered by other partners and what might be left unattended if new resources were not allocated to support MDA interventions in these areas.

ESPEN also estimated the medicines that had been provisioned and shipped to the countries and areas supported by ASCEND programme in 2021 and 2022. The total amount of medicines approved and ready to be shipped to the concerned countries exceeded 497 million for mass drug administration interventions scheduled in 2021. At the time the UK FCDO announced the interruption of funding to the ASCEND project, over 230 million tablets had been delivered to countries supported by the ASCEND project, and over 260 million were pending to be shipped by June 2021 so that they could be delivered in the MDA rounds planned for the second half of the year. Also, looking at the country stock, we estimated that 106 million tablets were at risk to expire in 2021 if scheduled MDA rounds were not implemented, totalizing over 306 million tablets between 2021 and 2022.

Dr Cano mentioned that the exploratory analysis has some limitations. First, ESPEN estimates were based on projections which were not considering the presence of other partners in the affected areas. This preliminary analysis did not target surveys or activities related to morbidity management (for lymphatic filariasis and trachoma). ESPEN were asked to provide a deeper and more precise analysis considering non-MDA interventions, the presence of other partners covering the funding gap, and the activities that ASCEND partners (Sightsavers and Crown Agents) were committed to support with the remaining available funding. The outcomes of this analysis should also be validated by NTD country programmes. Moreover, we wanted to incorporate to the analysis a suite of criteria such as closeness to achieving 2030 goals, risk of drug expiry, limited potential to get additional funding, to prioritize areas from those which might be left unattended. A coalition of donors formed by the BMGF, CIFF and ELMA had generously committed 100M US\$ to cover the gap left by the UK FCDO for the next 3 years. But considering the extension of the area supported by the ASCEND project, the allocation of this funding should be properly informed by data to make sure that at priority areas will get covered. Thus, ESPEN in conjunction with Sightsavers, Crown Agents, ITI, the NTD Modelling Consortium among other partners started a more in-depth funding gap analysis on the countries and areas so far supported by the ASCEND project.

Next section was presented by Mr Habets. He described the methodology put in place to carry out the detailed analysis of the financing gaps relating to the planned interventions against the 5 PC-NTDs covered by ESPEN. This will be followed by a presentation of the main results obtained and finally a description of the difficulties encountered.

The first stage of the analysis consisted in developing a bespoke user-friendly MS Excel-based tool which allowed for a quick review of pre-populated data extracted from ESPEN projections at the level of the implementation units and broken down by type of activity. Country programmes were expected to revise and validate the projections, confirm whether the expected MDA interventions have been taking place and if there was funding

to cover the forecasted interventions. Training sessions were organized, with one virtual session per country during which the Excel tool was presented in detail. Then followed a long phase of reviewing the quality of the data reported which sometimes required a number of round trips with the countries. Finally, it was possible, using disease-specific data and validated by the national programs, for them to carry out the analysis of the gaps themselves and to compile a first report on the extent of the financing gaps.

Mr Habet presented an overview of the MS Excel tool. The tool is organized as follows. One sheet per disease, one row per implementation unit which corresponds for most countries to a health district, and finally one column per variable of interest. The variables of interest were mainly related to mass drug distributions and impact surveys. Some columns collect information about the state of financing of the activities. They are dummy variables, namely 0 is recorded when funding is not available and conversely, 1 funds have been secured following the planning of this activity. This analysis was completed for the areas that ASCEND project was supporting and based on the diseases targeted in each area.

Then, Mr Habet presented two examples of main results obtained after analysing the data collected. The first table (Table 10 on slide) provides us with an overview of the extent of funding gaps in different countries, for each of the 5 PC-NTDs, for the years 2021 and 2022, regarding mass distributions of medicine and impact surveys. It can be read, for example, that Chad, in 2021, the national program encountered difficulties to fund lymphatic filariasis activities for 41 implementation units in which treatment was planned and expected to be covered by ASCEND project. These MDA were expected to reach to more than 5.6 million people. The second table (Table 11 on slide) provides more detail on the geographic distribution of these gaps with a breakdown by administrative region.

Table 10: All countries - NTD interventions with validated funding gaps

	2021			2022		
	MDA		IA	MDA		IA
	# ^a	Population ^b	# ^a	# ^a	Population ^b	# ^a
Lymphatic filariasis						
Chad	41	5,645,610	41	NG	NG	41
DRC	43	9,130,243	NG	82	15,910,659	33
Ethiopia	24	2,551,765	NG	24	2,623,283	4
Guinea-Bissau	65	879,996	30	35	579,315	40
Mozambique	4	746,314	NG	NG	NG	17
Nigeria	84	26,561,757	115	41	16,353,504	149
Zambia	NG	NG	95	NG	NG	95
Onchocerciasis						
Chad	46	6,689,408	NG	46	6,893,185	45
DRC	NG	NG	NG	117	21,683,285	NG
Ethiopia	89	7,515,025	NG	89	8,030,261	44
Guinea-Bissau	17	230,934	NG	17	236,696	17
Malawi	8	2,588,651	NG	8	2,663,720	8
Nigeria	137	20,439,700	NG	137	20,968,272	NG
Sierra Leone	12	6,509,675	NG	NG	NG	NG
Schistosomiasis						
Chad	NG	NG	NG	NG	NG	30
DRC	NG	NG	49	57	4,630,150	19
Mozambique	2	119,944	NG	3	116,595	70
Niger	NG	NG	4	38	4,416,774	21
Nigeria	176	9,987,328	NG	177	10,267,138	27
Zambia	8	2,562,113	65	5	2,574,082	5
Soil-transmitted helminthiasis						
Chad	NG	NG	1	NG	NG	3
DRC	NG	NG	23	46	3,026,890	8
Nigeria	12	1,591,887	5	12	1,633,055	3

Continued on next page

Table 10: All countries - NTD interventions with validated funding gaps (Continued)

	2021			2022		
	MDA		IA	MDA		IA
	# ^a	Population ^b	# ^a	# ^a	Population ^b	# ^a
Trachoma						
Ethiopia	83	11,784,352	27	71	10,804,287	NR
Mozambique	3	312,420	NR	NR	NR	NR
Nigeria	4	741,986	NR	NR	NR	NR
Zambia	3	436,541	NR	NR	NR	NR

NG: no gap, NR: not reported

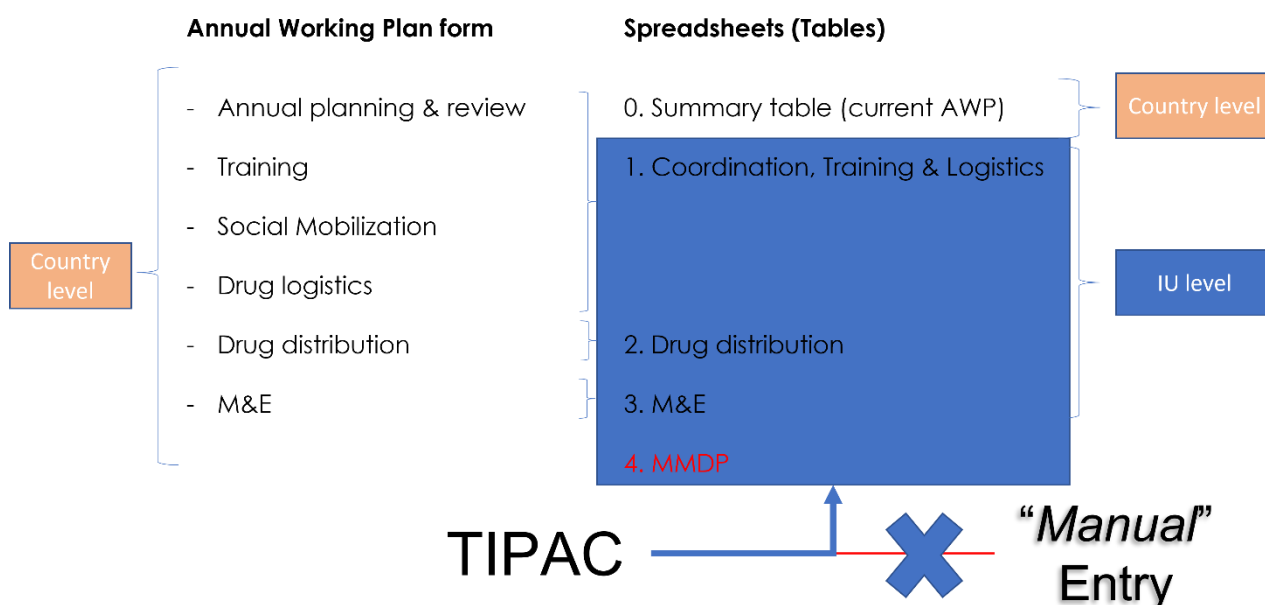
^a Number of IUs with funding gaps^b People requiring PC

Finally, Mr Habet talked about the difficulties encountered to complete this exercise. First, 11 out of the 18 countries affected by the early interruption of the ASCEND project participated actively in the review and validation of the datasets, leaving 7 that did not provide their inputs. Mr Habet also mentioned the difficulties encountered with the quality control of the data knowing that the user was not limited in the modifications they could make in the MS Excel tool. In some countries we were confronted with a limited level of competence in the field of data management, but it is undeniable that this type of data compilation exercise requires a minimum background in this data analytics. This peer-review process was new for NTD country programmes, so that it reasonable to think that programmes needed more time to familiarize themselves with the approach and the tools put in place. Finally, we have sometimes observed inconsistencies between the feedback provided by financial partners and the feedback provided by national programs.

In the last section, Dr Cano presented a framework in which ESPEN is working on to improve the monitoring of country work plans and funding availability. Whilst increased commitment is necessary from affected countries to sustain and funding national control plans, there is also a clear urgency for having better tools to closely monitor that all the endemic areas are properly and timely covered. The analysis led by ESPEN in the last few months have been very valuable but also very time-consuming. More importantly, it is providing a picture of a contemporary scenario but is not providing insights on where NTD interventions may become compromised in the future because of the lack of support. Here, we are going to present a proposal to develop a framework which will allow us to monitor more efficiently and precisely the completion of NTD interventions at implementation unit level.

We think that improving two existing tools, the Annual Working Plan form, which is part of the Joint Application Package, and upgrade the Tool for integrated Planning and Costing, also known as TIPAC, will allow us to develop a more efficient framework to monitor scheduled NTD interventions.

Currently, the Annual Working Plan is made by one single spreadsheet integrated in the JAP report. This form collects country level information on the timeline for MDA, surveys and other activities such as training, social mobilization, medicines logistic, etc. The form also collects information about funding availability and partner support for these activities. However, this information is collected at country level. We think that the Annual Working Plan could be enhanced if it were collecting the information at the implementation unit level. For this, some modifications should be implemented in the form, as we show in this slide. Indicators should be grouped by topic: Coordination, training and logistics, drug distribution, surveys and MMDP activities, and a separate spreadsheet should be set up for each topic and planning and costing made at the implementation unit level. Producing this information may be very time-consuming and implies a massive work, when this is done manually. For this reason, we are suggesting coupling this with an improved version of the TIPAC tool, which have been developed by the ENVISION project (supported by RTI and USAID).



The TIPAC tool is a MS Excel based application with macros that is used to collect information regarding planned PC-NTD related interventions, disease-specific endemicity, MDA history and finally cost estimates by categories and by items. It also collects information concerning the presence of partners and their committed support. Once the basic information is entered into the tool, this automatically generates cost estimates for the needed interventions, make the annual planning, include the information concerning partners' support and identify and quantify the funding gaps. It also includes some basic

analytical tools to visualize projections of program cost and drug needs, and other indicators. Finally, when the information is consolidated, it has a function to automatically generate the Annual Working Plan form which is to be submitted as part of the JAP. While the tool allows to enter the information at the geographical level the activities are conducted (implementation unit level), it finally consolidates the information at the country level for the AWP. Making the tool able to produce tables with planning and costing at the implementation unit level will make it more functional and useful for country programmes and stakeholders for them to follow up on planned interventions and funding availability.

Q&A

- **Whether TIPAC tools are available to other countries in the SEARO region. If so, can you provide the details?**

(Answer Q&A chat) TIPAC can be downloaded and used by any NTD programme that want to use it. There are not restrictions. However, we are planning to work with developers to update it and make sure that planning is generated at implementation unit level.

http://www.ntdenvision.org/resource/training_materials/training_for_tipac_tool_for_integrated_planning_and_costing

- **What Happen to country that already have PZQ that is about to expire in October 2022 and do not have funding to distribute before that time? Is there a way that WHO AFRO can assist such a country with funding?**

(Answer Q&A chat) We (ESPEN) would appreciate receiving this request to discuss

- **Thanks to Jorge and Emmanuel for the presentations; Most of the countries would like to use the DHIS2 to be able to communicate data for decision making and prioritization directly to the senior leadership at the MOH**

Chat

Achille Kabore: USAID has stepped in and filled gaps left by the FCDO cuts in Guinea and Cote D'Ivoire. These should be accounted for in the gap analysis

(CANO ORTEGA, Jorge) @Achielle. Thanks for your inputs. We indeed took this into account in the analysis. Perhaps the maps are not showing this, but analysis accounted for it.

(Achille Kabore) Significant gaps in funding has been identified in several countries using the TIPAC. It is important to first unpack existing TIPAC result to identify missing information and second ensure that we do not re-invent the wheel. Third do not comingle the gaps that existed in country before the FCDO with the gap left by ASCEND

Polls

- Sixty-eight (21/31) percent of respondents (NTD programmes' staff) said to have a full knowledge of all the partners implementing NTD interventions in their countries.
- Only 55% (17/31) of the NTD programme managers confirmed to establish their annual workplan with their local and international partners. 39% (12/31) said to make it partially.
- Fifty-eight (18/31) of the respondents said that they were unable to implement MDA interventions in some part of their countries because the lack of funding. Only twelve programme managers (39%) confirmed not having able to implement monitoring and evaluation activities (surveys) due to the lack of funding.
- Sixty-five (20/31) percent of the respondents said to have submitted their annual work plan forms (AWP) to WHO-AFRO in the past two years.
- The majority of NTD programme managers (81%) are using MS Excel to estimate the cost of planned NTD interventions. A 39% (12/31) said to be using TIPAC tool and 3 bespoke tools provided by a partner.
- Thirty-five (11/31) percent had never heard from the TIPAC tool, and then did not know that the TIPAC tool allow for the automate generation of the Annual Work Plan form. All the respondents thought that having a tool which allows country programmes and partners to follow up on the NTD interventions and funding availability at implementation unit level would be a very useful tool.

Day 2- Session 5: NTD resources for enhanced planning

Moderator: Dr Jorge Cano

Context

With the aim of making technical resources for planning and decision-making easily available to country NTD Programmes and stakeholders, ESPEN established the ESPEN portal in April 2017. This is an electronic platform designed to enable health ministries and stakeholders to share and exchange subnational programme data, in support of the NTD control and elimination goals.

In its first phase, the ESPEN NTD Portal made publicly available static endemicity and treatment status maps and related data at the level of the implementation unit (IU) and survey data conducted at the community level. Since launching the portal, more NTD data has been made available, processed and included.

To complement the existing suite of maps and datasets, WHO/AFRO has now developed interactive dashboards detailing both current progress and projections for the next 10 years at the level of implementation. Using historical data compiled under the ESPEN data repository, we have forecasted when MDA interventions will be needed, what type of MDA strategy should be implemented (considering co-endemicity), and when impact assessment should be conducted, to achieve the goals established by the new 2021-2030 Roadmap for the Elimination of NTDs. These resources can greatly support the completion of both National NTD Masterplans and Annual Work Plans.

The development of this large repository will provide control programmes and stakeholders the evidence they need to successfully set targets, plan activities, mobilize resources more efficiently and target interventions appropriately in order to tackle each NTD disease.

For making country programmes and stakeholders to be frequent users of the ESPEN data platform, they need to be properly informed on updates, improvements, and new resources available.

Facilitators

Mr Honorat G.M. Zouré is a Database administrator in the WHO/ESPEN since April 2017. Prior to joining ESPEN, he has worked fourteen years as Biostatistics and mapping officer for the WHO African Programme for Onchocerciasis Control (2001 – 2015), four years as Information Technology Manager for Catholic Relief Services in Burkina Faso (1997 – 2001) and three years as Biostatistician in the National Institute for environment and agricultural research of Burkina Faso (1994 - 1997). Mr Honorat Zouré holds an Advanced Degree in Agronomy of the High School of Agronomy of Rennes (France) with

specialization in Livestock Sciences and Techniques, and a Postgraduate Degree in Computer Science of the University of Avignon (France).

Dr. Jorge Cano is working as Surveillance Officer at the Expanded Special Project for the Elimination of NTDs in the WHO-AFRO regional office. He holds a PhD in Epidemiology and, MSc postgraduates training in Public Health and Parasitology and in Cartography, Remote sensing, and Spatial Analysis. Previously worked as Assistant Professor at the London School of Hygiene & Tropical Medicine in the field of geospatial modelling of NTD infections, focusing his research in lymphatic filariasis, onchocerciasis, STH infections, schistosomiasis, and more recently in podoconiosis, Buruli ulcer and mycetoma.

Mr Andy Tate is the Senior data and reporting advisor for NTDs at Sightsavers. In this role, he supports the organisation with effective data management, visualisation and use. Mr. Tate has a Master in Geography from the University of London and has worked in international development for over 14 years, with a specific focus on NTDs for the last three of these.

Mr Alex Pavluck is the Senior Technical Health Systems Director at Sightsavers. Mr Pavluck has worked on NTD programmes for the past 12 years. In that time, he has supported the development of many of the key data systems used in NTD programmes such as LINKS, GTMP, NTDdeliver, ESPEN Collect, and CHIP. Mr Pavluck has a Master of Public Health in Epidemiology from Tulane School of Public Health and Tropical Medicine and is currently pursuing a Master of Business Analytics from Ohio University School of Business.

Mr Modeste Tezembong is a health Procurement & Supply Management advisor with extensive experience in health commodities such as HIV/AIDS, TB, Malaria and NTD drugs. He is currently serving as the supply chain management officer at WHO AFRO in the ESPEN project. Before joining ESPEN, he previously worked for EGPAF, UNICEF, IOM, MINUSCA, and private sector etc. on projects funded by UNITAID/WHO, USAID/CDC-PEPFAR, BMGF, CIFF, J&J, ECHO, etc. He has a master's degree in logistics and strategic supply chain management from Institut Universitaire de la Cote (IUC), and a post graduate diploma in global health procurement and supply chain management from Empower School of Health & Kent State University, bachelor's degree in logistics & transport, and certificate of procurement of essential medicines and medical supplies from i+solutions/i+Academy, and many other certificates with EGPAF, WHO, UNICEF, USAID & APMG International.

Yael Velleman is Director of Policy and Communications at SCI Foundation, London, UK. She is a former chair of the NNN WASH Working Group and supports work on collaboration between WASH and NTD stakeholders.

Geordie Woods is Director of Social Behaviour Change and WASH at Sightsavers. He is the lead of the behaviour change task team within the NNN WASH working group and supports work on the design and delivery of behaviour change interventions for NTDs.

Report of the session

Presentation on ESPEN Collect survey support

Mr Adrien Elia Muhima and Mr Dyesse Yumba presented the ESPEN Collect Support Services (ECSS), which is a system to support countries in conducting surveys on LF, Onchocerciasis, STH and SCH. There has been a change in the onboarding workflow. During the request for support, in addition to the protocol, a country now needs to include a clearance from the country ethical board or a document giving a waiver. The protocol with the country authorization will then be submitted to the WHO/AFRO Ethical Review Committee for clearance.

Since its inception in 2018, ECSS has supported 72 surveys in 27 countries where more than 3,760 sites have been surveyed. In addition, 124 smartphones have been provided to country programs. There was an increased interest in ECSS in 2021 when 54% of the overall support has been provided. Mr Yumba presented how ECSS allows integration of the survey results into national databases, either through an integration engine or an API. In collaboration with Sightsavers and RTI, an integration of SCH/STH surveys into national DHIS2 has been piloted successfully in Ethiopia. Ideally, at the end of a survey, the data should feed the ESPEN Data Portal through the EPIRF template and feed the national database through an API.

Presentation on online submission of data files by countries through the ESPEN Portal

The session started by the administration of a poll to assess the awareness of participants about the tool for the online submission of the Joint Application Package (JAP) files.

Following the poll, Mr Honorat Zouré reminded that every year, countries submit to WHO/AFRO/ESPEN 4 files that make up the JAP: (i) the Joint Request for Selected Medicines (JRSM), (ii) the Joint Reporting Form (JRF), (iii) the Epidemiological Data Reporting Form (EPIRF) and (iv) the Annual Workplan (AWP). The files are reviewed by WHO at country, regional and headquarters levels. During the review process, all the communications are done through electronic messaging with a risk of action being delayed due to insufficient transparency. To mitigate this risk, ESPEN has developed an online application to upload the submission of JAP files and monitor their review, the JAP upload tool.

The JAP upload tool allows to submit and manage files, communicate, monitor the submission and review. It also improves transparency among stakeholders on the status the countries application for donated medicines.

The tool is accessible either as a dedicated tool or a public tool. The presentation highlighted the process of creating users account, creation of a JAP folder, uploading of files and setting a status, online communication between Ministry of Health and WHO

entities (WCO, AFRO; HQ). The public interface of the JAP upload tool (the JAP search) was presented allowing anybody to monitor progress in the submission and review of JAP files and retrieving final version of the validated and approved JRSM and JRF forms.

In 2021, ten (10) countries piloted the tool by submitting at least 1 file (Angola, Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Ethiopia, Gabon, Malawi, Senegal, Togo). In 2022, ESPEN will organize briefing sessions in order to expand its use. It is expected that by end of the year, at least 20 countries will be submitting consistently their JAP files using the tool.

Presentation on new country summaries and analytical dashboards on the ESPEN Portal

With the aim of making technical resources for planning and decision-making easily available to country NTD programmes and stakeholders, ESPEN established the ESPEN portal in April 2017. This is an electronic platform designed to enable health ministries and stakeholders to share and exchange subnational programme data, in support of the NTD control and elimination goals.

ESPEN NTD Data Portal is intended to be the most comprehensible data repository for mapping, impact surveys and records of preventive chemotherapy intervention. Ultimately, the portal intends to compile all the relevant data for guiding NTD programmes to control and eliminate the 5 PC-NTDs. For this, ESPEN is compiling data submitted through the JAP and TEMF forms, processing and summarizing the data to inform countries on progress and best strategies towards the control and elimination of PC-NTDs.

So far, the ESPEN portal includes data and more than 10,000 maps on treatment coverage and endemicity status community and implementation unit level. Dataset by country and disease with key indicators are available and downloadable. The portal has also incorporated implementation unit level maps displaying data on water and sanitation indicators which source is the Institute of Health Metrics and Evaluation of the University of Washington.

The ESPEN Portal has expanded to include comprehensive suite a dashboard designed to better track roll out of interventions and impact to allow better informed decision-making. The analytical dashboards produced by disease and country display key statistics by year including population and implementation unit summaries, simple graphics highlighting national coverage, detailed interactive map showing trends in population and implementation unit coverage over time.

ESPEN has also developed an analytical dashboard with projections of treatment and surveys need for each disease until 2030, which is embedded in the country-specific webpages. The projections rely on some assumptions such as impact assessment being “successful” (proving transmission interruption). Data on projections are downloadable as country summaries and implementation unit level projections.

The new ESPEN portal progress and forecast dashboards allow users to explore key statistics and maps at both national and sub-national level. The dashboards are

designed to support country NTD programmes to use the data to make informed decision and distribute resources more efficiently.

Q&A

Question (from Wycliff Omondji)

- **What is the time around from application time for countries to be allowed access to the use of ESPEN Collect Services?**

Answer (from Elia Muhima Adrien):

Normally it is requested to fill out the request form at least 6 weeks before the intended start of date of the survey. Between the registration to the data collection there are the form designing, dashboard designing, training of surveyors. The answer is 6 to 8 weeks.

Question (from Penny Smith)

- **What is the rationale for having the WHO country officer provide an invitation to the country program to access their application on the portal. Does that occasionally present a barrier to access, email not sent or not responded timely?**

Answer (from Honorat Zouré):

For WHGO the entry point in country is the WHO country office that is coordinating activities among partners (WHO, Ministry of Health, implementing partners). The invitation is for being able to upload files. For downloading approved files, there is no need for any credentials.

Question (from Alioune Seck, Senegal)

- **What measures need to be taken at country level in order to be able to setup the survey data into DHIS2. What resource is needed?**

Answer (from Elia Muhima Adrien):

Each country that needs to have the ESPEN Collect data integrated into DHIS should make this specific request during the registration for support. The data collection will start normally, and in the course of survey, a groundwork will be done with the country data manager to do the integration of the ESPEN Collect data into the national database. The resources needed are a country DHIS2 instance and data managers at country level.

Answer (from Dyessa Yumba):

In the case of Senegal, the country has already benefitted from ESPEN Collect support and there are already available datasets not yet integrated into the national database.

A first step will be ESPEN team to work with the Senegal team to have the existing dataset integrate, and then future data collected using ESPEN Collect Support Services will be automatically integrated into the national database.

Updates on the piloting of the Country Health Information Platform (CHIP) project

Mr Alex Pavluck and Mr Andy Tate from Sightsavers presented on the Country Health Information Platform (CHIP). The rationale behind the development of the CHIP platform is that NTD programmes tend to operate outside of health management information systems for a variety of reasons. Because of this, NTD programmes need to develop their own databases to store programmatic data coming from surveys, morbidity management, inventory management, and mass drug administration treatments. However, each year national NTD programmes submit a wealth of programmatic data to WHO and the International Trachoma Initiative (ITI) to report on endemicity status, treatments delivered, surveys conducted, morbidity, and medicines required and remaining for the current reporting period.

The proposed solution is to develop a platform that uses official annual reporting forms (JAP & TEMF) to produce a multi-year interactive dashboards for national NTD programmes.

CHIP comprises three modules:

- Country page module shows co-endemicity status.
- Treatments and surveys module: a page for each of the 5 PC NTDs. These pages have, to the extent possible, a similar appearance and structure to reduce training needs.
- WASH/NTD data merge module: a page to allow select sanitation and hygiene modelling data from IHME to be combined with NTD prevalence data to identify high priority areas.

A short demo of the CHIP was made so that the participants could learn how to navigate through the elements of the platform. The roadmap for putting the CHIP platform in place and made it operational for PC-NTD country programmes consist of:

- After receiving a request to generate a country-specific CHIP dashboard, this is generated and launched through the ESPEN NTD Portal.
- Holding monthly training sessions where users can call in and ask questions
- Recording of training videos for on demand training.
- Providing support to national programmes who want to complete and submit previous reporting forms that are currently missing.

Presentation on the NTD supply chain tools

Mr Modeste Tezembong (SCM officer in ESPEN) presented on NTD supply chain tools. The tools presented were:

- Goods receipt note (GRN).
- The stock card or bin for recording daily transactions at each storage point or service delivery point.
- The physical inventory report form for planning of next mass drugs administration campaigns.
- The NTD stock management tool (SMT) for recording of downflow of medicines and other NTD health products (from the national, regional and to peripheral levels).
- The district consumption reporting tool (DCT) for recording of supply chain information or supply chain data from the peripheral level, districts, regional, up to the national level.

A sample of each of the forms was presented. The main information to be provided in each of the forms and good practices have been extensively presented and discussed in other webinars. The GRN should be well kept and always be available for any programme managers who need to check the entrance of goods in a warehouse.

The Stock Control Card (SCC) should be used on a daily basis. It allows country programmes to know the number of tablets of medicine received, distributed, lost, balance, expiry date, manufacturer, lot number, among other indicators. The person keeping the SCC should fill his name and sign it off. The Inventory Report Form (IRF). It should be submitted when requesting for medicines. The key information to be provided when filling the form was presented in this session. Finally, the Stock Management Tool (SMT) is a Excel-based template developed by ESPEN to support planning and use of all medicines donated for PC-NTDs. It can be used at national and sub-national level. It allows programmes to track each medicine, the ins and outs by lot number.

Presentation on WASH/NTD analytics file

Mr Yael Velleman for SCI Foundation and Mr Georgie Woods from Sightsavers delivered the presentation. Facilitators mentioned that the NTD roadmap has for the first time set targets on water, sanitation and hygiene. There is also a new global strategy on WASH to combat NTDs that is a companion document to the NTD roadmap. There is a focus on using WASH data in NTD programmes to track progress.

Within the various communities of practices, there are 3 main options for looking at WASH/NTD data for decision making: (1) using existing database and adding relevant information, (ii) using Excel-based tools referring to a decision matrix useful for primary data collection and data analysis, and (iii) using information already available on the ESPEN portal. The third option was the focus of the presentation.

The WASH data included in the ESPEN portal, as we mentioned in earlier presentation, is coming from the WHO-UNICEF Joint Monitoring Programme for Water and Sanitation (JMP), which has been used by the Institute of Health Metrics and Evaluation (IHME) to construct a spatio-temporal geostatistical model, in combination with a suite of explanatory variables, predicting estimates of household access to different quality of water and sanitation services in the continuous space. ESPEN has consolidated these estimates at implementation unit level. The data can be used in multiple formats: raw, analytic file combining WASH and NTD data, data visualization on the ESPEN portal. The facilitators presented some screenshots showing how to navigate through the ESPEN portal and find the available WASH indicators.

The WASH data available on the ESPEN NTD Data Portal can help bring together information on the burden of NTDs and access to water and sanitation services at the district level and present it in a way that supports decision making and enhance accountability of service providers. It can also help identify areas of a country that should be prioritized for joint WASH and NTD implementation and increased investment in WASH services. The CHIP visualization dashboard also includes a module to interact with the WASH/NTD data, providing an indicator for the need of intensified intervention based on WASH quality and NTD-specific endemicity.

The WASH and NTD toolkit is being updated to include data for decision making, user guide for the three data for decision making options above, and examples of existing outputs.

Q&A

Question (from: Penny Smith)

- ***CHIP looks like a great tool to make the joint application package much more accessible. Will it be accessible in multiple languages?***

Answer (from Alex Pavluck):

So, we're definitely going to work to make sure that CHIP is in an appropriate language for every implementation, you know the demonstration obviously focused on English just to make it easy to share a demonstration. But there will be multiple languages in which CHIP will be developed and the real focus there is going to be the primary language for the country that the dashboards are being developed for.

Question (from: Fikre Seife Kebede)

- ***How frequent should one update the WASH data that considering infrastructure problems and seasonal changes. What is the source of the WASH data on the portal and reliable it is?***

Answer (from Yael Velleman):

The WASH data on the ESPEN portal is modeled data. As the data comes from national level surveys and censuses and then is modeled downwards to the IU levels, so there are things that it is useful for and things that it is not useful for. It helps identify if there are specific IUs or districts where the WASH situation is not very good, where the access is below the national median and helps you to show that, alongside the NTD data, if you have a district where access is relatively low, and you have a high burden of diseases, this indicates that for this district, there should be a joint planning conversation. But, because it is model data and because it is not frequently collected it is not real time data, and so, if you were to have a district level planning conversation with the WASH sector, you would need to use other sources of data that are more timely and that's the kind of information that is normally collected regularly by the district water offices.

Answer (from Geordie Woods):

we're hoping that this is a really good starting place. The real time WASH data would be obviously the best option and that would really allow real time decision making but in the absence that I think that this is a very good conversation, so I think it is the first starting point and then you're going to the district, or whatever level to validate that with actual country level data. In some countries, that first option that we have presented in our presentation, the data merge, I think we would really encourage international data managers to look at a real time version of the Washington global data.

Polls

- Only 18% (10/57) of the respondents to the meeting confirmed not having used the ESPEN NTD portal yet. Most popular features and resources at the ESPEN NTD Portal are downloadable maps and datasets (39%), the JAP Upload tool (25%), the recently created analytical tools (21%) and the implementation unit level cartography. Only 5 said to have used the ESPEN Collect Services.
- Sixty percent (34/57) of the respondents said they are not yet using ESPEN NTD portal resource for planning their interventions. Forty-one percent (23/57) of the respondents consider limited internet access, not knowing how to use the resources and do not find the information easily as major reasons preventing them not using ESPEN NTD portal. Only 5 respondents (9%) said not to have the information reliable or contemporary.
- Seventy-nine (45/57) percent of the respondents had heard of the JAP Upload tool as a tool for online submission of JAP reports. Yet, 60% said not having yet attended a webinar to be trained on its utilization.
- Only 32% (18/57) had used the JAP Upload tool to submit their JAP reports recently.
- Forty-two (74%) of the respondents knew that reviewed and validated JAP data could be downloaded from the ESPEN NTD portal.

- Mobile applications, electronic logistics information management systems (eLIMS) and DHIS2 were considered the most effective tool to improving NTD supply chain data accuracy and visibility, being chosen by 64%, 52% and 48% of the respondents, followed by customized excel sheet (40%).
- Sixty-eight percent of the respondents considered the NTD supply chain data should be collected at a monthly basis, and this should be done by NTD programme logistic officer (84% respondents).

Day 2- Session 6: Other information sources: using modelling data to fill information gaps and forecast intervention needs.

Moderator: Dr Jorge Cano

Context

ESPEN established the [NTD Data Portal](#) in April 2017 with the aim of making technical resources for planning and decision-making easily available to country NTD Programmes and stakeholders. The ESPEN NTD Portal is intended to be the most comprehensive, publicly available NTD data repository for mapping and impact surveys, and records of preventive chemotherapy (PC) interventions. But it is also intended to be more than a data repository, providing supporting resources for data collection, data reporting, and data analytics for decision making.

Ultimately, ESPEN NTD Portal is seeking to integrate all data that is relevant for guiding NTD country programmes throughout their work to control and eliminate the PC-NTDs. For this, ESPEN is **compiling** all relevant epidemiological and treatment data concerning PC-NTDs submitted by countries through regular channels (JAP & TEMF report systems), **processing** it and **summarizing** it to inform countries on their progress and best strategy towards the control and elimination of PC-NTDs.

However, the empirical data available in the ESPEN data repository is sometimes limited and information concerning the distribution and endemicity of diseases, or the impact of interventions are scanty or inexistent for some areas across Africa. Furthermore, as we are approaching the final stages of control and elimination of some PC-NTDs in certain geographical areas, there is an increasing uncertainty on whether interventions can be interrupted without having recrudescence of disease transmission and when, where and how post-intervention surveillance should be conducted.

To respond to all these questions, we need to resort to modelling science, both geostatistical and mathematical modelling. The former may be used, for example, to estimate endemicity status for areas where survey data is not available, and the latter for modelling disease dynamics and subsequently forecasting the impact of different intervention regimens or testing different post-intervention surveillance protocols.

Modelling presented important quantitative insights to program decision making. Geospatial modelling in particular for NTDs is a growing field, and there is increasing opportunity for these models to bring efficiencies to programmatic decision-making where there are gaps in routine data. However, many of the modelling efforts to date have been academic and delinked from programmatic partners or practical applications.

The NTD community needs to determine how to maximize the usefulness of these models for countries and program partners, leverage partners to facilitate increased access

to the models (e.g. via the ESPEN portal) and support programmatic use (e.g. via targeted TA).

Facilitators

Rachel Pullan is an Associate Professor at the London School of Hygiene & Tropical Medicine (LSHTM, UK). She is an infectious disease epidemiologist, interested in the epidemiology and control of neglected tropical diseases (NTDs) in sub-Saharan Africa, with a focus on spatial epidemiology and operational research. I am particularly interested in the design, implementation and evaluation of interventions for the prevention, control and potential elimination of helminthic NTDs. She has a first degree in biochemistry from Imperial College London, and an MSc (Demography and Health) and PhD (Epidemiology) from LSHTM. She leads a group of epidemiologists specialising in GIS, spatial analysis, and field-based research including large cluster randomised trials of public health interventions. The group she is coordinating, LASER research group, works closely with national control programmes and international agencies, and place a strong emphasis on developing an evidence base that can be used to inform policy and practice.

Deirdre Hollingsworth is a Professor at the University of Oxford, working as Senior Group Leader at the Big Data Institute. She is an infectious disease epidemiologist who uses mathematical models and statistical analyses to study the evolution and transmission dynamics of infectious diseases with the aim of informing the design of more effective control interventions. She is particularly interested in neglected tropical diseases, a group of diseases which cause suffering amongst the poorest populations of the world. She leads the [NTD Modelling Consortium](#), an international network of neglected tropical disease modellers. Her research foci are lymphatic filariasis, visceral leishmaniasis and a group of intestinal worms (soil transmitted helminths or STHs) which affect a large number of children and adults in low-income settings. She has ongoing interests in the transmission and evolution of HIV in both Africa and European/North American settings as well as malaria and influenza.

Report of the session

Dr Cano introduced this session to be facilitated by Professor Deidre Hollingsworth and Dr Rachel Pullan on how NTD programmes can use modelled data to guide programmatic decisions. He also presented the WASH dataset available through the ESPEN NTD Portal as an example of how modelled data can be used in combination with disease-specific indicators to identify areas which may require enhanced interventions. As it was presented in previous section, WASH data was generated by the Institute of Health Metrics & Evaluations (University of Washington) using community-level collected data on the household accessibility to water and sanitation services. These datasets have been processed using geostatistical techniques to generate continuous estimates across low- and middle-income countries (LMIC). Thus, modelled data can enrich the data sources that

NTD programmes can use to guide their interventions, and to support survey and treatment decision under scenarios of limited resources.

Dr Rachel L Pullan delivered a presentation on geostatistical modelling and its applicability on monitoring interventions against NTD diseases. Dr Pullan began her presentation remarking that intense MDA interventions in the past 10 years has led to a situation where we are now thinking about scaling down treatments with an associated scaling up of impact assessments. Based on projections developed by ESPEN based on MDA data reported by NTD programmes, the number of assessment surveys needed for the coming 5 years in the African region for the different PC-NTDs is quite significant. These projections raise some key questions: how should we best prioritize where to survey first given limited resources?; are there more efficient (cheaper) survey strategies that will give reliable results?; and how can we make the most of data from these surveys to make better decisions?. Exploring geospatial modelling approaches can be a potential solution to address all these questions. Then, she introduced the concept of geospatial modelling as a collection of statistical methods that are used to map, understand and predict disease patterns at fine spatial scales, by exploring how similar survey observations are to those collected nearby and/or associations with environmental factors. Geospatial approaches can help us tell where to do surveys, how to do surveys and use existing and new data to make robust control decisions. Geospatial modelling approaches have been used in the past to better understand the distribution and risk of NTD diseases. An example is the REMO mapping for onchocerciasis, and the utilization of geostatistical methods to outline the geographical risk and distribution on unmapped locations.

Dr Pullan continues by presenting an example on how geospatial modelling could be used to determine where to prioritise surveys. She pictured the example of the implementation of onchocerciasis elimination mapping (OEM), and potential applicability of modelling to exclude areas environmentally unsuitable to hold onchocerciasis transmission. Environmental suitability models use sophisticated computer algorithms to describe the relationship between environmental factors and disease/vector occurrence and predict whether the disease/vector may occur across the area, given the suitability of the environmental. The output is a continuous smooth prediction of the probability that an area is suitable for the disease transmission.

Next example she presented it focused on how to efficiently design surveys, where we want to conduct them, and then make the most of the data collected to make robust treatment decisions. She focused on the problem of schistosomiasis (SCH) impact assessment surveys. Many programmes are looking to assess the impact of their SCH and STH programmes following five or more rounds of successful preventive chemotherapy. Due to the focal nature of SCH, there is also growing interest in implementing SCH interventions at smaller implementation unit that those currently in use. However, using standard sampling approaches to determine prevalence within every single smaller area might quickly result in very large sample sizes. Instead, we might want to apply geostatistical approaches to design and implement precision mapping. This approach

works in two stages. First, risk maps are generated using existing data. These are used to tell us how many survey locations we need to visit for the impact assessment. If spatial correlation occurs over large distances, we do not gain much by sampling lots of locations close together, so recommendation will be to survey far apart. If distribution is very clustered (focal), we will need to survey in sites close together, to make sure we accurately identify these clusters and rule out areas with lower risk. This can be used to tell us the gains in precision we will get from adding new sites, and help decide the likely optimal number of locations. Second, new risk maps are generated from impact assessment survey data. These can be used to determine probability of exceeding a prevalence threshold for any spatial unit. These maps can be used to establish what is the best level of implementation at this point in the programme, which IUs require treatment, and which IUs might need a change of approach. Ethiopia and Zimbabwe are two examples of early adopters of this approach, although more field validation is needed. A large operational research initiative, the Schistosomiasis Oversampling Surveys are exploring this and other methods for impact assessment design.

Dr Pullan wrapped up her presentation by highlighting what might these methods offer us. They provide us with better and cheaper tools for M&E: smarter selection of survey locations, increased precision, and reduced sample sizes, better predictive ability, and data visualizations (including co-endemicities, overlays). They also contribute to more efficient, evidence-informed programming: leverage existing data, prioritisation of areas according to risk, ability to make decisions at varying spatial scales, and predict hotspots and identify inequities. Finally, they also offer opportunities for adaption and integration: disease- and stage- diagnostic tools provide programmes with increased flexibility, and application to national serosurveys for surveillance, incorporation of HMIS data.

Dr Pullan presentation was followed by Prof Hollingsworth's, who talked about the application of transmission modelling to guide country decision on MDA and surveys. She specifically presented the activities developed by the NTD Modelling Consortium, a collaborative project encompassing many academic and research institutions. She got started by introducing the concept of transmission modelling. Transmission modelling is a method for simulating the impact of interventions on the transmission of NTD. It can be a powerful scientific and strategic tool, as many of us have been ware of with Covid-19 when modelling has played a role in the face of uncertainty about this disease. In order to inform policy, it's best on if it is addressing real policy questions in a collaboration with stakeholders, epidemiologists and experts in the field.

Prof Hollingsworth gave a specific example on how Covid-19 and other funding issues have caused disruption on MDA interventions, and how they may impact in the control and elimination of the targeted NTD. How long can NTD interventions be postponed before progress towards the 2030 goals is affected adversely? For which diseases and in which settings will impacts of disruption be greatest? What migration and recovery strategies can be implemented once activities resume, in order to regain ground, minimize

the risks of recrudescence of infection and disease, and even accelerate progress towards the goal?

Then, Prof Hollingsworth presented a graphic displaying the prevalence of heavy intensity infection in school-age children over time, and how annual MDA with and without interruption impact on it. Eventually, you would hope to meet your elimination as a public health problem goal after a few years of implementing recommended MDA rounds. The plot shows the outcome for an idealized scenario where every treatment rounds is the same and systematic non-compliance is not a huge problem. The plot also shows a scenario in which one MDA round is missed between annual treatments (then MDA delivered every 2 years instead of recommended annual treatment). We can still reach the goal but perhaps two years later. Delays to MDA rounds will also lead to a greater numbers of infections in the community. The longer the delay, the greater the resurgence of infection in this period, and therefore the greater the number of rounds required to get back on track. In high transmission settings, the resurgence of infection is faster and then the number of MDA rounds needed to keep on track would be much higher.

The NTD Modelling Consortium worked with national programmes, and WHO and ESPEN, to identify common questions and scenarios concerning the impact of Covid-19 pandemic on the control and elimination of PC-NTDs. But how did this really impact national decision making and could we approach this problem in a different way to improve our impact on national decision making? The Consortium has tried to do that two through two routes. First, making their results immediately applicable and accessible at the sub-national level. For this, in partnership with ESPEN and LSHTM (Dr Pullan's group) they have combined geospatial modelling with transmission modelling and developed web application tools to make results accessible (NTD Prevalence Simulator). Second, they are also trying to reverse that model that was presented in terms of global questions down to national programmes and being responsive to questions that national programmes have. Through that subnational simulations and computational work and perhaps delivered through web applications, NTD Modelling Consortium is seeking to provide knowledge transfer through reproducible science code webinars and trainings on methods and also training for policymakers.

Q&A

For Dr Pullan and Prof Hollingsworth:

- ***What do you think it might be restraining or limiting programmes and data managers for using modelled data, both spatial and transmission data?***

(Dr Pullan). There is a number of different areas that we need to think about, specifically in terms of using geospatial modeling. There are three key areas that we still need to address to make these really useful tools and make them accessible and usable by data managers and program managers and more routinely. The first is that we need to

develop a full body of evidence that's convincing. We cannot expect uptake of tools that aren't yet being shown to be convincing and I think that's where some of the big operational research projects that have been conducted at the moment are really important. We do really need to ensure that there is sufficient evidence. There needs to be kind of endorsement. Approaches are only going to be picked up and used if they've endorsed by WHO. But one key thing to flag, particularly when it comes to apply geospatial approaches in survey designs, is that it is quite a long process which involves quite a lot of sophisticated analysis. The ability to do that is not necessarily going to be in house and requires a lot of conversations. between different partners, with modelers and implementers in the Ministry of Health. Therefore, there needs to be plenty of time for that conversation, so everyone understands what's going on and everyone's clear on what are the important questions that needs to be answered, and how are they going to be answered. The analysis itself can take time and so that the process needs to be built into any kind of planning period, which can be quite challenging.

(Prof Hollingsworth). The transmission modelling developed by the NTD Modelling Consortium are not very sophisticated mathematically, but it does have a barrier to entry. However, because of the Covid-19 pandemic, we are going to see more transmission modelling being used and applied to address health questions. However, it is going to be much harder to find please close to NTD programmes that will be able to pick up immediately all the computational efforts required to fit the model, although transferring the knowledge is very important for the NTD Modelling Consortium. In terms of policymakers, it is a quite big journey for them to use modelling data to make decision because they really expect modelling data and empirical evidence being considered equally. We need to provide that support to policymakers to understand what this tool is and how it fits alongside all the other tools they have. The future is more collaboration not less. Another important aspect is how modelers communicate they results. Using things like web tours, so people can actually play with the models themselves, working on how communicate uncertainty, what confidence interval means, are important for an increased uptake of models, and modelling outcomes.

- ***What role do you think partners such as ESPEN and non-governmental institutions could play to foster the uptake of geospatial and transmission modelling outputs?***

(Prof Hollingsworth). Institutions such as ESPEN are critical because they understand what the questions are from the programmes, and we can challenge modelers in terms of how they present those results and how they can communicate them. NTD programme managers do not have much time to talk to modelers, so that ESPEN can play this role of interpreting their questions and transmitting them to modelers.

(Dr Pullan). Seconded Prof Hollingsworth's answer to the question. In her experience, when working with country programmes using geospatial methods when designing and

implementing surveys, there are always a number of partners “in the room” that ensure they can be used effectively.

- ***What about using the worst-case scenario when developing models?***

(Prof Hollingsworth). When you have a lot of uncertainty, the worst-case scenario might be terrible but it might also be very unlikely, as we have seen with models developed for the Covid-19 pandemic. This is a real challenge, how to provide enough of the uncertainty but still provide a clear message. NTD surveys are not perfect, models are not perfect, NTD are neglected in many ways including data availability and quality. Therefore, these tools need to be used in the context of programme managers having a good understanding of their own data, what is not always the case.

Day 2- Session 7: Initiatives to improve in-country data literacy: ESPEN NTD Training pack, CHAI project.

Moderator: Dr Jorge Cano

Context

Many countries are not yet achieving optimal coverage of MDA, either because they are not fully targeting the right populations, are unable to accurately measure the coverage being achieved, or are not using data sufficiently to identify and respond to MDA delivery inefficiencies. There are several factors preventing the use of data to inform decision-making at country level including the fragmented nature of information; poor availability of data especially at lower operational levels of the health system; lack of confidence in the quality of data; limited access to timely information, analytics and evidence; suboptimal staff capacity to review, analyse and interpret data; or the lack of regular strategic data review meetings. Global and regional initiatives (e.g., ESPEN, NTD Modelling Consortium) generating evidence for NTD decision-making and promoting the sharing and use of information offer promise for overcoming some of these challenges but uptake into country planning and operations has been insufficient to date. Substantial opportunity thus exists to support NTD programs to better leverage existing data initiatives, strengthen data systems in country to improve the availability and use of high-quality information in program planning and decision-making, and achieve higher coverage of interventions in the right places.

The ESPEN NTD Portal is making the prevalence and treatment data found in the Joint Application Package (JAP) and the Trachoma Elimination Monitoring Form (TEMF) available to national programs and the global community. The ESPEN Collect survey support system is directly integrated with the ESPEN NTD Portal and allows survey data to be directly formatted into the Epidemiological Reporting Form (EPIRF), which should decrease the burden on Ministries of Health (MOHs) of collecting the data needed to submit this important program planning form. Evidence-based decision making against NTDs is crucial for progress. Through the Portal, ESPEN publishes data (maps and datasets) to improve the coordination of efforts and counter the use of inconsistent data, and ultimately, increasing the pace of progress.

The ESPEN Data Portal has been upgraded and now include several NEW comprehensive analytical tools that NTD programmes can use to follow up on their interventions, their impact, and to make decisions on future strategies. The data portal users will be able to interactively explore key statistics concerning to MDA progress, treatment needs, and disease specific endemicity status at sub-national level, also consolidated at country level, since the implementation of the *Joint Application Package* reporting system.

ESPEN has also developed interactive dashboards displaying **projections for the next 10 years**. Using all the historical data compiled under the ESPEN data repository, we have forecasted when MDA interventions are needed, what type of MDA strategy should be implemented, and finally when impact assessment should be conducted in order to achieve the goals established by the new 2021-2030 Roadmap for the Elimination of NTDs.

ESPEN, in conjunction with other partners such as the Clinton Health Access Initiative (CHAI), are considering critical to develop in-country capacities within the NTD programmes to make the most of all these resources for improving planning and decision making.

Facilitators

Dr Arnaud Le Menach is the Director of the Malaria Analytics, Surveillance and Technology team at the Clinton Health Access Initiative (CHAI). He holds a PhD in Epidemiology from the University Pierre and Marie Curie, France. His work focuses on the epidemiology of infectious diseases with an emphasis on malaria, surveillance system strengthening and evaluation of innovative strategies for disease control. He is now leading analytical activities related to access to malaria diagnosis and treatment, vector control interventions and malaria elimination.

Dr. Jorge Cano is working as Surveillance Officer/Data Analyst at the Expanded Special Project for the Elimination of NTDs in the WHO-AFRO regional office. He holds a PhD in Epidemiology and, MSc postgraduates training in Public Health and Parasitology and in Cartography, Remote sensing, and Spatial Analysis. Previously worked as Assistant Professor at the London School of Hygiene & Tropical Medicine in the field of geospatial modelling of NTD infections, focusing his research in lymphatic filariasis, onchocerciasis, STH infections, schistosomiasis, and more recently in podoconiosis, Buruli ulcer and mycetoma.

Report of the session

Dr Cano began his presentation by introducing the topic addressed in this session, which was to present some initiatives to foster the utilization of data and the development of data literacy skills within NTD country programmes. He said that in previous sessions, we had learnt about some initiatives intended to provide NTD country programmes with robust and easy-to-use analytical tools for a more efficient monitoring and planning of NTD interventions. However, the exploitation of all these tools and resources may require some guidance and training. ESPEN is fully committed to develop in-country capacities and skills for a comprehensive utilization of all the data and tools available in the ESPEN Data Portal.

Dr Cano continued by introducing some programmatic and organizational challenges that NTD programmes are facing and will have to cope with in the coming years in their way to fulfil the 2030 goals established by the new NTD roadmap. Second, he briefly described how some of the new resources and tools generated by ESPEN, and

made available through the ESPEN NTD Portal, could help address some of these challenges. Finally, he planned to present ESPEN plan to develop an integral training pack next year.

In the next slide, Dr Cano talked about the challenges faced by NTD programmes, both programmatic and organizational challenges. As we had heard in a previous presentation today, we were expecting MDA interventions to scale down in the coming years as many countries were complying with the expected number of effective MDA rounds. But this also implies that more surveys are needed to confirm that MDA interventions can be stopped. In addition, because of changes on the final goals established in the new Roadmap for NTDs, new areas may need to be remapped, as it happens with onchocerciasis. Also, the endemicity maps for other PC-NTDs such as schistosomiasis need to be completed. More importantly, because of the focality and spatial heterogeneity in the transmission of this disease, some discussion is underway to move the interventions from district level to sub-district level. This implies that for many areas there is not enough data evidence to ascertain the endemicity status, therefore more mapping surveys are needed to fill these gaps. Also, for STH and SCH is still unclear the epidemiological criteria and the tools to decide when MDA interventions should be stopped, and how to keep monitoring STH and SCH transmission after the interruption of MDA interventions.

To the top of the programmatic challenges mentioned before, we should also consider others such as unsecure funding to implement interventions or the impact of public health emergencies, such as the Covid19 pandemic, local or regional outbreaks, food insecurity, climate change, conflicts, etc. Besides all these programmatic challenges, Dr Cano also mentioned some of the organizational challenges NTD country programmes are facing such as, for example: lack of comprehensive database systems; insufficient in-country skills to manipulate and analyse NTD data, particularly long time-span datasets; significant turn-over within the NTD teams quite often leads to “loss of institutional memory”; not having access to complementary sources of data and data from previously existing programmes (i.e., APOC programme) that can be helpful to cover data gaps, and insufficient coordination with stakeholders (and vice-versa). These might be more country-specific challenges, but these listed here are common to many countries and NTD programmes.

Earlier today, some new resources and tools generated by ESPEN were presented. These tools have been made available through the ESPEN Data Portal such as the new analytical dashboards. Dr Cano then discussed how the utilization of the available tools, in particular the new dashboards, could help NTD country programmes to overcome some of the programmatic and organizational challenges we described in the previous slides.

There are a lot of examples of data integration and visualization tools available throughout the ESPEN NTD Portal:

- We have a large collections of disease specific maps showing treatment and endemicity related indicators.
- The ESPEN NTD Portal also has a data query tool so that the users can retrieve all the historical and contemporary data compiled by ESPEN.
- WASH overlays.
- And more recently developed features such as the country summary overview, and progress and forecasting dashboards.

The new ESPEN Progress and Forecast dashboards, said Dr Cano, allow users to explore key statistics and analytics, graphics, and maps, at both sub-national and national level. They show current endemicity and MDA progress to date for each of the PC-NTDs, together with future treatment and impact assessment needs for the next ten years. The dashboards have been purposely designed to support national programs to readily access and use their data, make better-informed decisions, and distribute resources more efficiently. He mentioned that disease-specific dashboards could be accessed through country pages – simply visit your country page, and select the disease you're interested in.

Then, going back to the slide in which the programmatic challenges were listed, Dr Cano discussed how some of them could be addressed with the current tools made available at the ESPEN NTD Portal. For instance, the projection dashboards would provide information on how many and what surveys are needed by implementation unit and by year. The progress dashboards are showing the history of MDA interventions by disease, and some maps (both dynamic and static PDF/PNG maps) the total number of MDA rounds implemented by implementation unit. This information can help inform when MDA may be stopped, or transmission should be assessed.

Finally, it would be very helpful for NTD country programmes and stakeholders to know what interventions, and where, are financially secured and properly supported. Also flagging up those areas that are at higher risk for not being able to keep up the pace with the interventions for multiple reasons (funding availability, insecurity, etc), would definitively contribute to a more efficient allocation of resources. As we presented yesterday, ESPEN is planning to develop some tools to address this next year.

Finally, Dr Cano briefly presented ESPEN plan to develop a training pack for programme and data managers to make the most of resources and tools available at the ESPEN NTD Portal.

This slide showed a schematic of the training pack that ESPEN is planning to develop in collaboration with some key partners such as Manta Ray Media (MRM), Standard Code (SC) and Sightsavers, among others. The training pack is designed to provide different informative and learning experience to the users. ESPEN is planning to develop interactive and informative videos to guide the Portal users through the different resources and features. There will be more proper training materials and videos organized in three thematic blocks: a first block of training materials showing how to register in and use the ESPEN Collect platform for conducting surveys, or the JAP import tool for an on-

line supervised submission of JAP reports. A second block of training materials will guide the programme and data managers through the available analytical tools, datasets and maps, for planning and monitoring interventions. Finally, ESPEN will produce some tutorials and videos to show how the users, particularly data managers, can retrieve data from the ESPEN NTD data repository and use it to produce their own bespoke maps or analytics. Dr Cano said that all these training resources will be made available at the ESPEN NTD Portal so that they could be used anytime by programme and data managers, and more broadly for any ESPEN Portal user. ESPEN data team is also planning to run regular webinars and trainings by demand to countries using this training pack.

Dr Cano finished his interventions by explaining that ESPEN had started to develop this training pack. This is intended to be a consultative and participatory process, so that ESPEN will be sharing the developed materials with country programme and data managers for their evaluation. He expected that all the programme and data managers will get involved in this process.

Dr Cano's presentation was followed by a presentation on a new initiative led by Clinton Health Access Initiative (CHAI) to promote the use of data and modelling to inform NTD programme decision making. Dr Arnaud Le Menach, Director of the Malaria Analytics, Surveillance and Technology team at the Clinton Health Access Initiative (CHAI), delivered this presentation. He started by presenting the CHAI organization and its mission and approach. CHAI was created in 2002 with the aim at working at the service of governments to strengthen their health systems. CHAI tries to embed within countries operational structures rather than delivering health services themselves. CHAI work to improve health systems and transfer skills and technology onto government staff through operational and management support. They seek to accelerate uptake of new tools and strategies by helping government and local private sectors in these countries better organize and manage the delivery of health services and health products. They are working in the field of malaria and NTDs, and different regions: Central America, Sub-Saharan Africa, and southeast Asia.

CHAI embeds its own professional in the governmental disease programmes to work as a day-to-day operational partner. They work to reinforce governmental leadership and ownership of the health programmes. They also have a network of technical experts that provides support to countries but also facilitate and translate the interaction between disease programmes and global partners such as technology companies or academia. The ultimate goal is to enhance impact and sustainability. He presented a few examples of NTD related projects in central America (Honduras, Panama and Guatemala) intended to scoping opportunities for strengthening NTD programmes, and piloting spatial data electronic tools to monitor MDA campaigns in Zambia and Eswatini, and another project to evaluate the performance of data systems In Kenya, Zambia and Eswatini focusing on PC diseases through desk review and interviews with key staff at the national level.

He highlighted some findings from their latest project. Regarding data collection and reporting, the lack of available high-quality data, NTD indicators are not always reported into national databases (i.e., DHIS2) and when it is provided this is aggregated and

reported late. They also identified parallel data flows due to project fragmentation and lack of data visualization with limited access to dashboards at different levels of health systems, and as result limited use of evidence to inform MDA plans, assess the impact of interventions, or evaluate the true burden of diseases.

There are several regional and global initiatives to promote the use of data such as the NTD Modelling consortium, ESPEN platform but still the use of this evidence to information decision making at country level remains limited. The goal of the project is to promote the use of data. CHAI's technical approach to promote the use of data at country level is at two level. First one is at country level, and it would start with groundwork to get their technical staff integrated within the NTD programmes, defining the scope of the support and making the planning, and followed by an implementation piloting. They conduct data quality audit and define areas for improvement. In collaboration with local NTD programme partners, they evaluate the data access, level of data system integration, availability of analytical dashboards and access to the data, and finally promote the data use through the routine data review and response, and development of evidence-based plans and operations. The ultimate objective is to strengthen programme governance and leadership, and promote partnership with local academics, technology groups, and implementers. Developing in-country capacities is another important part of their work. Second level, there are also some activity channel across country mostly focusing on translation of the programme needs to the global partners but also dissemination some of the lessons learned through the process working with programmes.

The technical approach can be applied to different use cases:

- Inform NTD programme strategy (e.g. use of mathematical models to assess the impact of suggested interventions).
- Improve the quantification of MDA commodity or coverage estimates by refining community-level population estimates.
- Planning surveys and MDA campaigns using historic and current evidence to target resources to most at-risk geographies.
- Increasing efficiency of MDA delivery by improving treatment register quality, routing monitoring of community campaign operations and coverage, providing feedback at district level and supervision to drug distributors.
- Inform programme advocacy and/or donor approach to seek resources.

Dr Le Menach mentioned that the project is to be implemented in Sub-Saharan Africa, focusing on the 5 PC-NTDs and initially two countries will be targeted, Kenya and Benin, although they are in conversation with the BMGF to expand to another country between Nigeria, Ethiopia or DRC. It is a three-year project, and groundwork is expected to last 6-12 months, with the implementation of intensified activities at central and/or at sub-national level between March 2022 and September 2024. The project will establish a collaborative partnership with NTD programmes and relevant government units (e.g.

HMIS). Working closely with WHO Afro to share data, lessons learned and provide technical assistance, as well as with the NTD Modelling consortium and the academia.

Q&A

For Arnaud:

- ***Fragmentation may occur at different stages of data processing: data collection, data storage, data processing, and data reporting. Which areas should programs prioritize to get harmonized in order to build more efficient surveillance systems?***

They have identified multiple data systems coexisting, some own by country programmes others by partners. One of the priorities at the end of the day is to ensure that there is one data system in country that enables for visualizing and interpreting the data and that is accessible to everyone, country programmes and partners. There is also a need to avoid duplicating data collection system, and standardized what data is to be collected (similar indicators)

- ***What key capacity gaps have CHAI observed and what key expertise need to be built to enable NTD programs to effectively use data?***

They have identified several needs but a recurrent one is the need to develop in-country capacities on data utilization and data interpretation, use of cartography, use of electronic platforms for data collection, data analytics, etc. The interpretation of data is also an important gap, the use and interpretation of modelled data, and ultimately translation of the data evidence in action and work plans.

Polls

- Sixty-five percent of the respondents said to use a proper database system to store their programmatic data. However, when they were asked for the platform used to store their NTD data, 71% (12) confirmed to use MS Excel, and 41% (7) worked with DHIS2 system.
- When attendees were asked if their local or international partners use to sharing their data concerning to MDA or M&E activities with the national programme, 41% (7) said that not all of them.
- Lack of funding (65%) and lack of data (47%) were claimed to be the main gaps when making decision regarding MDA or M&E interventions.

- The lack of structured database system and the insufficient in-country capacity followed by the data loss are considered the major weakness of NTD programmes for data management, data processing and data analytics.
- The respondents considered that collected data should be mostly used to inform NTD strategy, better planning of M&E activities and better quantification of commodities need.

CLOSING CEREMONY

Dr Amir B Kello (acting ESPEN Team Leader, WHO/AFRO) gave the final closing remarks. Dr Kello praised the quality of the presentations delivered in the two-days meeting. He also highlighted the presentations of new data resources and tools that have been developed and now available for NTD programmes through the ESPEN Data Portal for a better monitoring and planning of NTD interventions. Dr Kello reminded all the attendees of the many challenges NTD programmes have had to face in 2021: continued impact of COVID-19 pandemic amid the launch of the new NTD Roadmap. But for the ESPEN team has also been a year of many changes since Dr Maria Rebollo has left her current role of ESPEN team leader. ESPEN wanted to celebrate with all the NTD community, Maria's work as ESPEN team leader, her achievements and endeavours as coordinator of this project since 2017. Dr Pauline Mwinzi had prepared a short video with photos and comments commemorating and praising Maria's work, which was followed by a brief talk from Dr Maria Rebollo remembering her time as ESPEN team leader. She used the opportunity to thank all the NTD programmes and partners for accompanying her in this journey. She also wanted to celebrate all the achievements and progress made by the NTD community to control and eliminate PC-NTDs in the last 5 years.

ACKNOWLEDGEMENTS

Special thanks to the WHO/AFRO team who organized the meeting.

APPENDIX 1 – Meeting Agenda

Day 1: Wednesday 15th December 2021

Time UTC+1	Topic and session	Presenters and panellists
13:00 - 13:05	Introduction of meeting / Presenting Meeting Agenda	Moderator: Amir Kello
13:05 - 14:00	Session 1: The WHO/AFRO-UCN restructuring for better country support	Chair: Amir Kello Opening remarks and Presentation: Dr Benido Impouma, UCN Director Dr Gautam Biswas, WHO/HQ Dr Akpaka Kalu, TVD Dr Spes Ntabangana, MCAT
14:00 - 14:50	Session 2: NTD Roadmap 2021-2030: disease specific targets: challenges and opportunities	Chair: Lamine Diawara Dr Didier Bakajika – ESPEN Dr Pauline Mwinzi – ESPEN Dr Amir Kello – ESPEN Dr Andrew Korkor, NTD Team Dr Aime G Adjami – ESPEN
14:50 - 15:20	Session 3: NTD country programmes joining forces: Kikundi CoP	Chair: Amir Kello Dr George Kabona and PMs
15:20 - 15:50	Session 4: Funding gaps and the ESPEN gaps analysis tool	Chair: Pauline Mwinzi Dr Jorge Cano & Mr Emmanuel Habets
15:50 - 16:00	Wrap Up and close of day 1	Moderator: Amir Kello

Day 2: Thursday 16th December 2021

Time UTC+1	Topic and session	Presenters and panellists
13:00 - 13:05	Introduction second day session	Jorge Cano
13:05 - 14:40	Session 5: NTD resources for enhanced planning: <ul style="list-style-type: none"> ✓ Data collection: NTD Collect Services ✓ Data submission: JAP Upload tool ✓ Data analytics: NTD Portal Analytic dashboards ✓ Data reporting: NTD Portal Maps & Data, CHIP platform ✓ Medicine monitoring: NTD Supply Chain Management tool ✓ WASH Analytical files 	Chair: Jorge Cano Dr Jorge Cano – ESPEN Mr Honorat Zouré – ESPEN Mr Elia Muhima – ESPEN Mr Dyesse Yumba – ESPEN Mr Modeste Tezembong – ESPEN Mr Alex Pavluck – Sightsavers Mr Andy Tate – Sightsavers Mr Geordie Woods – Sightsavers Ms Yael Velleman – SCI Foundation
14:40 - 14:50	Healthy break (or extended discussion)	

14:50 - 15:20	Session 6: Other information sources: using modelling data to fill information gaps and forecast intervention needs.	Chair: Jorge Cano Dr Rachel L Pullan – LSHTM Dr Deirdre Hollingsworth – Oxford
15:20 - 15:45	Session 7: Initiatives to improve in-country data literacy: ESPEN NTD Training pack, CHAI ³ project	Chair: Jorge Cano Dr Jorge Cano – ESPEN Dr Arnaud Le Menach – CHAI
15:45 - 16:00	Maria farewell Wrap Up and close PMM	Amir Kello (acting ESPEN team leader)

³ Clinton Health Access Initiative: granted funding to promote use of data and modelling to inform NTD programme decision making

APPENDIX 2 – List of facilitators

Name	Position	Institution	Session
Dr Benido Impouma	Director UCN Department	WHO/AFRO	Session 1
Dr Gautam Biswas	Acting Director NTD Department	WHO/HQ	Session 1
Dr Akpaka Kalu	Malaria Team Leader	WHO/AFRO	Session 1
Dr Andrew Korkor	Acting NTDs Team Lead	WHO/AFRO	Session 1
Dr Spes Ntabangana	Medical Officer, UCN/TVD	WHO/AFRO	Session 1
Dr Lamine Diawara	Medical Officer, UCN/TVD	WHO/AFRO	Session 2
Dr Amir Kello	ESPEN Medical Officer – Trachoma	WHO/AFRO	Session 2
Dr Didier Bakajika	ESPEN Medical Officer – LF/Oncho	WHO/AFRO	Session 2
Dr Pauline Mwinzi	ESPEN Medical Officer – STH/SCH	WHO/AFRO	Session 2
Dr Aime G Adjami	ESPEN Laboratory Coordinator	WHO/AFRO	Session 2
Dr George Kabona	NTDs Program Manager, Tanzania	Kikundi CoP	Session 3
Mr Emmanuel Habets	ESPEN Consultant	WHO/AFRO	Session 4
Dr Jorge Cano	ESPEN Surveillance Officer	WHO/AFRO	Session 5
Mr Honorat Zouré	ESPEN Database administrator	WHO/AFRO	Session 5
Mr Elia Muhima	ESPEN Collect Project manager	WHO/AFRO	Session 5
Mr Dyesse Yumba	ESPEN Collect Data manager	WHO/AFRO	Session 5
Mr Modeste Tezembong	ESPEN Supply Chain Management Coordinator	WHO/AFRO	Session 5
Mr Alex Pavluck	Health Systems Director	Sightsavers	Session 5
Mr Andy Tate	Senior (NTD) Data & Reporting Advisor	Sightsavers	Session 5
Mr Geordie Woods	Technical Director for Behavioural Change and WASH – NTDs	Sightsavers	Session 5
Ms Yael Velleman	Director of Policy & Communications at the Schistosomiasis Control Initiative	SCI Foundation	Session 5
Dr Rachel L Pullan	Associate Professor in Epidemiology	LSHTM	Session 6
Dr Deirdre Hollingsworth	Professor – Senior Group Leader	Oxford Big Data Institute	Session 6
Dr Arnaud Le Menach	Senior Epidemiologist at Clinton Health Access Initiative	CHAI	Session 7