



STH Coalition Action Group Meeting

2017 Executive Summary and Meeting Report

*This document highlights summary notes and key recommendations
from the STH Coalition Action Group Meeting held in London, UK,
February 2-3, 2017*

Report Date: April 6, 2017



Abbreviations and Acronyms

ERP	Expert Review Panel
GAELF	Global Alliance for the Elimination of Lymphatic Filariasis
GPE	Global Partnership for Education
GSA	Global Schistosomiasis Alliance
ICTC	International Coalition for Trachoma Control
JMP	Joint Monitoring Programme
JRF	Joint Reporting Form
LF	Lymphatic Filariasis
M&E	Monitoring and Evaluation
MDA	Mass Drug Administration
MHI	Moderate or high intensity infection
MOE	Ministry of Education
MOH	Ministry of Health
NGO	Non-governmental Organization
NTD	Neglected Tropical Disease
OR	Operational Research
PC	Preventive Chemotherapy
PSAC	Preschool-age Children
RCT	Randomized Control Trial
SAC	School-age Children
SDG	Sustainable Development Goal
SHN	School Health and Nutrition
STH	Soil-transmitted Helminthiasis
STH AC	STH Advisory Committee
TAS	Transmission Assessment Survey
UNICEF	United Nations International Children's Emergency Fund
UTC-NTDs	Uniting to Combat Neglected Tropical Diseases
WASH	Water, Sanitation, and Hygiene
WCBA	Women of Childbearing Age
WER	Weekly Epidemiological Record
WHO	World Health Organization

Executive Summary

Meeting Objectives

- Understand and address geographic and epidemiologic drug coverage gaps based on current WHO strategy milestones.
- Review Coalition progress of 2016 activities and finalize the 2017 Annual Work Plan.
- Guide STH Coalition operations and functional structure to ensure effective coordination and impact on STH control.

Executive Summary

The STH Coalition Action Group met in London on February 2-3, 2017. The meeting was attended by 26 members.

The meeting opened with a series of technical presentations that highlighted the status of planned and current research, policy, and implementation opportunities.

Presentations and discussions focused on:

- The latest WHO guidance and priorities for STH control;
- The scientific basis for deworming and feasibility of elimination;
- Advances in diagnostics and operational research;
- Quality of product purchased when it is not part of drug company donation programs;
- Progress toward STH Coalition work plan targets;
- Issues unique to reporting of data from the NGO sector;
- Importance of improved disease surveillance and monitoring; and
- Recent developments in the WASH and NTD sectors to support broad delivery of integrated programs.

Each of the workstream chairs offered presentations which highlighted achievements and identified challenges and barriers. Workstream chairs reviewed the status of 2016 activities and proposed new activities for 2017. In addition, seven recommendations resulted from the Action Group deliberations to support continued progress to achieve the goals established by WHO.

Calls to action to support achievement of the STH control goals included:

- Shifting program focus from measuring drug distribution, or coverage, to also measuring disease, which will require broad implementation of parasitologic monitoring;
- Laying the groundwork for implementing strategies beyond 2020;
- Addressing improved data quality, granularity and transparency;
- Improving access to quality generic drugs, especially for the PSAC target group; and
- Modifying the STH Coalition's current organizational structure to better support these changes.

Meeting participants noted that no individual program or country is likely to achieve STH control goals in isolation. With millions of people at risk in more than a hundred countries, partnerships are critical for success. As the STH Coalition matures, we intend to shift our focus to countries, capitalizing on partnerships with country-focused NGOs to strengthen and learn from national programs.

Meeting Report

CWW Opening Remarks (Imtiaz)

Opening comments from Dr. Rubina Imtiaz, director of Children Without Worms (CWW), noted that global STH control efforts are at a crossroads. To date, the program has focused on preventive chemotherapy to achieve coverage goals in select countries. Good progress has been noted in many areas, supporting a change in strategy from primarily a drug distribution approach to intensive control efforts. This strategy change requires a shift from counting doses of drugs delivered through mass campaigns to measuring people with worms within specific geographic locations and communities.

New tools are in the pipeline to enable programs to conduct parasitologic monitoring. Dr. Imtiaz noted that the STH Coalition must also align its goals and efforts to address the disease burden (versus measuring only drug coverage), broaden partnerships to support diagnostic innovations, and support control efforts via the development and promotion of tools, products, and methodologies to help countries adopt new practices.

WHO Opening Remarks (Mupfasoni)

Dr. Denise Mupfasoni of WHO noted 2016 highlights in STH control:

Increase in drugs procured. While coverage numbers for 2016 are not yet available, WHO noted an increase in drugs procured, due in part to India's large local procurement. WHO expects another increase in 2017 to support continued global scale up of STH control programs.

Guideline Review Committee Meeting. The revised STH strategy, which emphasizes the goal of less than one percent prevalence of moderate to high intensity infection (MHI), was conditionally approved and will be included as part of a WHO compendium of all strategy plans.

The WHO focus for 2017 includes evaluating how many women of childbearing age (WCBA) need treatment and how many are currently covered by the Lymphatic Filariasis (LF) programs.

Discussion

- A list of countries that reached 75% coverage among both preschool-age children (PSAC) and school-age children (SAC) should be distributed and included in Weekly Epidemiological Records (WER).
- Preparatory work for scale up of treatment to WCBA is underway and will be emphasized as part of the WHO strategy post 2020. A related WHO guidance-defining meeting is targeted for June 2017.
- Country programs are interested in providing PSAC coverage but are limited by drug donations, which target SAC only and the WHO reporting format that does not allow separate listing/capture of private sector PSAC deworming. Country programs that disburse SAC-targeted drugs to PSAC may report all coverage under SAC as they perceive that as the donor priority.

Technical Presentations

A series of technical presentations provided the background and context for ensuing meeting discussions. A brief summary of these presentations and comments can be found in [Appendix D](#).

Review of 2016 STH Advisory Committee Recommendations (Pelletreau)

The STH Coalition Action Group reviewed the recommendations from the STH Advisory Committee's October 2016 meeting. During the meeting, discussion turned specifically to identifying the potential role of the STH Coalition to support parasitologic monitoring and improvements in data quality.

Review STH Coalition Function and Structure (Bara)

Action Group members requested the Secretariat revise the bylaws to better support the needed structure and function of the STHC. Revised by-laws will be drafted for approval of the Action Group.

A brief summary of the proposed structural changes can be found in [Appendix E](#).

Review progress on 2016 activities and propose 2017 Action Plan activities

Each of the workstream chairs provided an update on the activities in 2016. An updated work plan will be provided as a separate document once agreement of key activities is negotiated. Details of the reports and comments are included in [Appendix F](#).

Milestones for the London Declaration Scorecard (Belizario)

The purpose of the Scorecard is to track progress toward commitments made as part of the London Declaration that support reaching the WHO milestones. In 2016, STH received a green rating, indicating we were on track to reach the 2020 goals. The STHC is responsible for endorsing the milestones for the 2017 Scorecard.

Proposed changes from the current milestones include:

- Proposed milestone 6 (Percentage countries with <1% MHI in all countries requiring PC) has not been included previously. The STH Advisory Committee recommends including it, as this is the WHO goal for elimination as a public health problem.
- Milestone 9 (Percentage of 10 countries identified by WHO to be high-burden for STH that have started deworming) should be removed since this milestone has been achieved.

Reaching the milestones for 100% of countries requiring PC for STH reaching 75% SAC and PSAC is at risk. There is inequity within countries on treatment coverage between SAC and PSAC. The 75% of SAC and PSAC needing treatment worldwide is also at risk.

The discussion of the London Declaration Scorecard presentation can be found in [Appendix G](#).

Information Sharing and Coordination

A presentation was offered specific to the availability of materials for the education sector intended to support the integration of deworming into school health budgets. Materials that were developed by

Partnership for Child Development (PCD) and Sightsavers for the School Health Integrated Programming initiative (SHIP) were offered for awareness with a request for review and input by interested parties.

- Contact Laura Appleby (l.appleby@imperial.ac.uk) to provide input into the documents.

A second presentation provided an update on the Partners Map and encouraged STHC members to both contribute and utilize available data.

Details specific to the upcoming NTD Summit were provided to the attendees. More information is available at the [Uniting to Combat NTD website](#).

More detail around the presentations offered can be found on the [Uniting to Combat NTDs webpage](#).

Closing comments

The following themes arose during the Action Group meeting:

- *Data reporting, quality, and completeness.* How can STHC members support the use of data for decision-making. Specifically, the STH Coalition should encourage more robust efforts to improve sub-national prevalence mapping. This supports stakeholders' ability to target resources to higher prevalence areas of countries and avoid unnecessary mass deworming costs
- *Promising practices.* Pockets of excellence exist within programs but no processes are in place to transfer knowledge to other locations. This desire for cross pollination of effective practices across countries came through strongly in the country profiles and continues to be a theme.
- *Access to quality generic medications.* This topic was identified as a critical success factor for sustainable control.
- *Restructuring of the Coalition.* Activities discussed will need to be supported by a different operating model. To propose modifications, the Secretariat will provide suggested changes to the bylaws and the STHC organizational structure for consideration by the Action Group members

The coalition can support efforts to address:

1. *Data quality and improvement:* Tools and improved practices can be developed to support reporting from the public and private sectors for SAC and PSAC.
2. *Monitoring guidelines and tools:* Although WHO provides guidelines, additional tools can be developed to assist in the implementation of existing guidelines.
3. *Parasitologic surveys and testing:* An adaptation of a monitoring tool is being piloted in Bangladesh. Similar products exist for other NTD programs, which can be adapted to support STH monitoring.

Appendix A – Participant List

Name		Organization	Email
Lauren	Abrams	Children Without Worms	labrams@taskforce.org
Clayton	Aiello	Vitamin Angels	cajello@inlexo.com
Laura	Appleby	Partnership for Child Development	l.appleby@imperial.ac.uk
Debra	Bara	Children Without Worms	dbara@taskforce.org
Laura	Barrett	Children's Investment Fund Foundation	LBarrett@ciff.org
Vicente (Jun)	Belizario	University of the Philippines, Manila	vbelizar@yahoo.com
Mark	Bradley	GlaxoSmithKline	mark.h.bradley@gsk.com
Simon	Brooker	Bill and Melinda Gates Foundation	simon.brooker@gatesfoundation.org
Fiona	Fleming	Schistosomiasis Control Initiative	f.fleming@imperial.ac.uk
Michael	French	RTI	mfrench@rti.org
Grace	Hollister	Evidence Action	grace.hollister@evidenceaction.org
Rubina	Imtiaz	Children Without Worms	rimtiaz@taskforce.org
Dan	Irvine	World Vision	dan_irvine@wvi.org
Alex	Jones	Children Without Worms	ajones@taskforce.org
Serene	Joseph	Swiss TPH, World Health Organization	josephse@who.int
Bill	Lin	Johnson & Johnson	wlin@its.jnj.com
Antonio	Montresor*	World Health Organization	montresora@who.int
Molly	Mort	Bill and Melinda Gates Foundation	Molly.Mort@gatesfoundation.org
Denise	Mupfasoni*	World Health Organization	mupfasonid@who.int
Sonia	Pelletreau	Children's Investment Fund Foundation	spelletreau@ciff.org
Hadley Matendechero	Sultani	Ministry of Health, Kenya	hadleysultani@gmail.com
Ploi	Swatdisuk	USAID	pswatdisuk@usaid.gov
Yael	Velleman	WaterAid	YaelVelleman@wateraid.org
Judd	Walson	DeWorm3	J.Walson@nhm.ac.uk
Johannes	Waltz	Global Schistosomiasis Alliance	johannes.waltz@merckgroup.com
Carol	Wylie	World Vision	cwylie@worldvision.org

* Via teleconference

Appendix B – Meeting Agenda

Day 1 – Thursday, February 2, 2017

Time	Session	Presenter(s)
9:00-9:15	Welcome and Introductions	Bara
9:15-9:30	CWW/STH Coalition Opening Remarks	Imtiaz
9:30-10:00	WHO Opening Remarks and Discussion	Mupfasoni (Skype)
10:00-10:30	Break	
10:30-11:00	Presentation: The scientific rationale for mass deworming: responding to (yet another) meta-analysis	Joseph
11:00-11:30	Presentation: Data for Forecasting and Decision Making in STH Programs	Brooker
11:30-12:00	Presentation: Interrupting the Transmission of STH: The DeWorm3 Project, January 2017 Progress Update	Walson
12:00-1:00	Lunch Break	
1:00-1:30	Review 2016 STH Advisory Committee Recommendations	Pelletreau
1:30-2:00	Review Coalition Function and Structure	Bara/All
2:00-3:00	Review progress on 2016 activities and propose 2017 Action Plan activities	Ajello and Wylie Hollister
3:00-3:30	Break	
3:30-4:30	Review progress on 2016 activities and propose 2017 action plan activities (continued)	Belizario Velleman
4:30-5:00	Propose 2017 action plan activities	All
5:15	Closing comments and adjourn	Bara
7:00	Dinner, Aubaine Mayfair, 31 Dover Street, London. WIS 4ND	

Day 2 – Friday, February 3, 2017

Time	Session	Presenter(s)
8:30-9:00	Welcome	Bara
9:00-9:30	Process for Endorsement	Bara
9:30-10:00	Endorse milestones for the London Declaration Scorecard	Belizario
10:00-10:30	Break	
10:30-11:30	Coordination and information sharing <ul style="list-style-type: none"> • Guidelines for the Education sector • Partners map • Coalition teleconference, February 13 • NTD Summit 	Appleby Abrams Bara
11:30-12:00	Closing Comments and adjourn	Imtiaz

* Presentations can be found [here](#).

Appendix C – Recommendations

The Action Group members proposed seven recommendations for further consideration, which are described below.

Recommendation 1: Examine deworming rates for PSAC to offer insight as to why PSAC coverage, while meeting the planned target level set for 2015, is less robust than expected, and appears to be affected by variable numbers of countries reporting each year and under-reporting of validated treatments by the NGO community.

Rationale: The STH Advisory Committee (STH AC) raised the issue of coverage specific for PSAC with a call to “explore why reported PCT coverage rates for PSAC lag behind those for SAC amid scale-up efforts in high burden countries.” Detailed examination of published data and other methods could provide insight as to why the reported PSAC coverage was much lower than what the implementing coalition members think it should be.

Data from the WHO’s Weekly Epidemiological Record suggests that PSAC coverage barely reached planned coverage targets and actually dropped modestly over the last three years for which data are available: 2013 – 2015.¹ The reasons for this apparent drop are unclear. In 2015, fewer countries reported activities as compared to 2014. In addition, records from NGO partners that procure a significant proportion of the total drugs for PSAC treatment globally suggest that total PSAC coverage is underreported to WHO. While a large portion of NGO treatments are now being included in the WHO PCT database by country, a substantive number of validated treatments are not---based on drug requests and supply by country. Reporting and data flow for PSAC partners should be clarified and ascertained by coalition members, Secretariat, country programs and WHO. Underreporting, if continued, will impair WHO ability to demonstrate progress. There was a suggestion to further explore this issue at the country level with the coalition partners engaged in PSAC PCT.

Recommendation 2: Establish Monitoring and Evaluation and Operational Research as sub-committees of the STH Advisory Committee (STHAC).

Rationale: This proposal resulted from the discussion around how the STH Coalition functions. The Monitoring and Evaluation (M&E) workstream and Operational Research (OR) workstream were initially established to serve both the STH Coalition and the STHAC. In practice, the workstreams’ 2016 activities were related to the portfolio of activities specific to the STHAC. The STHAC is intended to provide expertise and operates independent of the Coalition. This recommendation is intended to clarify the relationship between these two groups and to clearly establish the M&E and OR functions solely as subcommittees of the STHAC with the STH Coalition as a recipient of this expertise.

Recommendation 3: Stimulate academic centers to look at biomarkers related to STH infection.

Rationale: The Coalition has an important contribution to make in terms of identifying specific needs for research and monitoring of programs in partnership with academia. Identifying biomarkers related to STH

¹ Weekly Epidemiologic Report vol. 91, 49/50 (pp. 585-600 Schistosomiasis and Soil Transmitted Helminthiasis: number of people treated in 2015.

infection will improve capability to conduct parasitologic monitoring, particularly in relation to the need for improved accuracy at lower levels of infection after multiple rounds of MDA.

Recommendation 4: Promote the benefits of focusing on areas of high prevalence in middle income countries with low access to water and sanitation infrastructure.

Rationale: Enable further coordination between WASH and NTDs agencies, particularly on increasing access to and use of sanitation.

Recommendation 5: Establish mechanisms to focus specifically on improved data management, quality, and transparency for programs and partners.

Rationale: Increased data transparency requires increased data validation, increased reporting practices, and more. With only 60% of endemic countries reporting regularly, there is a risk of not achieving the WHO coverage targets (set at 75%) for SAC and PSAC by 2020. National program managers highlighted reporting issues. Improved availability and transparency of data are needed at the sub-national level. The coalition should identify specific projects in select countries to support better data access and transparency. The Secretariat can assist in developing these projects.

Recommendation 6: Address issues specific to procurement of quality drugs for PSAC and recommend effective solutions.

Rationale: WHO has no prequalified manufacturer of albendazole. WHO's Expert Review Panel (ERP) process has not formed a ranking system (i.e., ERP scores) that could facilitate immediate procurement and could identify manufacturers with quality, long-term production potential. Ongoing efforts to assemble a product description that sets expectations and requirements for manufacturers have had limited progress. Members will summarize the necessary steps to achieve production and procurement of quality PSAC drugs, identify the roadblocks, and suggest workable solutions to address these challenges.

Recommendation 7: Restructure the STH Coalition to achieve greater impact.

Rationale: Members questioned the current workstream structure and acknowledged that it may not be optimal to achieve its goals. Meeting participants discussed alternate models, with an emphasis on moving away from measuring processes to developing/completing measurable activities that directly and positively impact STH programs in coalition countries. The Secretariat will propose alternative structures to the Action Group.

Appendix D – Technical Presentation Summaries and Comments

Technical presentations highlighted successes and continued challenges. Among the successes, WHO noted that following multi-year mass drug administration (MDA), parasitologic testing has documented specific geographic areas with very low STH prevalence: less than 1.5%. In these select implementation units (districts), WHO is considering reducing the frequency of MDA. It was noted that in one country, this approach is projected to save up to 40% of the necessary deworming drug. The group discussed how this may lead to the need for a Lymphatic Filariasis (LF)-like decision guidance and survey tools for countries to support post-elimination surveillance.

Participants noted that reducing the frequency of MDAs requires intensive monitoring. Resource issues related to parasitologic monitoring remain to be addressed. Coalition members who have conducted such surveys are encouraged to share their technical and cost experiences with the STH Coalition Action Group.

The STH Advisory Committee recommended that programs focus on the WHO goals that involve measuring the incidence of disease rather than coverage—though data gaps existed in both areas. With better disease burden estimates and more clearly-defined high-risk populations, national programs can direct comprehensive interventions where they are most needed.

While children remain a priority at-risk population, WHO has indicated that women of child bearing age will likely be prioritized as part of the post 2020 agenda. The STH Coalition will closely follow the development of WHO guidance on this topic.

Data quality and completeness was a key area of discussion. The action group reached agreement on the need to identify projects and activities that would help define current data practices with the goal of strengthening overall quality and availability of information. Prevalence and drug coverage maps over time and by district from Ghana provided an example of how greater data granularity improves planning and implementation.

WHO presented a response to the Cochrane Review and other meta-analyses that questioned the positive health effect of deworming. The review showed clear benefits to growth (weight) of infected children, especially when coupled with long-term nutrition and micronutrient supplementation. The official WHO response to the Cochrane Review will likely be available by April 2017.

The DeWorm3 research will use implementation science to inform evidenced-based practice for STH control and elimination and explore how to scale programs for optimal impact. Tools and methods will be tested and may later be adopted by programs.

Individual Technical Presentation notes and comments

The scientific rationale for mass deworming: responding to (yet another) meta-analysis (Joseph)

Dr. Serene Joseph covered the evidence of morbidity caused by STH infections, the benefits of preventive chemotherapy (PC), the evidence from randomized control trials and systematic reviews, and the importance of considering evidence from other study designs in decision-making.

Morbidity caused by STH infections

- *Hookworm*: Blood loss and anemia
- *Ascaris*: Malabsorption, intestinal obstruction (particularly in young children), allergic reaction and hypersensitivity
- *Trichuris*: May cause anemia independent of hookworm. This can be exacerbated in cases of pregnant women with co-infection of hookworm. Trichuris dysentery syndrome can happen in cases of moderate or heavy intensity infection (MHI).

Limitations of randomized controlled trials (RCT)

RCT studies try to measure the effect of deworming on weight, height, development, cognition, educational status, and attainment. However, it is considered unethical and logistically difficult to establish a proper comparison group. Severe cases are excluded and those children are treated clinically. Compliance and co-interventions may lead to contamination where children in the control group receive deworming outside of the study protocol (e.g. from community campaigns or pharmacies). It is difficult to overcome the issue of low power, particularly because the studies include uninfected children who do not benefit from deworming.

Meta-analyses

Studies find no impact of deworming when you look at populations containing infected and uninfected individuals because there is no effect of deworming on uninfected people. Deworming has a clear effect when treating infected populations. The few long-run studies with 8-10 years of follow-up are not easily included in systematic reviews, but show a positive impact of deworming.

Conclusions

There is no question that deworming benefits infected individuals, and that the maximum benefit of deworming is achieved with long-term appropriate food intake and/or micronutrient supplementation. Health improvements following deworming have been consistently demonstrated, but additional benefits such as improved cognition are difficult to measure in the short term. Currently, there are few measurement tools available to demonstrate long-term effects. Rigorous observational studies have been conducted; however observational studies are not typically included in meta-analyses.

Discussion/Comments

- People question “does deworming work?” but they are really asking different questions that cannot be grouped together. Children who are infected should be treated. How they are treated is what is up for debate.
- WHO had a meeting last year that resulted in the formulation of recommendations for deworming during a Guideline Development Group meeting (April 2016). The recommendations are currently under review.
- The WHO recommendations on antenatal care for pregnancy include deworming for WCBA.
- Current program decision-making is based on prevalence within ecological zones, which tend to be large, ill-defined areas. Disease effect could be underestimated because large segments of the

population being treated are not infected. Programs should focus on areas with high prevalence, especially in middle income countries with low access to water and sanitation infrastructure.

Data for Forecasting and Decision Making in STH Programs (Brooker)

Mathematical modeling helps to optimize MDA programs. Data allows us to map and target interventions, track and adjust interventions, conduct impact assessments, know when we have achieved the goal and can stop MDA, and monitor post-treatment.

Challenges

- *Data quality and completeness:* Data flows tend to be piecemeal, existing in lots of different places and formats.
- *Barriers to sharing data:* If we want to track progress, we must have data at the level of implementation--which is frequently not broadly available.
- *Using data for informed decision making and programming:* If we do not *use* data, it does not impact program operations and quality.

WHO Roadmap goals and London Declaration Scorecard

WHO's NTD Roadmap tracks progress toward milestones for NTDs 2012-2020. The Scorecard monitors the commitments that partners made to combat NTDs. It includes milestones for coverage and impact, program support, drug donation, and research.

Moving beyond the coverage goal

We are on track to meet the 75% PSAC and SAC goals outlined in the Roadmap, but it is unclear what that means in practice and how the STH community moves forward with monitoring of a parasitological outcome. If programs move beyond the first goal of deworming when and where possible (from the three-tiered goal structure) to intensified control or interrupting transmission, parasitologic monitoring is needed for decision-making.

Ideal types of data needed for NTD programs

The LF program in Ghana has treatment coverage by district since 2001. Concurrently the program collected epidemiological data, including extensive baseline mapping, transmission assessment surveys (TAS), and monitoring. Some districts are now passing TAS and stopping MDA for LF. STH programs need similar data for decision-making to show progress and gaps as well as to demonstrate impact toward an end goal.

Current data flows

Mapping and treatment surveys are reported up from the local and national levels into the Integrated NTD database. Delays in the joint application package and reporting gaps create issues in data timeliness and completeness. We have the tools and the system, but they need to be used by countries and partners. Monitoring frameworks, such as use of sentinel sites and inclusion of STH in TAS for LF, are not used in a systematic way.

Forecasting

To forecast, programs need clear goals, measurement tools, and guidelines from WHO. The ability to develop forecasts varies widely across diseases. For STH, there is a coverage goal; without a routine measurement tool, the end game is unclear.

Under SDG 3.3.5 (Number of people requiring interventions against NTDs), there is a clear target for NTDs. By 2030 the STH Action Group wants to see a 90% reduction in the number of people requiring intervention for NTDs. This gives a clear goal for forecasting, and through LF programs measurement tools can be developed for STH.

Issues to consider:

- Programs have little incentive to provide detailed data, and there is little funding available. As a community, the STH Action Group needs to find ways to support countries' desire for more robust data.
- The importance of timely and publicly available sub-national data was emphasized along with the need for clearly defined end-points.
- Existing tools, platforms and partnerships need to be built upon to support and incentivize countries.

Discussion/Comments

- The LF maps presented use subnational data for forecasting. Access to subnational can help illustrate progress.
- Data on risk factors, especially for sanitation, needs to be included to make the model relevant for STH control.
- Countries would be more open to sharing data if they had the capacity to put it together. Countries must operationalize the tools and databases available and format the data to present it in a way that drives progress toward elimination.

Interrupting Transmission of STH: The DeWorm3 Project (Walson)

Background

Funded by a large investment by the Bill and Melinda Gates Foundation and many other partners that have joined to fund synergistic components, the DeWorm3 project has three objectives:

1. Define the goal (define breaking transmission and how it is measured);
2. Evaluate intervention impact (undertake a series of rigorous randomized control trials to see if community-wide MDA can achieve breaking transmission); and
3. Make policy recommendations for implementation at scale (work with partners to operationalize breaking transmission).

The presentation focused on the third objective: policy recommendations. There are three potential policy recommendations that could result from the findings of the DeWorm3 trials:

1. It is possible to break transmission everywhere it is attempted. *Policy implication:* develop guidelines for breaking transmission.
2. There are areas where elimination is possible and areas where it is not. *Policy implication:* develop guidelines for countries to determine whether they can move toward breaking transmission or continue with morbidity management programs.
3. It is not possible to break transmission anywhere. *Policy implication:* operationalize how to continue the global morbidity management program.

Implementation science

The implementation science approach used by DeWorm3 helps to illustrate what it takes to scale successful programs.

Aim 1: Understand stakeholders who influence the decision to go to community-wide MDA. What political resistance might there be to moving deworming from MOE to MOH? Stakeholder mapping will help us understand how to address these questions: What are the implications of that sort of shift? What are the barriers and the ways around the bottlenecks?

Aim 2: Identify barriers and facilitators to community-wide MDA. This involves focus group discussion and stakeholder interviews. Through circuit mapping the flow of a change, we can nicely identify efficient places to intervene and restore the flow of change. Using a consolidated framework for implementation research (CFIR), we can systematically evaluate these barriers and facilitators.

Aim 3: Quantify the readiness to change. Assess the barriers to change now so that when we have the results of the study we are ready to move forward and have identified the best ways to do that. This utilizes the organizational readiness for implementing change (ORIC) instrument.

Aim 4: Map the delivery process and identify discrepancy. Why did discrepancies occur? Compare areas that are working well and area that are not. Understand what happens through MDA at community and school levels.

Aim 5: Focus on cost and cost effectiveness. Cost data are captured to assess the cost of community-wide MDA versus targeted MDA.

Discussion/Comments

- The TUMIKIA project in Kenya studies the feasibility of elimination. DeWorm3 will leverage that success to move forward. Tools, such as a urinary assay to measure metabolites of albendazole to measure coverage, are being piloted within the TUMIKIA setting. Once data become available, models can be refined.

Appendix E – Proposed changes to Coalition structure

Proposed changes to the Coalition structure were offered for the Action Group for consideration. These included:

- The monitoring and evaluation (M&E) and operational research (OR) workstreams be moved to the STH Advisory Committee as subcommittees. This better reflects the workstreams' current function and clarifies the relationship between the coalition and the Advisory Committee. As Secretariat of the Advisory Committee, CWW would continue to support operational research conference calls and other activities as appropriate.
- As the Secretariat, CWW should take on a more formal advocacy role. A representative from CWW will link with the efforts of the ARM group at NNN and UTCNTDs.
- In the absence of clear guidance and clear activities for how to support women of childbearing age (WCBA), we should delay establishing a WCBA workstream. Guidance is expected from WHO this summer.

Appendix F – Progress on 2016 Activities and Proposed 2017 Action Plan Activities

Review progress on 2016 activities and propose 2017 Action Plan activities – PSAC (Ajello)

Preschool Age Children (PSAC)

Reporting issues are a key barrier to tracking coverage.

- It was noted that the 48% coverage in 2015 is a solid achievement but reflects a decrease in the context of coverage in the last three years. It is unclear whether this is a problem of actual low treatment coverage or of reporting gaps. From 2014 to 2015, there were nine large countries that did not report data but ordered more deworming drug doses.
- Every group is using a different denominator for the number of individuals at risk, which impacts reported coverage and tracking progress.
- NGO treatments increased by 262% between 2010 and 2014. In 2017, World Vision and Vitamin Angels are providing enough treatment for 100 million children around the world, a number that reflects 50% of the 2020 target. The organizations have difficulty reporting these treatments to WHO.

Identifying partners

The PSAC workstream has 31 members, but only four procure drugs and conduct deworming. The workstream has identified 10 other NGOs that distribute albendazole to see whether they also procure it and if they have any procurement challenges.

Drug quality

Ongoing efforts are necessary to develop a product description for vendors to produce to. Potential Ongoing efforts are necessary to develop a product description for vendors to produce a quality generic albendazole. Potential manufacturers of generic drugs prefer a USP monograph over the international pharmacopeia. USAID is assisting USP in assuring Good Manufacturing Practices for select generics in select countries. With the PSAC Chair's efforts, USP has added Albendazole to this list and are interested in working to improve production capacity of quality drug in developing countries. There is also interest in creating a USP monograph for chewable albendazole which is ideal for the younger children at risk.

Wider integration of discussions with UNICEF and discussions with national governments would be helpful to all parties, including World Vision and Vitamin Angels, who already meet regularly.

Financing

The STH Coalition should encourage WHO and UNICEF to renew emphasis on gaining member state financial support for PSAC deworming medication.

Review progress on 2016 activities and propose 2017 Action Plan activities – SAC (Hollister)

School-aged Children (SAC)

The 2016 work plan listed the objective “Support national governments to increase the reported deworming drug coverage in school-age children from 40% in 2013 to >60% in 2015.” That objective was achieved, although that success is not directly attributable to the SAC workstream activities given the years the deworming took place.

Indicators for 2016	Status
1. Create country profiles for 7 of 10 high burden countries.	The profiles were completed and well-received. Because of the way in which the profile data was presented (barriers and gaps), it was not possible to get approval from governments to share them broadly. Moving forward, the information from the profiles can be used to develop policy and advocacy briefs and to inform where gaps need to be addressed.
2. Increase PC coverage in SAC by 20% in the WHO-listed high-burden countries from 2013 to 2015.	This was achieved. The recommended action moving forward is to determine methods and tools to improve data collection and availability and to plan for the scale down of LF programs.
3. Two national governments request World Bank/IPA/GPE funds for school-based deworming in 2016	This was not achieved in 2016. The funding mechanism has changed. It is unclear whether the Coalition will continue to pursue this activity and which partners would undertake the advocacy efforts necessary to secure the GPE funds.

Potential 2017 Activities

- Determine funding gap for deworming globally.
- Use data from the profiles and potentially data from funding gap analysis to determine where resources are most needed for treatment scale up.
- Develop tools for practical application of guidelines to increase uptake by country programs.
- Publish best practices on a) cross-sector policy / governance approaches; b) integrated programming; and c) domestic resource mobilization for PC in SAC.

Challenges

- Resources. Some donors that currently support STH programs will not do so in the future. Scale-up and plans for sustaining national programs are needed.
- The advocacy platform lacks clarity. What is our message?
- There been significant time and effort expended on conversations related to STH transmission break/elimination and related discussions about scaling up treatment to reach adults. This creates a diversion of focus from scale up and treatment of the currently prioritized at-risk populations that has not yet been achieved.

Discussion/Comments

Discussion/Comments

- Adding deworming into countries' education sector budgets is a potential advocacy goal.
- Effective programs must be intersectoral, using the health sector's skill set for measurement and the education sector for the delivery platform.
- USAID is performing situational analysis to document the overlap between LF and STH (e.g., how much STH is LF?) in the 17 USAID-supported countries.
- WHO and the Bill and Melinda Gates Foundation are working on a funding gap analysis for every London Declaration disease.

Review progress on 2016 activities and propose 2017 Action Plan activities – Monitoring & Evaluation and Operational Research (Belizario)

2016 Activities	Status
1. Establish London Declaration scorecard milestones.	Milestones were established. The milestone on 20% of countries reporting prevalence and intensity data was met.
2. Support WHO-led revision of STH strategy for 2016-2010.	The meeting was held in December. WHO will finalize and share the report.
3. Develop interim recommendations for parasitologic monitoring for PSAC, SAC, WCBA.	CWW has developed an STH Prevalence Survey Manual, which is being piloted in Bangladesh.
4. Develop interim recommendations for the transition from LF to STH programs.	The checklist was developed is under review by WHO.
5. Identify the best candidate assays under development for improved STH diagnostics.	STH diagnostic meetings were held in Ghent and Annecy. Multi-field studies of improved STH diagnostic assays are planned.
6. Initiate operational research on STH transmission breakpoints.	BMGF has initiated the DeWorm3 study. There is also an ongoing demonstration project in Bangladesh.

Proposed 2017 Activities

- Develop WASH indicators in London Declaration scorecard that align with 2030 SDG 6.
- Develop indicators for preschool age children and deworming of women of reproductive age.
- Develop monitoring guidelines for preschool age children and women of reproductive age.
- Initiate research that will examine the reasons why deworming rates for PSAC lag behind reported coverage rates for SAC.
- Scale up efforts in high-burden countries.

Discussion/Comments

- Guidelines specific to crushing medications (to prevent choking of young children) were suggested as a topic that could be considered by the STH Advisory Committee.
- While national programs receive technical guidance from WHO, countries need support to

Discussion/Comments

implement the guidelines. Partners may fill this need by developing tools to help implement the WHO guidance.

- Select government programs are doing well. For example, the Government of Kenya and their partners measure prevalence and intensity. This data support the government's clearly-stated goal of elimination of STH as a public health problem in children. While some of this success is not apparent at the global level, high performing national programs should be acknowledged.
- Guidance for implementation-level monitoring will be needed for NGO partners that deliver deworming.
- The STH Coalition recognized Charles Mwandawiro's leadership as the past chair of the operational research workstream. Dr. Mwandawiro formally resigned his position as chair in December.
- Based on the recommendation to establish the M&E and OR workstreams as subcommittees of the STH Advisory Committee, it is not clear if a chair for OR is required going forward.

Review progress on 2016 activities and propose 2017 Action Plan activities – WASH (Velleman)

About the WASH Workstream

The purpose of the WASH workstream is to encourage organizations to deliver collaborative or integrated programs for improved control efforts. The workstream has faced challenges in terms of engagement: most workstream participants join to listen and learn, and very few can provide the technical expertise on WASH.

The WASH workstream is intended to serve as a technical support to the action group and to other workstreams when they have WASH needs. For example, the workstream can contribute WASH content when policy materials are being developed, provide feedback on program design, identify countries where we can collaborate, make links to the right decision makers in the WASH sphere, or support the uptake of integrated program indicators.

The WASH and NTD sectors have different ways in which they hold themselves accountable for what they deliver, but the overlap is not controversial. Both sectors are working toward health, sustainability, shared prosperity, and equality, as set out in the WHO Global Strategy on WASH and NTDs, released in summer 2015. This overlap should be used as a starting point for developing collaborative programs.

Common indicators

Without common program-level success indicators, programs do not collaborate. The NNN WASH working group recently developed eight common indicators through an extensive process. Another round of consultation is planned to develop indicators that are more specific to different disease control programs or other types of programs that are not relevant to all NTDs: trachoma, STH, Schistosomiasis and DMDI (Disease Management, Disability and Inclusion). Coalition members are encouraged to participate in this next round of consultation and to attempt to incorporate the indicators in their own programs.

WASH NTDs case studies

The WASH working group of the NNN and WHO, are collecting case studies of collaborative WASH and NTDs approaches. Findings from these studies will be synthesized to provide a report for the NTD Summit.

BEST Framework

ICTC has benefited from the SAFE strategy, a clear package of intervention areas that is fundable. The BEST (Behavior, Environment, Social Inclusion, Treatment) Framework hopes to deliver the same thing for NTDs in terms of funding, political priority, and delivery of more coherent and effective programming approaches to disease control. The initial concept has been endorsed by NNN and will be used to frame cross cutting discussions at the April NTDs Summit.

WASH NTDs Toolkit

The NNN WASH working group intends to produce a WASH and NTDs toolkit based on previous materials produced by ICTC. The toolkit will be a step-by-step guide for national level program managers to develop a collaborative process with WASH stakeholders to plan, fund, implement, and monitor joint programs.

Discussion/Comments

- One of the key impediments to collaboration is the mismatch in sector objectives. The NTD community looks for reductions in disease prevalence, while WASH actors are accountable to improve access or coverage. Rather than trying to persuade one another to adopt the other's target, joint objectives can be developed.

Appendix G – Discussion of London Declaration Scorecard

- Because reporting is incomplete, it is hard to define coverage trends and state that reaching the coverage goals is at risk.
- The STH Coalition should call for an improved reporting system and issue a statement that captures these issues.
- The slides used during the presentation had not been updated to reflect the recent WER with updated coverage figures for SAC and PSAC. The slide in question (slide 4) has since been modified to reflect the current data.
- The proposed WASH indicators should be updated to reflect the new Joint Monitoring Programme (JMP) language which will be released in June. The highest level will be “safely managed,” not “improved.” From the STH control perspective, safely managed is more relevant and should be the language used in the Scorecard (indicator 10). Indicator 11 should be updated to add the language “free from fecal and chemical contamination.”