End Neglected Tropical Diseases in Africa

END in Africa

Semi Annual Report

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Acronyms and Abbreviations

ALB	Albendazole
ASTHM	American Society of Tropical Medicine and Hygiene
CDC	Center for Disease Control
CDD	Community Drug Distributor
CDTI	Community-directed Treatments with Ivermectin
CHW	Community Health Worker
CSI	Integrated Health Center (CSI in French)
CSPS	Health Center (CSPS in French)
DHMT	District Health Management Team
DQA	Data Quality Assessments
DSA	Disease Specific Assessment
END in Africa	End Neglected Tropical Diseases in Africa Project
EU	Evaluation Unit
FHI 360	Family Health International 360
FPSU-L	Filarial Programmes Support Unit-Liverpool
FTS	Filariasis Test Strip
FOG	Fixed Obligation Grant
FY	Fiscal Year
GHS	Ghana Health Service
GOEC	Ghana Onchocerciasis Elimination Committee
HD	Health District
HDI	Health & Development International
HKI	Helen Keller International
HRA	High Risk Adult
ICCC	Intra-Country Coordinating Committee
IEC	Information, Education and Communication
IVM	Ivermectin
LF	Lymphatic Filariasis
M&E	Monitoring and Evaluation
MDA	Mass Drug Administration
MDG	Millennium Development Goals
MEC	Mectizan
Mf	Microfilaremia
MMDP	Morbidity Management and Disability Prevention
MOF	Ministry of Finance
MOH	Ministry of Health
MoHS	Ministry of Health and Sanitation
MOU	Memorandum of Understanding
NMIMR	Noguchi Memorial Institute for Medical Research
NTD	Neglected Tropical Disease
NTDP	Neglected Tropical Diseases Program
OAA	Office of Agreements and Acquisition
OEC	Onchocerciasis Elimination Committee
Oncho	Onchocerciasis

ONPPC	The National Office of Pharmaceutical and Chemical Products (ONPPC in French)
Ov16	Onchocerciasis tests
PBC	Planning and Budgeting Control
PCT	Preventative Chemotherapy
PHU	Peripheral Health Unit
PMP	Performance Management Plan
PNLSGF	National Program for Schistosomiasis, Lymphatic Filariasis and Soil-transmitted Helminthiasis (PNLSGF in French)
PNSOLO	National Program for Eye Disease and Onchocerciasis (PNSOLO in French)
PPMED	Policy, Planning, Monitoring and Evaluation Department
PZQ	Praziquantel
RISEAL	Réseau International Schistosomiase Environnement Aménagement et Lutte
RPRG	Regional Program Review Group on LF
SAC	School-age Children
SAE	Severe Adverse Event
SAR	Semi-Annual Report
SCH	Schistosomiasis
SCI	Schistosomiasis Control Initiative
SCM	Supply Chain Management
SOP	Standard Operating Procedures
SSP	Strategic Social Partnerships
STH	Soil-transmitted Helminthiasis
STTA	Short-term Technical Assistance
TA	Technical Assistance
TAS	Transmission Assessment Survey
TEC	Trachoma Elimination Committee
TF	Trachomatous Inflammation Follicular
TIPAC	Tool for Integrated Planning and Costing
TIS	Trachoma Impact Assessment
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
UWA	Urban Western Area
WA	Western Area
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization

Executive Summary

This semi-annual report (SAR) outlines the progress made during the first and second quarters in year seven (FY17) of the eight-year Cooperative Agreement No. AID-OAA-A-10-00050, "End Neglected Tropical Diseases in Africa," or "END in Africa." The six countries chosen by the United States Agency for International Development (USAID) for the operational portfolio include: Burkina Faso, Niger, Togo, Ghana, Sierra Leone, and Cote d'Ivoire. These countries have remained in the portfolio with no changes during the period under review. During this reporting period, FHI 360 and its partners undertook the activities outlined in the FY17 work plan (October 2016–September 2017).

FHI 360 worked with other partners in the END in Africa consortium to support and monitor the execution of activities of all sub-grantees and Neglected Tropical Disease Control Programs (NTDPs) within the Ministries of Health (MOHs) to ensure all work plan activities were executed per technical expectations and that USAID policies and regulations were observed. This included making periodic site visits, reviewing the sub-grantees' monthly progress reports, monitoring project expenditures and cost-share contributions, handling project coordination, and addressing implementation issues.

FHI 360 continues to support the work of the NTDPs in the six END in Africa implementing countries toward the elimination of trachoma, lymphatic filariasis (LF) and onchocerciasis (oncho), and the control of schistosomiasis (SCH) and soil transmitted helminthiasis (STH) as public health problems. This goal is facilitated by robust monitoring and evaluation (M&E) systems. FHI 360 also works closely with implementing partners to guide mass drug administration (MDA) activities and ensure that program impact assessments are implemented in accordance with World Health Organization (WHO) guidelines and sound data are collected and reported to USAID in a timely manner.

The END in Africa M&E specialist continued to liaise with the country programs and other NTD partners to ensure appropriate execution of M&E activities. All six countries have submitted their FY17 SAR1 workbooks, which have been reviewed by FHI 360, USAID and RTI International. The outstanding issues from the FY16 workbooks have been addressed and MOH approval is being sought. The review process for Ghana and Cote d'Ivoire is ongoing.

Disease specific assessments (DSAs) conducted in the six countries for the period under review included: transmission assessment surveys (TAS) and pre-TAS for LF; epidemiological (epi) and entomological (ento) surveys for oncho; trachoma surveillance and impact assessment surveys; and SCH sentinel site surveys:

- *Pre-TAS and TAS for LF:* Burkina Faso conducted TAS 2 and TAS 3 (carry over activities from FY16) in 4 and 5 health districts (HDs), respectively. These post-MDA surveys confirmed that LF transmission has been interrupted and there is no need to resume MDA in the districts surveyed. The survey data will also be used to populate Burkina Faso's eventual elimination dossier for LF. Cote d'Ivoire conducted LF sentinel surveys in 12 HDs. This baseline data is required pre-treatment of before LF MDA. Ghana conducted pre-TAS in 9 LF endemic districts. Two out of the 9 districts conducted TAS 1 and the remaining 7 conducted TAS 2. Preliminary results indicate all 9 districts passed TAS. Niger conducted

pre-TAS in 11 districts, of which 6 districts had microfilaraemia (mf) prevalence <1% and will be submitted to the Regional Program Review Group (RPRG) for TAS 1 approval. Those that failed will continue MDA. TAS 1 was also carried out in Gouré HD and the results indicate MDA may be stopped. Sierra Leone conducted pre-TAS in 6 HDs and TAS in 8 HDs, but results are not yet available.

- *Trachoma impact surveys (TIS)*: Burkina conducted trachoma surveillance surveys in 7 districts for the first time. The results show there has not been a resurgence of trachoma in the districts surveyed. The district-level prevalence among children (1–9 years) ranges from 0.79% to 1.74%. The trachoma impact surveys in 19 HDs are ongoing. These data will be used in Burkina Faso's elimination dossier to substantiate its eventual claim of eliminating trachoma as a public health problem. Niger conducted TIS and trachoma surveillance surveys in 4 districts each. The TIS results show that two of three districts can stop MDA, while the third requires 3 additional MDA rounds, and the surveillance results show that trachomatous inflammation follicular (TF) prevalence remains <5%.
- *Oncho epidemiological & entomological surveys:* Cote d'Ivoire conducted epi surveillance in 60 villages in 6 HDs. In Sierra Leone, oncho transmission assessments are ongoing in 8 HDs to determine the impact of MDA after 11 rounds of treatment. Togo completed an ento survey in 3 of 4 endemic HDs and an epi survey in Boboye HD only. Results for the three countries are still pending.
- *SCH/STH impact assessments:* Niger conducted sentinel site surveys in 17 sentinel sites. Both forms of SCH (*S. Mansoni* and *S. Haematobium*) are endemic in Niger. Results are not yet available. Based on the intensity of SCH prevalence, the results will be used to determine the number of MDA rounds needed before future re-assessment.

Overall, about 48.9% and 68.2% LF-endemic and trachoma-endemic health districts have stopped MDA, respectively. This brings the number of districts to be treated in FY17 to 150 for LF and 41 for trachoma, like a year ago. The reported numbers include all six program countries.

In this reporting period, 34,532[1] people were trained to conduct and/or supervise MDAs, or to perform M&E-related activities. Training sessions were cascaded and organized mainly around MDA or DSA activities. All countries disaggregated trainee data by gender. Available data shows that about 64.8% of the trainees were female.

After receiving all workbooks for FY17 SAR1, the situation is as follows: As of March 2017, the only treatment numbers that have been vetted for the first six months of FY17 were from Burkina Faso (oncho and SCH). The total number of people treated for at least one NTD and the number of treatments provided during the first half of FY17 was the same for both variables, 1,360,488. The cumulative number of people treated for at least one NTD through END in Africa from 2010 to date is 203,913,886, and the cumulative number of treatments provided is 431,310,029. The slow increase is due to program countries planning many of their MDAs in the second half of FY17. The project will have more complete treatment numbers to report in FY17 SAR2.

Over the past six months, END in Africa conducted the following main MDA activities:

[1] Most were trained for Ghana's school-based SCH/STH and community SCH treatment, which had been planned for FY16, but were conducted and reported in the period under review.

- Burkina Faso – The NTDP conducted 3 MDA activities: LF and community-directed treatments with Ivermectin (CDTI) MDAs in the Sud-Ouest and the Centre-Est region implemented the first round of SCH treatment for FY17. The coverage results were satisfactory for the two USAID-funded MDAs (CDTI and SCH). The oncho epi coverage rate was 82.21%, while the SCH MDA achieved 95% program coverage. Both MDAs achieved 100% geographical coverage.
- Ghana – The 2 MDAs conducted during this reporting period were both FY16 activities: School-based treatment for SCH and STH conducted in September–October 2016 in 204 districts, with treatment coverage of 85.7%. Community-based SCH MDA for adults (≥15 years) was conducted in 47 hyperendemic districts in November–December 2016. Preliminary reports from 35 out of the 47 participating districts show treatment coverage of 74.7%. Data is yet to be validated. Complete results will be reported in the FY17 SAR2.
- Niger – The FY17 MDAs were organized into 2 campaigns to minimize the expiration of drugs and to ensure the logistical workload was manageable at the central level. The first campaign began in January 2017 and covered 4 regions. Complete data is not yet available. The second campaign will begin as soon as the Mectizan (MEC) and Albendazole (ALB) donations arrive in-country.
- Sierra Leone – SCH MDA was conducted in October 2016 in 7 HDs. There was no significant difference between NTDP reported coverage of 81% versus independent monitoring results that showed 83% of persons eligible for treatment consumed the drugs. The data are still pending.
- Togo – The December 2016 MDA was implemented in 6 districts with high STH prevalence, 15 districts with high onchocerciasis prevalence, and sub-districts within 21 districts with high SCH prevalence. Data analysis is ongoing and coverage rate is expected to be quite high (>95%).

For the financial management and capacity building component, the END in Africa team, specifically Deloitte Consulting LLP, continued to demonstrate progress in building more sustainable NTDPs in three of the six program countries. END in Africa's sustainability approach continues to look beyond resource mobilization, toward strengthening the NTDPs' financial management, advocacy, strategic social partnerships, and organizational capacity. In addition, END in Africa continued to transition its support from workshops to mentoring and coaching, further institutionalizing NTDP tools and procedures, and empowering NTDP teams.

Key activities over the past six months demonstrating the connection between END in Africa's activities and sustainability:

- Reinforced capacity building efforts in financial systems and operational management:
  - *Cote d'Ivoire:* The two Cote d'Ivoire NTDP directors want to build staff capacity around advocacy for resource mobilization and strategic partnership development in FY17. They have identified individuals from the financial analysis and planning team and the advocacy and partnership development team who will work closely with Deloitte.
  - *Ghana:* Between October 2016 and March 2017, END in Africa continued its work around skills building, mentorship, and institutionalization of best practices and new tools, particularly in using the Tool for Integrated Planning and Costing (TIPAC) data to effectively inform the NTD program.

- TIPAC implementation and data use for policy and program decision-making:
  - *Cote d'Ivoire:* In February 2017, Deloitte led a TIPAC update session that focused on effectively consolidating the programs' budgets.
  - *Ghana:* The February 2017 TIPAC workshop brought together national NTDP/PCT staff, program managers for Buruli Ulcers and Yaws, and NTDP financial administrators, for an efficient and effective planning process regarding sustainability of the programs.
  - *Togo:* Deloitte presented the December 2016 TIPAC workshop analysis to the NTDP coordinator and program directors during a February 2017 partner coordination meeting to facilitate a comparison of resource mobilization capacity and asset allocation efficiency.

- Reinforced the NTDP's sustainability planning capacity and advocacy efforts:
  - *Ghana:* Deloitte supported the NTDP to revise the terms of reference for both the Advocacy & Communication and Resource Mobilization Committees of the Intra-Country Coordinating Committee (ICCC).
  - *Togo:* Deloitte conducted a workshop on advocacy and strategic communications in October 2016, which yielded a stakeholder ecosystem map that allowed the NTDP to create a prioritized short list of target audiences.

In the next six months, FHI 360 and its partner, Deloitte, will continue to implement END in Africa project activities as outlined in the FY17 annual work plan. The two entities will support Helen Keller International (HKI) and Health & Development International (HDI) in the implementation of activities in each of their respective countries, plus Ghana & Cote d'Ivoire, including MDAs and second tier sub-agreements. Lastly, FHI 360 will continue to ensure that sub-grantees and partners remain compliant with all approved sub-agreements regarding financial reporting and project implementation.

Project Management

During the period under review, FHI 360 executed various activities to ensure continued progress toward the goals outlined in the FY17 END in Africa work plan. This section outlines some of the key activities related to project management:

- Weekly conference calls and/or meetings were held between the USAID NTD team and the END in Africa team to exchange information, consult on various issues, and keep all stakeholders up-to-date on project implementation.
- The END in Africa team finalized and submitted the second FY16 semi-annual report (April – September 2016) to USAID.
- The END in Africa team submitted the Ghana and Niger FY17 country workplans to USAID for review in September 2016 and approvals were obtained in October 2016.
- END in Africa convened a one-day Cross-border Coordination Meeting in Accra on October 27, 2016 to discuss and facilitate synchronization of oncho and LF MDA in endemic districts along the borders of four countries supported by the project (Burkina Faso, Cote d'Ivoire, Ghana, Togo). The participating countries agreed to synchronize rounds 1 and 2 of oncho MDA in 2017, to be conducted in May and November, respectively, across endemic districts along common borders. As part of the recommendations from the meeting (see collaboration and coordination section), END in Africa has agreed to:
    - Create maps of West Africa showing details of districts that will synchronize treatment. It is hoped these maps will foster collaboration between FHI 360 and other NTD partners within the sub-region, and among countries.
    - Appoint a liaison officer within the END in Africa project to coordinate discussions and activities among USAID, FHI 360 and abovementioned countries to ensure drug requests are submitted and drugs are received on time, i.e. before May each year.
- Recruitment and hiring of a new program manager (Dr. Virginie Traore) for the Cote d'Ivoire program. Dr. Traore was the former chief of party of the PACTE-VIH project (regional HIV prevention and care project in West Africa), implemented by FHI 360. She started work with END in Africa in December 2016.
- The associate director, technical (ADT) participated in several technical/expert meetings relevant to the successful implementation of the END in Africa project:
    - Sierra Leone (Dec 14–16, 2016) – Second meeting of the NTD Technical Advisory Committee, held in Freetown to provide a technical update on the progress made toward LF and oncho elimination in Sierra Leone, and to participate in discussions on the way forward.
    - Niger (Jan 25–26, 2017) – First meeting of the onchocerciasis elimination committee (OEC) in Niamey, to present the new 2016 WHO guidelines for stopping MDA and verification of elimination of onchocerciasis, and to participate in discussions on the way forward for the elimination of LF and onchocerciasis in Niger.
    - Ghana (Feb 16, 2017) – Ad hoc meeting of the Ghana OEC to discuss the following: a review of Oncho surveillance data (mapping data, treatment data, epidemiological surveillance data, and entomological surveillance data) as follow up to the first OEC ad hoc meeting; a review of the oncho plan for 2017; and recommendations/guidance for further work to improve the quality of oncho data.
    - Togo (Mar 1–2, 2017) – Meeting of trachoma experts in Lomé to review available data and determine the way forward for the elimination of trachoma in Togo.

- Ghana (Mar 8–9, 2017) – Ghana Trachoma Elimination Committee (TEC) meeting to discuss WHO guidelines on the preparation of a trachoma dossier for the validation of elimination of trachoma as a public health problem. The TEC also discussed the new WHO protocol for a trachoma trichiasis (TT)-only survey and agreed to conduct a TT-only survey after the current case search in Yendi.

- The END in Africa project team conducted routine monitoring and planning visits in Burkina Faso (Feb 13–Mar 1, 2017), Sierra Leone (Mar 21–24, 2017), and Cote d'Ivoire (Mar 27–31, 2017).
  - The M&E Specialist supported the implementation of DQA in Burkina Faso's 2 regions of Sud-Ouest and Centre-Sud.
  - The project director and associate director, technical visited Sierra Leone and Cote d'Ivoire. The visits involved a thorough review of implemented activities, plans for the pending FY17 activities, program progress made, and challenges encountered. The project team worked with the subgrantees and NTDPs to address challenges. The team observed integrated TAS and an oncho survey in the Port Loko district, Northern region of Sierra Leone, and mapping for trachoma in Abengourou district, Indenie-Duablin region of Cote d'Ivoire. A key observation made is that NTD actors are motivated by project leadership monitoring visits, which are used to encourage field actors to continue their commitment towards the control of preventative chemotherapy NTDs in the respective countries.
- FHI 360 participated in and hosted the 2016 USAID NTD Partners Annual Meeting on December 7–8, 2016 in Washington DC, USA: *Securing Success in 2020: The Next 2 Years.*
- FHI 360 executed four procurement actions in the first half of FY17: diagnostics (FTS and IgG4 OV16) for Cote d'Ivoire and Ghana, Tetracycline HCl 1% 5g eye ointment tubes for the Cote d'Ivoire program, and Praziquantel (PZQ) drugs for Burkina and Togo. Details are provided in the SCM section of the report.
- FHI 360 Ghana country office initiated procurement of required logistics and preparation for the upcoming END in Africa Partners Meeting scheduled for April 26 & 27, 2017 in Accra, Ghana.
- The END in Africa project was the winner of the 2016 FHI 360 IMPACT Award for Program Excellence. The project was recognized for its demonstrated efforts to achieve quality, satisfaction and impact in programs furthering FHI 360's Mission.
- The END in Africa project director was among the finalists nominated for the 2016 FHI 360 IMPACT Award for Client Satisfaction and Program Management. This award recognizes excellence in client satisfaction related to project management and program delivery, including effective management of relationships and ensuring that projects are on track, on time, on budget and more than meet FHI 360's clients' needs.

Project Implementation

This section details the major accomplishments in project implementation in the past six months. It highlights activities related to the issuance and management of grants, summaries of sub-grantees, technical assistance/capacity building, collaboration and coordination, and M&E activities in each country.

Issuance and Management of Grants

During the period under review, the FHI 360-led team executed the following activities in support of sub-grantees and MOHs:

- Monitored all sub-agreements to ensure compliance with USAID reporting, spending and cost-share requirements and regulations.
- Processed sub-grantee monthly financial reports and accruals.
- Submitted and obtained USAID approval for thirteen fixed obligation grants (FOGs): Ghana MOH (6) and Cote d'Ivoire MOH (7).
- Reviewed and approved several second-tier FOGs: Niger (12), Burkina Faso (8), and Sierra Leone (3).

Summary of Sub-Grantee Activities by Country

Competitively selected sub-grantees are currently supporting the NTDPs/MOHs of the six END in Africa countries: HKI in Burkina Faso, Niger and Sierra Leone; HDI in Togo; and FHI 360 in Ghana and Cote d'Ivoire.

Burkina Faso

- Oncho MDA campaign, using the community-directed treatment with Ivermectin (CDTI) approach, was conducted in the Sud-Ouest region in December 2016. Preliminary results show a program coverage rate of 82.21%.
- SCH MDA campaign was conducted in the Centre-Est region February 17–22, 2017 and had a program coverage rate of 95%.
- The Filariasis Programme Support Unit – Liverpool (FPSU-L) supported LF MDA in the Sud-Ouest region in coordination with the onchocerciasis CDTI campaign supported by END in Africa. MDA data are not yet available.
- Participated in a cross-border meeting between Burkina Faso, Côte d'Ivoire, Ghana, and Sierra Leone on October 27, 2016, in Accra to plan for synchronized campaigns in FY17. The synchronized MDA in these three countries is planned for May 2017.
- Some FY16 activities were implemented during the first half of FY17. These include:
    - Trachoma surveillance surveys in seven districts. The results of the surveillance surveys confirm that TF prevalence among children 1–9 years remains below 5%.
    - TAS 2 in the Centre-Nord region, and TAS 3 in the Hauts-Bassins and Cascades regions. The TAS 2 and TAS 3 produced satisfactory results (i.e. all evaluation units passed).
- While not supported by END in Africa (though important for the overall progress of Burkina Faso), TAS 1 was conducted in Dano district in December 2016, achieving results below the critical cut-off value. This district will stop LF MDA.
- A workshop was held in Bobo Dioulasso (March 21–24, 2017) to revise the data collection tools in support of the upcoming FY17 MDA campaigns. This involved ensuring the tools provide space to record data by age range, community contribution, and deadlines for transmission of data.

Further details on activities in Burkina Faso are noted in Appendix 2.

Cote d'Ivoire

- An epidemiology evaluation of oncho to measure the impact of MDA on the oncho situation in 6 districts was conducted between January and March 2017.
- An LF baseline survey was conducted in 12 HDs on February 1–13, 2017 to obtain data that will be used to monitor treatment impact.
- Trachoma mapping in 9 HDs is still ongoing.
- On January 17–19, 2017, a meeting was held to develop an operational action plan for FY17 workplan activities.
- A workshop to update the TIPAC with FY17 workplan activities and associated costs took place on February 6–10, 2017.
- A meeting was held on March 9–10, 2017 with Prefects of Cote d'Ivoire's 20 health regions to improve their knowledge of NTDs and their collaboration with the NTDP.
- Workshops to develop health education and social mobilization materials, and to review and validate the IEC/BCC materials were conducted on January 3–5, 2017.
- Data managers' training on TIPAC and the integrated NTD database was conducted on February 6 – 10, 2017 and February 20–24, 2017, respectively.

Further details on activities in Cote d'Ivoire are noted in Appendix 2.

Ghana

- The Ghana Health Service Director General set up two important committees – Trachoma Elimination Committee (TEC) and Ghana Onchocerciasis Elimination Committee (GOEC).
- The GOEC has held one major meeting and 2 ad hoc meetings since December 2016 and is currently working with the NTDP to organize existing data as a basis for developing a comprehensive oncho elimination strategy for Ghana. The GOEC has also approved a protocol for oncho assessment survey in Ghana, which is expected to be carried out from March to May 2017.
- The TEC is currently working to complete a dossier for validation of elimination of trachoma in Ghana by WHO. The dossier is expected to be completed by the end of April 2017 and submitted to WHO in May 2017.
- The NTDP conducted pre-TAS in 9 LF-endemic districts in February–March 2017. FTS was used instead of night blood survey.
- The NTDP, in collaboration with the Access and Delivery Partnership project and PATH, organized a 2-day NTD Supply Chain Stakeholders meeting. The aim of the meeting was to help the program to effectively manage NTD logistics through development of NTD-specific SCM guidelines and standard operating procedures (SOPs). The meeting brought together NTDP SCM stakeholders at the national, regional, district and sub-district levels and NTDP partners (FHI 360, Sightsavers and WHO), to develop the SCM guidelines and SOPs. Final SOP content and structure will be developed by PATH by June 2017.

Further details on Ghana's activities are noted in Appendix 2.

Niger

- The first round of the MDA campaign was launched in January-March 2017 in four regions using community radio stations, public criers and female community health workers to

transmit messages in the targeted villages and hamlets.

- In September 2016, pre-TAS surveys were conducted in 11 districts (FY16 workplan).
- TAS 1 was conducted in 1 district (Gouré) in October 2016 (FY16 workplan) and the results show MDA may be stopped.
- Trachoma impact surveys were conducted in October 2016 in 4 districts and results show two of the three districts can stop MDA, whereas Gouré requires 3 additional MDA rounds.
- Trachoma surveillance surveys were also conducted in October 2016 in another set of 4 districts (FY16 workplan).
- The national SCH and STH control program (PNLBG) conducted sentinel site surveys in October 2016 in 17 sentinel sites. (*Note:* PNLBG changed the Boboye health district sentinel site from Falmado to the village of Bongou Koukou). Results are not yet available.
- An NTD coordination meeting was held on November 24, 2016, chaired by the Ministry of Health's Director of Studies and Programming. This meeting primarily addressed the preparations for the FY17 MDA campaign.
- The first OEC meeting was held in Niamey, January 25–26, 2017. This meeting launched the preparation of the dossier for certification of oncho elimination in Niger and a road map for the certification process was developed.
- The new 2017–2021 NTD master plan was finalized and forwarded to the Minister of Health's office for validation and signing.

Further details on activities in Niger are noted in Appendix 2.

Sierra Leone

- Social mobilization activities through community meetings and radio programs were held between September 26–30, 2016 in various communities to gain the support and commitment of stakeholders for the SCH MDA in 7 health districts.
- SCH MDA targeting school-aged children (SAC) and high risk adults (HRA) was conducted in 7 HDs by community health workers (CHWs) from October 12–19, 2016 and supervised by the national program and HKI staff. The MDA was planned as part of the FY16 workplan, but was delayed due to heavy rains and the closure of schools.
- MDA monitoring and supervision exercises were conducted at the national, district and community levels, supervised by the NTDP, District Health Management Teams (DHMTs) and community leaders, respectively.
- Independent monitoring and evaluation of health worker training and community sensitization meetings for SCH MDA in 7 HDs was held between November 7–11, 2016.
- The HKI Head of Programs & NTD Assistant, National NTD Program Manager and M&E Officer attended the 9th MRU Meeting held October 19–21, 2016 in Monrovia, Liberia. The MRU meeting serves as a platform to strengthen collaboration among member countries (Sierra Leone, Guinea, Liberia and Cote d'Ivoire) in the fight against NTDs.
- Two OEC meetings were held on September 29 and December 15, 2016.
- The training of Pre-TAS and TAS survey teams took place February 22–24, 2017 in Makeni, Northern Sierra Leone. The pre-TAS took place from February 26 – March 9, 2017 and the TAS 1 and onchocerciasis assessment will take place from March 15 – April 15, 2017.

Further details on activities in Sierra Leone are noted in Appendix 2.

Togo

- Second round of albendazole, praziquantel, and ivermectin treatment completed for calendar year 2016 in high-burden areas – 6 districts with high STH prevalence, 15 districts with high oncho prevalence, and high-risk sub-districts in 21 districts with high SCH prevalence. The data have been collected and collated, but not yet analyzed.
- Planning for the first round of treatment (Oncho, STH, SCH) for calendar year 2017. Key stakeholders participated in an NTD coordination meeting on January 12–13, and a program review and micro-planning meeting is being held with all stakeholders from March 13–17, 2017. Plans for the May 2017 MDA and the data collection tools were finalized by the end of March 2017.
- Two meetings focusing on onchocerciasis elimination were held in October 2016 and February 2017. The major stakeholders discussed the implementation of activities decided upon at the Onchocerciasis Elimination meeting in July 2016, including activities which are planned for the second quarter of calendar year 2017.
- Togo participated in a cross-border meeting organized by FHI 360 in October 2016 and it is hoped that the alignment of treatment schedules across bordering countries will aid in the elimination of onchocerciasis.
- One meeting on trachoma elimination in Togo was held in early March 2017 during which a plan was devised to determine if trachoma has been eliminated from Togo and if so, to remove Togo from the list of trachoma-endemic countries.
- Deloitte led two activities related to TIPAC, advocacy and resource mobilization in Togo. The Togolese government considered its NTD plan, calculated funding gaps, and identified potential funding sources, both locally and internationally. It is hoped that this type of training will increase the sustainability of the program over the long-term.
- The Integrated NTD Program in Togo shared some of their successes at the American Society for Tropical Medicine and Hygiene (ASTMH) meeting in Atlanta in November 2016. The LF Program Coordinator, Dr. Monique Dorkenoo, and the HDI team had four abstracts accepted, two for presentations and two for posters.

Further details on activities in Togo are noted in Appendix 2.

Technical Assistance/Capacity Building

As the lead partner in the END in Africa consortium, FHI 360 was responsible for coordinating technical and administrative support related to capacity building with all the sub-grantees and NTDPs. It took the lead in providing assistance on compliance with USAID requirements. In this regard, it strengthened the NTDPs' and sub-grantees' capacity to manage projects, work planning, M&E, data management, SCM, and quality assessment. Deloitte is the lead partner in financial management systems and reporting, including budgeting.

NTD Technical Assistance

Throughout the period under review, FHI 360 and its partners assisted MOHs in identifying TA requirements, creating assessment plans, and implementing a variety of capacity building activities. The main activities planned and/or executed by the FHI 360–led team are outlined below:

Table 1

Technical Assistance Requests in FY17

Country	TA requested	Justification	Technical skills required	Number of days required	Suggested source	Status
Burkina Faso	Implementation of DQA	The NTD program has indicated the need of technical assistance on implementation of DQAs	Expertise on DQAs	2 weeks	END in Africa	Done
	Develop a trachoma elimination program	To provide the NTD program a road map to achieve trachoma elimination by 2020	Expertise in trachoma and experience facilitating planning discussions	8 days (FY17 Q3/Q4)	ITI/HKI	To be completed second half of the year
	Provide support to the technical/ elimination committees for NTDs targeted for elimination	Support needed to build technical expertise in NTDs and improve the NTDP's experience in coordinating technical committees that will help the NTDP make sound technical decisions to achieve elimination	NTD expertise	2 days (FY17 Q4)	END in Africa	To be completed second half of the year
Cote d'Ivoire	TIPAC data entry of NTDP annual plan for planning and decision-making	The TIPAC should be updated annually to help the Cote d'Ivoire NTDPs' support program sustainability	Expertise on the TIPAC	2 weeks	END in Africa (Deloitte)	Completed in February 2017
	Capacity building on research methodology and development of articles and abstracts for publication	There is a need for strengthening capacity of NTD PROGRAM on research methodology and development of articles and abstracts	Expertise on research methodology and development of articles and abstracts	1 week	University of Ivory Coast, local research institution & CDC	To be discussed and completed FY17 second half
	Technical assistance on local resource mobilization	There is a need to start planning for sustainability of NTDP activities	Expertise on local resource mobilization	1 week	END in Africa (Deloitte)	To be discussed and completed FY17 second half
	Implementation of DQA	This is the second year of activities and DQA is needed to find ways of improving quality of data submitted on NTDs	Expertise on DQAs	2 weeks	END in Africa (Deloitte)	To be discussed and completed FY17 second half
Ghana	Assist NTDP in the transition from oncho control to oncho elimination program	TA is needed to guide activities including assessments, transmission zone demarcation and provide supervision and quality control.	WHO, Noguchi Memorial Institute for Medical Research (NMIMR)/CSIR/School of Public Health (SPH)	4 months	END in Africa	Done. An OEC was established to guide the NTD program on this.
	Develop strategy for STH treatment after LF elimination	LF treatment platform used for STH treatment is now reduced from 98 to 17 districts and expected to end before 2020. There is need to support the NTDP to determine the strategies for STH after LF treatment.	STH program implementation and technical expertise	Up to 2 months	END in Africa	Discussion ongoing. A meeting will be held in Accra in April 2017 to continue this discussion
Niger	Provide training on completing and analyzing Workbooks' data	Errors in workbooks have led to slow reviews and multiple revisions; TA may alleviate the overall workload for all parties.	Expertise in workbooks	2 days (FY17 Q3)	END in Africa (FHI 360)	To be completed second half of the year
	DQA training	Shortcomings in Data collection, quality assessment and processing that need addressing	DQA expertise	1 week	END in Africa	To be completed second half of the year
	Integrated NTD database	Need assistance on how to use the Integrated NTD database. Activities relating to this new tool includes initial cascade training on the tool (for countries to know how to use it and the purpose) from central level, to regions, then districts.	Expertise in databases	1 week	END in Africa	To be completed second half of the year
Sierra Leone	DQA Implementation	NTD indicated the need of technical assistance on DQA implementation after the training	DQA expertise	2 weeks (FY17 Q3/Q4)	END in Africa (FHI 360)	To be completed second half of the year
Togo	Follow-up training from Deloitte to update the TIPAC for FY17 (Strategic Planning)	The NTDP would like assistance in the analysis and utilization of the data emerging from the TIPAC	Expertise on TIPAC	3 days (FY17 Q1))	Deloitte	Done Completed Oct 10-12, 2016
	Capacity building in supply chain management	The NTDP requests training on supply chain management to improve the movement and flow of drugs and data at all levels, with an emphasis on the district level.	Expertise in supply chain management	1 week (FY17 Q2)	TBD	To be completed second half of the year

Country	TA requested	Justification	Technical skills required	Number of days required	Suggested source	Status
	Organize a stakeholder meeting for mobilizing resources	The NTDP needs technical assistance on advocacy and stakeholder outreach.	Expertise on advocacy	3 days (FY17 Q1)	Deloitte	Done Completed Feb 15-17, 2017
	Training on WHO Integrated NTD database (M&E)	The NTDP needs to improve on current data management strategies and integrate data management across all individual NTD programs.	Expertise in WHO Integrated NTD database	2 weeks (FY17 Q1)	END in Africa (FHI 360)	To be completed second half of the year
	Training on NTD Data Quality Assessment (DQA) Tool	The NTDP needs understand and use the DQA tool to assist with program M&E.	Expertise on NTD DQA	2 weeks (FY17 Q1)	END in Africa (FHI 360)	To be completed second half of the year
	Training on ArcGIS and graphic presentation of data	The NTDP needs to have the capacity to independently graph their epi and entomology data, particularly to help with onchocerciasis elimination.	Expertise in training on ArcGIS; can train in French	5 days (FY17 Q1)	END in Africa (FHI 360)	To be completed second half of the year
	External expert participation at Togo's OEC meeting	Although Togo has many highly accomplished oncho experts, additional expertise from WHO, MDP and entomology and oncho elimination experts is needed at one OEC meeting during the year.	Expertise in onchocerciasis and onchocerciasis elimination (WHO/CDC, MDP, Carter Center)	1 week (FY17 Q3)	Consultants	Ongoing. The 3rd meeting of the OEC will take place second half of year

Supply Chain Management

END in Africa undertook the following activities to strengthen and institutionalize supply chain and drug management systems and accountability, which are essential for successful MDA.

Burkina Faso

An initial shipment of 6,680,000 PZQ tablets was received during this reporting period. The second batch is expected at the end of March 2017. A rough estimate of FY18 PZQ needs required through the donation program was also quantified and provide to USAID and WHO. A physical inventory was conducted in the NTDCP warehouses and in the regions. The inventory data is currently being consolidated. The FY17 Albendazole and Ivermectin have not yet been delivered. Regarding Zithromax, the NTDP requested drugs only for the Pô district. This district will only be treated, pending the results of the upcoming trachoma impact survey. Drugs will be sent only after the International Trachoma Initiative receives and reviews the impact survey data.

Also, the NTDCP received a supply of FTS from the WHO donation program to conduct TAS. In FY16 FTS were used for the TAS 1 and ICT cards were used for the TAS 2 and the TAS 3. ICT cards will no longer be used for future TAS evaluations in Burkina Faso.

There were delays noted in transferring remaining drug inventories from the districts to the regions in a timely manner following the MDA campaigns. After the MDAs, remaining drugs must be transferred to the regions. However, this poses a difficulty for hard-to-reach areas in the Sud-Ouest where ongoing treatment is recommended (which requires that drugs remain at the health facilities after the CDTIs). Delays in transferring drugs from the CSPS to the districts due to lack of fuel for transport have also been reported.

Cote d'Ivoire

During this reporting period, the Cote d'Ivoire NTDPs received the delivery of 140 FTS kits (30 tests/kit) to conduct the LF baseline survey, 528 SD Bioline Ov16 rapid test kits (25 tests/kit), which FHI 360 purchased to evaluate the progression of oncho from control to elimination, as well as 39,972 (HCl 1% 5g) tubes of Tetracycline eye ointment for the treatment of trachoma in children under six months. All procured diagnostics and drugs arrived in-country in December 2016, January 2017, and February 2017, respectively.

Ghana

The NTDP received 19,800 FTS kits and 31,500 Ov16 rapid test kits procured by USAID through FHI 360 on January 3 and 27, 2017, respectively. Also, the NTDP accepted a proposal from PATH to support the program to develop SCM tools to improve SCM for NTDs in Ghana under the Access and Delivery Partnership project. A 2-day NTD Supply Chain Stakeholders meeting was held on February 8–9, 2017 in Accra. The aim of the meeting was to assist the NTDP to effectively manage NTD logistics through development of NTD-specific SCM guidelines and standard operating procedures (SOPs) as well as training of trainers to facilitate end user training on the tools across the country. This is complementary to the NTDP's FY17 workplan activity to develop and produce job aides specific for NTDP SCM to address the NTDP's SCM problem with reverse logistics for NTD medicines.

In terms of drug stocks, the national MDA monitoring teams had expired albendazole at a few regional medical stores, but expired quantities are not yet available.

Niger

During the period under review, the PNSO received 8,616,000 Zithromax tablets and 122,304 bottles of Zithromax syrup on October 28, 2016. No other drugs were received during the reporting period. In the request for drugs for the FY17 MDA, Niger was late in notifying the WHO of its Ivermectin, PZQ and Albendazole needs because of the delay in evaluating the campaigns and conducting the post-campaign physical inventory. Thus, the Ivermectin and Albendazole have not yet arrived in Niamey (no PZQ is planned to be shipped in FY17).

In terms of drug forecasting, the PNSO has been working on finalizing its 2018 request for Zithromax with the International Trachoma Initiative. For the other needed drugs, the joint request form for the ALB, MEC and PZQ has not yet been submitted; however, the NTD Programs plan to submit the application to the WHO by April 15, 2017.

Drugs are monitored from the time they are stored at the ONPPC until supplies are sent to the health districts. However, the health districts' drug management capacity is still inadequate, particularly post-campaign, for conducting the reverse logistics. This situation is often the result of changes in the staff responsible for drugs at the district level. Many of the warehouse employees at the district level who were previously trained in SCM have been assigned to other positions and replaced by employees without drug management experience.

Though the Niger SCM system has several strengths, there are still some lingering weaknesses which include:

- Inadequate reverse logistics,
- Inadequate information feedback from the NTD programs to the districts, leading to the expiry of certain drugs,
- Delays in transmitting the utilization reports and drug orders (particularly Mectizan, PZQ and Albendazole). For the drug orders, HKI is working with the NTD programs to determine the support we can provide to ensure an on-time and quality submission for FY18 drugs.

Sierra Leone

The country received a PZQ shipment of 4,929,500 tablets in September 2016 (this shipment was not reported in the FY16 SAR2). The PZQ used for the October 2016 SCH MDA in 7 HDs arrived in December 2015. Both shipments were cleared and transported to the NTDP warehouse in Makeni.

The issue of expiration or wastage did not arise during the reporting period. Drugs were distributed based on the "First to Expire, First out" rule. No physical inventory was conducted after the October 2016 SCH MDA; however, 680 tablets of PZQ were lost/spoiled during the distribution per the MDA reports received from the NTDP.

Other logistics, such as the dose poles (used for MDA in semi-urban and urban settings), pencils, pens, and polythene bags were distributed to the various DHMTs and onwards to the PHUs and

CDDs at the community level. Following the MDA for SCH in the 7 HDs, the remaining PZQ were quantified at PHU level, and returned to the district pharmacists and onwards to NTDP warehouse in Makeni.

A major challenge at the various DHMTs continues to be the lack of operational vehicles to transport drugs to the various PHUs. Most of the vehicles supplied to the DHMTs are no longer road worthy following their utilization during the Ebola outbreak. This makes it difficult to distribute drugs in a timely manner. To ensure that drugs and logistics are distributed in time for MDA activities, motor bikes and boats were hired for MDA activities, especially in hard to reach areas, to help the focal persons transport drugs where there was a vehicle constraint. The vehicles purchased by USAID in FY16 are used for program supervision by NTDP national level staff.

Togo

Albendazole, ivermectin, and praziquantel were distributed to the districts in which a second MDA occurred in December 2016 and, after the MDA, the remaining medications and data forms were collected. The Togo MOH has consistently achieved success in the distribution and collection of MDA medications, and continues to refine the process. However, recently there have been some SCM issues identified that require attention. For example, in preparing for the December 2016 MDA, some praziquantel was identified that was very near the expiration date. This should not have occurred if the 'First in, first out' policy was being followed and if the individuals responsible for distributing and collecting medications were closely paying attention to the expiration dates.

In addition, during the investigation of a severe adverse event (SAE) during the April 2016 MDA, investigators discovered that after an MDA, leftover medications from different lots were sometimes combined in a single bottle. Finally, during the investigation of an SAE in December 2016, it was discovered that a community drug distributor had left the medication in a household for someone who was not present, which does not follow the directly observed treatment guidelines the MOH has set. These issues highlight the need for wide-scale retraining in supply chain management and appropriate medication handling guidelines. Overall, the preparation of applications, forecasting, and supply planning has been accurate and losses of medications have been minimal.

Financial Management and Capacity Building

Between October 1, 2016 and March 31, 2017, the END in Africa team continued to demonstrate progress in building more sustainable NTDPs in three program countries. END in Africa's sustainability approach continues to look beyond resource mobilization, and is embodied through the strengthening of four foundational "building blocks" of financial analysis and strategy, advocacy and communications, strategic social partnerships (SSPs), and organizational capacity. During the reporting period, END in Africa continued to transition its support from workshops to mentoring and coaching to further institutionalize NTDP tools and procedures and to empower NTDP teams.

Key activities over the past six months relating to the four building blocks demonstrate the connection between END in Africa's activities and sustainability.

Organizational Development

END in Africa team continues to work with the NTDPs to increase self-awareness of program performance and improve their capacity for self-directed programming. We continued our work around skills building, mentorship, and institutionalization of best practices and new tools, particularly in using TIPAC data proactively. Organizational development work with each NTDP has focused on public financial management, government leadership, performance management, and data use for decision-making.

Expand platform for managing Fixed Obligation Grants (FOGs) and capacity building efforts in financial systems and operational management

Building upon experiences and progress realized in previous years, END in Africa continued to provide technical assistance needed to strengthen the NTDP's competences in Ghana, Togo, and Cote d'Ivoire around management and implementation of the FOG funding mechanism and the financial managements system. This support was carried out through the input of FOG data into the TIPAC to reflect the FY17 budget and costs and by coaching how to coordinate certain program activities to promote integration.

Effective work planning is vital to program success. The NTDP conducts several activities including MDAs, capacity building, advocacy, and engagement with partners. Almost all NTDP activities are implemented with decentralized regional and district health administrations that implement multiple public health. Gaining the full attention of districts and regional health administrations over a specific period to implement NTD interventions requires meticulous planning to synchronize activities. The Deloitte team supports the NTDP to coordinate activities with the many competing public health interventions at the regional and district level.

Reinforce capacity building efforts in financial systems and operational management

Ghana: END in Africa program team continued its work around skills building, mentorship, and institutionalization of best practices and new tools, particularly in using TIPAC data for information. Over the years, the NTDP's capacity to implement the TIPAC without significant oversight has improved, which helps the team utilize the TIPAC data for planning and decision-making. This year's TIPAC workshop was shortened and included individuals from both the NTDP and PPMED. It was significant that in this year's workshop the NTDP team led the data entry with minimal support and supervision by Deloitte. The expectation is that this effort will be extended to cover the data analytics aspect of the program management.

Cote d'Ivoire: The END in Africa support in Cote d'Ivoire has ramped up in the past year as the NTDP moved into the second year of activities. After an introduction to the team in October 2016, Max Ateba discussed the program's priorities with both disease program leaders and establish an agenda for key activities needed to support sustainability. Both program directors, Dr. Meite and Dr. Kouakou, want to build staff capacity around advocacy for resource mobilization and strategic partnership development in FY17. Mr. Ateba introduced both leaders to the building blocks of sustainability and walked them through the prerequisites needed to build an effective advocacy

strategy and implementation plan. Following these meetings, the NTDP directors have identified individuals from the financial analysis and planning team and the advocacy and partnership development team who will work closely with Mr. Ateba this year.

Financial Strategy and Analysis

END in Africa provided the following financial strategy and analysis support in the second half of FY16: TIPAC implementation and data use for policy and program decision-making in Cote d'Ivoire, Ghana, Togo, and Niger; Support the implementation of Ghana's NTD Finance Strategy; and NTDP Master Plan completion and budgeting for Sierra Leone, Ghana, Togo, Niger, and Cote d'Ivoire. END in Africa continued to work with NTDPs to incorporate TIPAC outputs into master plan updates while also advocating for the continued use of the TIPAC and incorporation into country program work plans. The team will continue to provide ad hoc support to country programs to further institutionalize data and information use for decision-making.

TIPAC implementation and data use for policy and program decision-making

The results of the TIPAC analysis are valuable in supporting and establishing data-driven decision-making within the NTDPs. The data analysis and visualization we completed in the last six months include a program overview, historical analysis of the TIPAC data, current state analysis, and identification of gaps to be addressed for program sustainability. Deloitte will continue to provide support to country programs to further institutionalize data entry, analysis, and use results of the TIPAC for decision making. All countries have previously received TIPAC capacity building trainings, which allowed Deloitte in FY17 to hold data entry workshops in each country.

Togo: Max Ateba and Kingsley Frimpong traveled to Togo to support the TIPAC workshop from December 12-16, 2016. Prior to this meeting, the team identified NTDP staff with the most TIPAC knowledge to serve as 'champions' and advisors alongside Mr. Ateba and Mr. Frimpong. In early February 2017, Max Ateba and Jimmy Rollins summarized and presented the TIPAC analysis to the NTDP coordinator and program directors during a coordination meeting with existing partners. The TIPAC data analysis highlights financial risks facing the program in the short and long term, and provides a year-to-year comparison of resource mobilization capacity and asset allocation efficiency. Gaps in funding for M&E and advocacy activities identified in the TIPAC results were discussed during the meeting with partners. A comparative analysis of the updated disease workbook- where programmatic data are recorded- and the TIPAC data will allow us to evaluate the NTDP's ability to achieve its stated programmatic objectives based on the current state of finances.

On February 2, 2017, Mr. Ateba and Mr. Rollins held coaching sessions with the NTDP financial management team, including three accountants and an M&E officer. The goal was to examine the current planning and budgeting control (PBC) process of the NTDP and identify bottlenecks. The key findings of these discussions were: i) there is no common PBC process and the updated budgeting and financial control manual is not routinely utilized; ii) all team members indicated the desire for a standardized system, such as improved Excel tools or an accounting software, to execute the planning and budgeting functions; and iii) only one person was familiar with the TIPAC, the other three team members being new to the program. Deloitte will continue to provide

mentorship to the financial management team to address these challenges.

Cote d'Ivoire: Between February 6 and February 10, 2017, Mr. Ateba led a TIPAC update session in Cote d'Ivoire. This session was only the second TIPAC update for Cote d'Ivoire's NTDP, and the first time for the team to effectively apply the knowledge acquired during FY16's TIPAC training. To prepare, Deloitte requested that participants review specified material ahead of the update workshop. Such an approach was allowed for a more productive workweek, which focused on effectively consolidating the programs' budgets.

Ghana: From February 13-15, 2017, the non-residential TIPAC data entry workshop brought together National NTDP/PCT staff (Disease specific Program Officers, PCT Program Managers, FHI 360 seconded-staff to GHS/NTDP), Program Managers for Buruli Ulcers and Yaws, and NTDP Financial Administrators. Following an efficient and effective planning process, the abridged data entry session provided a good input for data analytics, the next stage of the process. The TIPAC "champions" spent extra days in the offices of the GHS/NTDP to complete the remaining non-PCTs (Human African Trypanosomiasis (HAT), Guinea Worm, Leprosy and Cutaneous Leishmaniasis) entries.

We are working with the team to leverage analytics and visualization tools to develop a summary of findings from the TIPAC, and how the results can support the sustainability of the programs. Deloitte will continue to mentor and coach the NTDP in how to perform the data analysis and use it for effective decision making, empowering the NTDP to perform the TIPAC workshops and analysis on their own in future years. The data analytics should be ready by end of March 2017.

Support the adoption and implementation of Togo NTDP's Finance Strategy

After completing trainings on the four sustainability building blocks, the Deloitte team provided support to Togo's NTDP to finalize the Togo Finance Strategy. During Mr. Ateba's and Justin Tine's technical assistance visit to Lomé from October 10 to October 13, 2016, they led working sessions with the NTDP team on the strategy to ensure broad buy-in and alignment with the 2020 objectives outlined in the NTDP Master Plan. The Finance Strategy outlines an approach to mobilize the necessary resources for the NTDP activities and address the financial risks facing the program. It also underlines the need for better financial management, reaffirming what was highlighted in the organizational capacity assessment performed in FY16. Since the adoption of the final draft, Deloitte has been supporting the team in the implementation of the Togo Finance Strategy and will use this document as a guide for the Advocacy and Communications Strategy and the Partnership Action Plan, both underway.

Support the NTDP Master Plan and budgeting

In Ghana, the NTD Master Plan is the overarching vision and roadmap for NTD program implementation. In FY16, the Deloitte team worked with the GHS/NTDP to examine and refine their NTD program vision, establish a program trajectory for achieving their vision, and lay the foundation for performance management against the Master Plan. During the period under review, Deloitte supported the development of an integrated case management of NTDs. It became imperative for NTD country programs to employ cost-effective approaches to reduce morbidity and mortality, disability, and negative social consequences of NTDs, within an integrated

framework of the case management of NTDs. Specifically, we provided significant input into the budgeting and sustainability of the plan, which eventually will be incorporated into the existing NTD Master Plan. This output now sets the tone for subsequent support in program performance management and planning through financial accountability, governance, and Performance Management Indicators.

Advocacy and Communications

Advocacy and communications articulate NTDP value and communicate the importance of NTD control and elimination to stakeholders. Advocacy and communications can be powerful enablers of stakeholder engagement, investment, and partnership development. Accordingly, advocacy activities increase awareness of NTDs and help to win support for the program among influential government decision makers, public opinion leaders, and communities.

Reinforce the NTDP's sustainability planning capacity and advocacy efforts to diversify partners' pool and mobilize resources

Togo: From October 17- 21, 2016, Mr. Ateba and Mr. Tine conducted a workshop on advocacy and strategic communications. An output of the meeting was a stakeholder ecosystem map that allowed the NTDP to create a prioritized short list of target actors. With Deloitte's assistance, the team was also able to build upon skills learned during the same workshop to lay the foundation and roadmap for an advocacy strategy.

The advocacy strategy draft is currently being developed by the team with the technical assistance of Deloitte and is expected to be finalized in Q3. This important document structures how the NTDP will lead advocacy efforts to address the challenges identified through TIPAC data analysis. These challenges include inadequate levels of resources mobilized in comparison with the program's needs and a concentration of funding among very few partners (USAID, Sightsavers and DAHW). The chosen approach is to pursue targeted strategic partnerships to address funding gaps, diversify partners, and strengthen the NTDP's ability to achieve control and elimination targets.

Ghana: The Deloitte team is supporting the GHS/NTDP to organize the Intra-country coordinating committee (ICCC) meeting. The terms of reference have been revised for both Advocacy and Communication and Resource Mobilization committees of the ICCC. Deloitte supported the GHS/NTDP to develop an agenda and the mailing list for circulation and approval. Once these are cleared, we will participate in the meeting and support all sub-committees in the completion of their respective roles. The dissemination of the Advocacy and Communication strategy and the Strategic Social Partnership strategy will occur during the meeting scheduled in May 2017.

Strategic Social Partnerships

Increase NTDP sustainability planning and advocacy efforts to diversify partners and mobilize resources to improve financial stability

Togo: Having previously provided training and mentorship on strategic partnerships development, partners' selection, and partners' prioritization, Deloitte assisted the NTDP in planning and

facilitating the meeting with existing partners in February 2017. Mr. Ateba and Mr. Rollins led the review of the finance strategy and the results of the TIPAC analysis. During this meeting with existing partners, they also facilitated a discussion with participants on how these results can be used to drive the strategic partnership agenda forward. The outputs of the meeting include a shortlist of targeted organizations for partnership and a preliminary action plan for the partnership development efforts in FY17.

Ghana: In FY16, GHS/PPMED demonstrated strong ownership over partnership activities. FY17 activities supported the success of the partnership strategy and action plan developed during FY16 to institutionalize the partnership unit, increase domestic resource mobilization, and increase ownership for related activities.

Between October 2016 and March 2017, we worked with the GHS/NTDP management and GHS/PPMED to finalize the Strategic Social Partnership strategy. Strategic Social Partnerships are a sustainable way to motivate and stimulate service delivery and quality improvement and increase population involvement in health issues. This reality motivated the recommendation to transition the entire partnership effort from a vertical approach to a centralized one within the GHS/Policy, Planning, Monitoring & Evaluation Division (PPMED).

In addition to the finalization of the strategy, mentoring efforts continue to enable skills in the SSP concept. Partnership points of contact within GHS/PPMED participated in the TIPAC data entry workshop to appreciate and understand how the program gaps are identified using the tool. Including both the NTDP and the PPMED in the TIPAC workshop improved knowledge and ownership of the data entry and analysis process.

Strengthen Ghana NTDP work with private sector partner uniBank

In FY16, we supported the Ghana NTDP proposal for LF management to uniBank Ghana Ltd. As of March 2016, uniBank has pledged and transferred funds to the LF Morbidity Management campaign in the priority Upper East region, reducing the funding gap identified during TIPAC activities by approximately $42,000 USD. UniBank has expressed interest in engaging in follow-on discussions to continue their funding.

During the period under review, Deloitte provided a supervisory role to ensure the Performance Monitoring Plan developed in the proposal to track activities of the LF project was followed. Relationship management is critical in any partnership, and therefore our role was to support timely delivery of these reports and other deliverables to uniBank. To date, there have been 30 surgeries performed by the two hospitals using funds from the bank and all reports have been submitted in a timely manner. The examination of partnership renewal and expansion depends largely on performance in all aspect of the project.

Success Stories

The work undertaken by Deloitte to support the END in Africa project has reinforced successes that will continue to guide our work:

- **Building-up political will and leadership capabilities.** To sustain the progress that has been

made in controlling and eliminating NTDs, NTD Country Program Managers need to cultivate the political leadership required to engage a diverse group of people, identify and facilitate partnerships for mutual benefit, mobilize resources, and enable integrated programs. These leadership and management skills are not always intuitive or inherent. Throughout this reporting period, Deloitte has worked on empowering and equipping Program Managers with useful tools to advance and sustain the NTD program objectives.

- **Mentoring and coaching to institutionalize good management practices and hone skills learned during workshops.** Focused mentoring and coaching can reinforce the skills learned during workshops, helping to institutionalize improved processes for NTD program delivery. Deloitte has supported the mentoring and transfer of skills to the program teams, particularly in areas related to FOG management, TIPAC implementation and use, and partnership facilitation and resource mobilization.
- **Facilitating strong public-private partnership.** During the consultation and engagement process in past years, it became clear that the GHS/PPMED team did not feel empowered to seek out partnerships on their own. Deloitte has played a critical role in facilitating these introductions, empowering teams with the necessary tools, and supporting them in nurturing those relationships to mobilize resources.

Collaboration and Coordination

END in Africa–General

FHI 360 continued to coordinate with USAID, the MOH in each country, and existing USG-funded NTD programs to ensure effective program execution. END in Africa's NTD Technical Advisor continued to collaborate with NTD partners and NTDPs to plan for the 'End Game' and prepare countries for the final DSAs needed for trachoma and LF before countries start preparing their respective dossiers for verification of elimination.

Most of the END in Africa countries are 'walking the final mile' in respect to elimination of LF and trachoma as public health problems and are expected to stop nationwide MDAs for these diseases by 2020. Consequently, there is need to sustain the achievements made and reduce the risk of recrudescence. The END in Africa project organized a cross-border coordination meeting on October 27, 2016 to address and discuss cross-border issues in 4 of the 6 supported countries – Burkina Faso, Cote d'Ivoire, Ghana and Togo.

The meeting was divided into two groups based on shared border demarcations. Group 1 included Ghana and Togo; and Group 2 included Ghana, Burkina Faso and Cote d'Ivoire. Ghana shares a border with the other 3 countries, hence its inclusion in both groups. The groups deliberated on the following topics: priority districts, timeframe, challenges envisaged, and recommendations for successful synchronization.

Group 1 decisions:
Identified priority districts: 5 districts in Ghana (Hohoe, Nkwanta North, Nkwanta South, Kadjebi and Jasikan) will synchronize treatment with 3 districts in Togo (Sotouboua, Wawa and Danyi).

Timeframe for synchronization: Treatment will be done in the same month. Since oncho treatment is biannual in some districts in both countries, 1st round of treatment will be conducted in May 2017 and 2nd round of treatment in November 2017. Only 2 districts in Ghana will conduct 2nd round of treatment (Nkwanta North and Nkwanta South) while all 3 districts of Togo will do biannual treatment.

Challenges: The same partners (END in Africa and Sightsavers) operate in the 2 countries, so there will be relatively fewer problems with partner coordination. However, receipt of drugs in-country may be delayed due to lack of funds or insufficient funds for activities during the treatment period, and communication will be a challenge because of language (French in Togo versus English in Ghana). The countries may have to implement MDAs at the same period as other public health programs, so they must compete with these other programs for the attention of districts. Programs may also have challenges integrating some of the interventions linked with MDAs.

Group 2 decisions:
Identified priority districts: Bordering districts for each two countries: Ghana/Cote d'Ivoire border: Ghana (5) – Bole, Sawla-Tuna-Kalba, Tain, Bia West, Bia East; Cote d'Ivoire (4) – Abengourou, Bouna, Bondoukou, and Aboisso. Ghana/Burkina Faso border: Ghana (5) – Bole, Sawla-Tuna-Kalba, Wa West, Lawra-Kasena-Nankana West, Bawku West; Burkina Faso (6) – Batié, Kampti, Po, Gaoua, Dano, and Bittou. Cote d'Ivoire/Burkina Faso border: Cote d'Ivoire (3) – Bouna, Ferkessédougou, and Ouangolodougou; Burkina Faso (4) – Batié, Kampti, Mangodara and Banfora.

Timeframe for synchronization: MDAs will be conducted within the same week, the second week of May and November 2017 (for districts conducting bi-annual MDAs).

Challenges: Late arrival of drugs for MDA, availability of the necessary logistics and financial resources needed, different NTD partners in each country could create a challenge for receiving funds and drugs at the same time, and there could be conflicts with activities of other programs within the same districts.

Overarching recommendations from the meeting:

- Coordination is needed at the international level to respond to problems that might negatively impact the planned synchronization. END in Africa will appoint a bilingual Liaison Officer responsible for coordination and communication between countries and FHI 360/USAID to address the challenges noted above. There is also a need for countries to be able to hire temporary interpreters for collaboration meetings at lower levels.
- Togo conducts integrated SCH/STH/oncho MDA with PZQ, ALB, and ivermectin. Since non-availability of 1 of these drugs creates a delay for the integrated MDA, it was decided oncho treatment should be prioritized and implemented if ivermectin is available and the others are not available. This, however, means that more funds will be needed to conduct the other MDA when drugs eventually become available. LF and oncho MDA will also be prioritized if there is any delay with receiving drugs for the other PC NTDs within countries.
- There might be problems with specific diseases within specific countries that should be addressed accordingly by the countries concerned but may have an impact on the synchronization. In the case of such occurrences, the country concerned will make this

known to all stakeholders so that efforts can be made to resolve the problems encountered as early as possible.

- Countries should focus on synchronization instead of harmonization of MDAs as the latter requires a higher level of coordination between countries. Synchronization is relatively easier to implement as it involves the same period of treatment (month or week), and the same targeted diseases, while harmonization might require treatment at the same time (days) among the same group of diseases using the same treatment criteria. Furthermore, it is better to do synchronization now and move to harmonization when there is adequate experience with synchronization as not all the districts will be conducting biannual treatment (2 out of 5 districts in Ghana for oncho versus all 3 in Togo).
- Countries also need to consider details such as timeframe for DSAs (pre-TAS & TAS) in relation to MDAs.

Specific Country Activities

Country-specific activities carried out by our sub-grantees and supported by END in Africa are summarized below:

Burkina Faso

- Burkina Faso's 2011-2020 national health development plan (PNDS) gives priority to combating NTDs. NTD control efforts are included in health action plans at all levels (NTDCP, regional health directorates, and districts). This priority was the basis for developing an initial 2012-2016 strategic plan to combat NTDs and, subsequently, a second 2016-2020 plan, which was adopted on 27 December 2016, but which has not yet been officially signed by the Minister of Health.
- The Government of Burkina Faso provides financial support to the NTDCP to carry out communications activities, including supplemental support for social mobilization. Some health facility management committees (COGES) are responsible for managing the CDDs, using COGES resources. However, it is difficult to quantify these amounts because they are not recorded fully and completely at the district level.
- The onchocerciasis subcommittee met January 11–12, 2017 and reviewed the results of the entomological and epidemiological studies conducted in the Cascades region. Recommendations were made to improve efforts to combat onchocerciasis, specifically vector control and reopening the onchocerciasis laboratory for ELISA tests.
- An activity planning meeting for the NTDCP and HKI was held on January 26–27, 2017 to jointly plan activities for the coming months.

Cote d'Ivoire

- The government's commitment towards NTD control continues to be very high since the END in Africa project was launched in FY16. During the first half of FY17, it had representation by high level MSHP officers in all activities conducted by the NTDP and a very good participation by Prefects of the 20 regions during the March 9–10, 2017 coordination meeting.
- There continues to be very good collaboration between END in Africa and other NTD partners working in Cote d'Ivoire. During this semester, quarterly conference calls were

organized to strengthen this existing partnership, and NTD partners (especially FHI 360 and Sightsavers) also organized joint supervision and monitoring of NTD activities.

Ghana

- The government continued to let the NTDP use the health system structures at all levels– national, regional, district and sub-district to support NTDP activities. Medical stores at all levels keep NTD medicines and health system vehicles are used to support NTD activities.
- The NTDP received funding from an indigenous private Ghanaian bank, Unibank, to conduct morbidity management and disability prevention activities for select patients in the Upper East region of Ghana (November 14–30, 2016). The NTDP trained 5 health staff in the management of elephantiasis, conducted hydrocoele surgery for 30 patients free of charge and trained 55 elephantiasis patients in home-based care in 13 districts. The impact of the intervention will be measured by following 20 hydrocoele and 30 elephantiasis patients over the next 12 months to assess clinical and socioeconomic improvement.
- Three brand new vehicles were purchased to support the NTDP. Volta River Authority provided funds for the purchase of 2 vehicles to support NTDP activities and the third vehicle was purchased by the NTDP with funds from the DFIF-funded CountDown Project.

Niger

- A coordination meeting was held in November 2016 and chaired by the MOH Director of Studies and Programming. The objective was to review MDA campaign preparations, the treatment of the Diffa refugee camps and the overlap with the activities of the new World Bank NTD project. The regions involved in the first MDA were confirmed and an MDA timeline was developed.
- The NTD steering committee created when the NTD/World Bank malaria project launched, serves as the NTD Task Force and assembles all the MOH partners working on NTD control efforts in Niger. The new project's annual action plan was validated at the meeting. It should be noted that efforts had been made for several years to reinvigorate the NTD Task Force; however, government support lacked. This is viewed as a positive indication of NTDs interest by the government.
- While no new staff were hired to support the NTDP or disease programs, the MOH reminded the national NTD focal point of her role – responsibility to coordinate all the partners involved in this work. Whether she improves her performance remains to be seen, during coming activities (e.g. NTD coordination meeting, steering committee meeting or meeting with MOH officials).
- The relationship with the MOH and other NTD partners has improved significantly through regular coordination meetings chaired by the MOH Deputy Secretary General. In addition, the first meeting of the Task Force committee, requested for several years by HKI, indicates a strengthening of the Ministry's interest in NTDs.
- The Minister of health requested for a presentation from HKI to better understand the organization and its NTD work in Niger.
- All the regional authorities present during the FOGs contract signing mission expressed their willingness to support HKI in its missions. To illustrate this, the MOH General

Secretary congratulated HKI at the National Health Committee workshop during the presentation of the 2016 evaluation. It highlighted HKI among MOH's best technical and financial partners.

Sierra Leone

- The national program and its partners held three coordination meetings to discuss timelines for the DSAs and the three MDAs for LF-STH in the Western Area, SCH in 7 HDs and LF-OV-STH in 12 HDs.
- NTD and SCH/STH Task Force Meetings are scheduled for April 2017 to discuss the outcome of TAS 1 in 8 HDs and the onchocerciasis assessment survey. These meetings will establish the necessary steps to be taken if LF MDA will be stopped in those districts and the impact it will have on the treatment for STH and hypo-endemic communities for onchocerciasis.
- The MoHS annual work plan includes a budget line to cover administrative costs for the NTDP secretariat. However, the release of these funds to implement NTD activities remains a major challenge. No additional funding was received by NTDP from the government or other partners during the reporting period.
- A new staff (deputy program manager) was assigned to the NTDP to assist the program manager but has not yet commenced his duties. No additional office space was provided during the reporting period.
- The NTDP was invited by the Directorate of Food and Nutrition to their National Anemia Working Group meeting in November 2016 to give a status update of STH in the country. Notable action points from this meeting were the importance of strengthening behavior change communication and the scaling down of STH MDA from twice annually to once yearly due to the current progress in the STH control.
- The National Program and its partners were invited to participate in the 9th MRU meeting held October 19–21, 2016 in Monrovia, Liberia. The meeting brings together National Coordinators and Program Managers of NTDs programs of member countries, WHO representatives, NTDs donors, NGOs, and civil society organizations. The annual conference served as a platform for experience sharing and exchange of ideas to improve NTDs implementation within and along borders communities. The meeting also served as a means of advocacy and resource mobilization.

Togo

- The government of Togo continues to be strongly supportive of the Integrated NTD Control Program. The MOH held numerous coordination meetings to discuss the December 2016 MDA implementation and May 2017 MDA preparations, as well as the elimination of onchocerciasis and trachoma.
- The Togo MOH is also developing their data management and analytical capabilities.
- The Togo Integrated NTD Program developed tools for the CDDs that can be reused every year (e.g., dose poles and flip charts), and registers that can be used for multiple years to increase the cost-effectiveness of the program. In addition, the Program has developed integrated reporting tools and implemented integrated trainings and drug delivery. Additional ways to integrate activities with other partners are continually being sought

(e.g. with UNICEF, WASH).

- The MOH is developing partnerships within the government (e.g., WASH, malaria, onchocerciasis, education, etc.), as well as with other non-governmental organizations (UNICEF, Red Cross, Plan Togo, etc.) to participate in the integrated MDA.
- Collaborations among the Integrated NTD Program, HDI-Togo, Sightsavers and the Onchocerciasis Program are being strengthened as a step to moving toward onchocerciasis elimination.
- The MOH, HDI, and Onchocerciasis Program are developing ways to further integrate onchocerciasis into the integrated platform, including collaborative development of detailed and integrated implementation plans for distribution of medications and data analysis.
- HDI is also working to bring together other partners (CDC, the Taskforce for Global Health) to support onchocerciasis surveillance and elimination activities, and operational research on onchocerciasis.
- HDI is continuing to work with the Bill & Melinda Gates Foundation to identify cases of trichiasis in the community using the MDA platform.

Monitoring and Evaluation

FHI 360 and partners continued to support the selected six countries in developing sustainable M&E systems for NTD Country Programs. FHI 360 works closely with implementing partners to ensure that MDA activities and program impact assessments are implemented in accordance with WHO guidelines and that sound data are collected and reported to USAID in a timely manner.

Key M&E activities undertaken within the last six months are classified into the following sub-sections:

- Support to sub-grantees and MOHs to develop and implement quality M&E systems
- Data management and documentation
- Routine program monitoring
    - MDA
    - Impact assessments
    - Training
- Technical assistance/capacity building on M&E

Support to Sub-grantees and MOHs

The M&E Specialist continued to liaise with country programs and other NTD partners to ensure appropriate execution of M&E activities for NTD Programs. The main accomplishments for this reporting period were as follows:

- All FY17 SAR1 workbooks were submitted to USAID and RTI for review and all countries provided responses to all comments. USAID, RTI and FHI 360 review the workbooks separately, put all comments into a single feedback file, discuss the feedback in a group, and send joint USAID/RTI/FHI 360 feedback to the countries. The M&E Specialist provides country background/specifics, as necessary.
- As there is a delay in data review due to multiple persons' timeline and priorities, the M&E team agreed on the new workbooks' review process starting with FY17 SAR2. Country

and/or partner will send workbooks to FHI 360 for preliminary review and feedback to countries/partners. FHI 360 will send the final or near-final version of the workbooks to USAID with a copy to RTI for secondary review, and then FHI 360, RTI and USAID will work together to address any outstanding issues.

- Outstanding issues with FY16 workbooks have been addressed and MOH approval is being sought. The review process is ongoing for Ghana and Ivory coast.

Country-specific details are below:

Burkina Faso

On February 13 – March 1, 2017, the END in Africa M&E Specialist supported the implementation of DQA for the Sud-Ouest and Centre-Sud regions to:

- Verify the quality of the data transmitted to the various sites sampled;
- Assess the capacity of the NTD data management systems at the various levels to gather, document and report quality data; and
- Identify the areas of the NTD data management system that need improvement.

And while the FY17 post-CDTI coverage surveys have not yet been conducted, following the last post-treatment CDTI coverage survey, which took place from May 2–30, 2016 in 12 endemic villages in the Sud-Ouest region, several recommendations were formulated:

- Reinforce supervision of CDDs during the CDTI by head nurses;
- Registers should be verified for completion prior to submitting to the epidemiological and data management personnel (CISSE);
- IEC/BCC should be strengthened at the community level;
- Mop-up should be conducted in villages/hamlets where coverage is low.
- Supervision in the last round of CDTI in the Sud-Ouest indicated these recommendations had largely been followed.

Cote d'Ivoire

On February 20–24, 2017, data managers from Gkeke and Belier regions were trained on the integrated NTD database. The FHI 360 M&E Officer supervised the activity.

Ghana

FHI 360 M&E Officer supervised the pre-TAS in 9 LF endemic districts, TAS 1 in 2 districts, and TAS 2 in 7 districts.

Niger

A DQA planned for two previous fiscal years still has not yet been conducted. Although this activity should have been carried out in prior fiscal years when funds were available, it has been postponed because of lack of preparation and unavailability of NTD programs. The NTDP had planned to conduct a DQA in FY16 but could not find time to do so, given the heavy load of activities; however, the NTDP recognizes that DQA can help identify areas where major data reporting issues exist and find a solution to them. DQA has not been reprogrammed for FY17 because the NTDP prefers to ensure that the MDA and the DSA take place per the planned schedule. In FY17 again, there is a heavy DSA schedule and because the END in Africa project will

end in two years, the NTDP recognizes activities need to take place on time during this fiscal year.

Sierra Leone

To determine the effectiveness and efficiency of health workers' trainings and community sensitization meetings for the SCH MDA, HKI developed questionnaires to evaluate the knowledge gained by communities and impact of health workers' training on the SCH MDA strategy. The findings from this evaluation were presented in the form of a poster during the annual review meeting for NTDs in January 2017. The key findings highlight the need for a better understanding of the signs and symptoms of SCH, exclusion criteria from participation in the MDA, common adverse events associated with MDA, and good hygiene practices. These topics need to be emphasized during trainings and community meetings.

An end-process independent monitoring (IM) was conducted by HKI two weeks after the SCH MDA to validate the reported MDA coverage. The results showed no significant difference in coverage between IM reports and NTDP coverage. Additionally, questionnaires were administered to individuals both at household and community locations to assess the reasons for non-compliance. The main reasons were: 'my house not visited', 'fear of side effects', 'out of the area', 'did not eat', and 'had no water to take the drugs'.

The NTDP received training on data quality assessment in August 2016; this training will be rolled-out to NTD focal persons and district M&E officers in August 2017. Following the training, the NTDP will conduct its first DQA to strengthen data quality, consistency and reporting at all levels. This is scheduled in September 2017.

A major M&E challenge facing the NTDP and other partners in the country are population denominators. The summary results[2] of the national population and housing census conducted in December 2015 indicate a gross underestimation of population figures in some districts. Another challenge encountered by the national program during the SCH MDA is the poor road network, especially in hard-to-reach (HTR) districts (Kailahun, Kono and Koinadugu). DHMTs must spend additional days to monitor and supervise some of these HTR communities

Togo

The Togo MOH is continuing to use the existing M&E framework and tools supplied by FHI 360.

Data Management and Dissemination

All 6 countries have submitted their FY2017 SAR1 workbooks that have been reviewed and the countries provided their feedback on all comments. There is no challenge encountered this time with submission of workbooks. Also, the review team addressed the remaining outstanding issues FY15 and FY16 workbooks and the final review on Ghana and Ivory coast workbooks FY16 is ongoing. The countries will submit the final workbooks to their respective MOH for approval.

[2] https://www.statistics.sl/wp-content/uploads/2017/01/final-results_-2015_population_and_housing_census.pdf

Burkina Faso

Data quality was evaluated for two regions (Sud-Ouest and Centre-Sud) in February 2017 to:

- Verify the quality of the data transmitted to the various sites sampled;
- Assess the capacity of the NTD data management systems at the various levels to gather, document and report quality data; and
- Identify the areas of the NTD data management system that need improvement.

The World Bank supported this activity, but technical assistance was provided by the END in Africa M&E Advisor. The DQA revealed several strengths, including satisfactory reporting for MDAs, the availability of data collection tools at all levels of the health system, establishment of NTD data management guidelines, and human resources dedicated to data management. Some areas that require improvement include: archiving of tools; updating the Integrated NTD Database, enforcing the use of up-to-date data collection frameworks, timeliness in reporting, and ensuring data collection registers are checked sufficiently.

Sierra Leone

During the reporting period, the Sierra Leone NTDP Program Manager, Dr. Yakuba M. Bah made a presentation at the 65th annual conference of the American Society of Tropical Medicine and Hygiene (ASTMH) in Atlanta, Georgia in November 2016. The presentation "Challenges in achieving mass drug administration coverage in the context of epidemics: a case study of Ebola in Sierra Leone" was part of the RTI organized symposium on the topic: *Terrorism, conflict, epidemics and acts of God: the impact of the unpredictable on NTD programs*.

Togo

The Togo LF Program coordinator attended the COR-NTD and ASTMH meeting in Atlanta in November 2016. HDI presented the following two oral presentations on her behalf and two poster presentations:

- *"Prevalence of Ov16 antibodies among school-age children after twenty years of mass treatment with ivermectin in Togo" (presentation)*
- *"Using a door-to-door mass drug administration campaign to identify trichiasis and hydrocele in Togo" (presentation)*
- *"Prevalence of antibodies to Wb123 six years after elimination of lymphatic filariasis as a public health problem in Togo" (poster)*
- *"Comparison of the onchocerciasis Ov16 IgG4 rapid test and Ov16 ELISA among children in Togo: experiences with a new surveillance tool" (poster)*

Routine Program Monitoring

FHI 360 recognizes the importance of sound data management in ensuring continuous performance improvement and thus, it provides TA to sub-grantees and NTDPs in END in Africa countries to strengthen data management skills among M&E staff and program managers. The M&E advisor monitored country M&E activities on a regular basis, collecting information through phone calls, monthly reports, workbooks, work plans and emails. The follow-up on all planned M&E TA (the WHO joint reporting template, the integrated national database and DQA) in FY 17 was done and many activities will take place in FY17 Q3 and Q4.

Mass Drug Administration

Burkina Faso
The MDA activities focused on the Sud-Ouest and Centre-Est regions, which implemented the first round of CDTI/LF MDA and the first SCH round of FY17, respectively. In the Sud-Ouest, FPSU-L supported the LF MDA and END in Africa supported the CDTI. The oncho/LF CDTI/MDA was held December 15–24, 2016 and the SCH MDA was conducted February 17–21, 2017.

Overall, the coverage results were satisfactory for both the oncho CDTI and SCH MDA funded by USAID. A total of 161,039 persons were treated for oncho (out of 160,498 persons targeted) with epidemiological and geographic coverage rates of 82.21% and 100%, respectively. For the SCH MDA, 1,199,449 persons were treated (out of 1,262,134 persons targeted), achieving 95% program coverage and 100% geographical coverage.

Cote d'Ivoire
No MDA was performed during the reporting period.

Ghana
FY16 school-based treatment for SCH and STH was conducted in September – October 2016. All 204 districts that participated in the MDA have reported results. Out of the 4,784,949 registered children, only 4,013,047 were treated. This represents treatment coverage of 85.2%.

Community-based SCH MDA for adults (≥15 years) was conducted in 47 hyperendemic districts in November – December 2016. This treatment was planned under FY16. Reports from 35 out of the 47 participating districts shows that 746,692 adults were treated out of 999,642 registered giving a treatment coverage of 74.7%. Complete results are expected by the end of April 2017.

During the school-based SCH/STH MDA in October 2016, 3 cases of SAE were reported involving two 8-year old children and a 16-year old. All three cases ingested the recommended dose of PZQ and Albendazole for their height and the medicines were administered by their respective school class teachers. One of the 8-year old children was diagnosed with Respiratory Distress and the other diagnosed with Angioedema, while the 16-year old was diagnosed with Acute Renal Failure. In all cases, the diagnosis was considered secondary to ingestion of drugs administered in school. All children were admitted in hospital and discharged after recovery.

Niger
The first MDA campaign began in January 2017 in all five health districts in Niamey region, only for SCH and STH treatment (PZQ/Albendazole). Diffa region treated for LF, Trachoma, and SCH, with two of the districts (Mainé Soroa and N'Guigmi) treating for Trachoma and LF. In Dosso region, two districts were treated for SCH/STH only (Boboye and Dosso) and one district (Gaya) was treated for SCH and LF. The campaign in Tillabéri region was split between support from END in Africa and Schistosomiasis Control Initiative (SCI). Of the six districts in this region, Tillabéri, Say, Téra and Kollo receive USAID funding and two (Ouallam and Filingué) receive SCI funding. The SCI/RISEAL supported health districts are only treated for SCH/STH. Coverage results are not available yet.

MDA lessons learned during this reporting period included the efficiency of splitting up the MDA campaigns into two phases (each consisting of 4 regions). This move helped to overcome issues of enormous logistical burden on all actors and delay of the entire campaign until all drug arrived in-country. In addition, diving the campaign into two phases increases the available central-level personnel to provide oversight to each region. Splitting the campaign into two phases enables 4 persons to oversee each region, rather than just two. Given the large geographical size of the country, this will enable them to cover more territory.

In addition, the practice of independent monitoring for several years has enabled several issues to be detected during the campaign and are resolved in a timely manner. Independent monitors signal to health center heads if certain populations have not been reached; these health center heads then send CDDs to those zones to distribute the medications. Where drug shortages are discovered, the health center heads arrange to have additional drug shipped to that areas. In case of poor social mobilization (here, referring to public criers and female community health workers who have not been able to transmit messages everywhere or correctly), this is reviewed during the MDA evaluation to determine whether capacity-building is required. And for incorrect dosing, MDA training for CDDs focused more on role play this year, rather than theory.

Sierra Leone

During the reporting period, SCH MDA in 7 HDs was conducted October 12–19, 2016 with funds from END in Africa. The NTDP reports show a total of 1,038,783 (SAC: 422,010 and HRA: 616,773) out of 1,282,075 persons targeted were treated with PZQ, with a program coverage of 81%. The IM results showed 8,965 out of 10,800 persons interviewed at both household and community locations recalled taking PZQ with a coverage of 83%. There was no significant difference in IM results versus NTDP reported coverage.

The SCH MDA was scheduled for the final quarter of FY16. However, due to the rainy season and the closure of schools, it was conducted in October 2016. MDA data has been updated in the FY16 workbooks, and the workbooks previously submitted to FHI 360.

MDA lessons learned highlight the importance of social mobilization messaging and advocacy efforts. Intensive use of community radios, town criers and the airing of jingles several days prior to and during the MDA helped to keep coverage high. No district fell below the WHO recommended epidemiological coverage threshold during the FY16 SCH MDA. In addition, the IM conducted during the MDA has been very influential in improving the final MDA coverage.

Togo

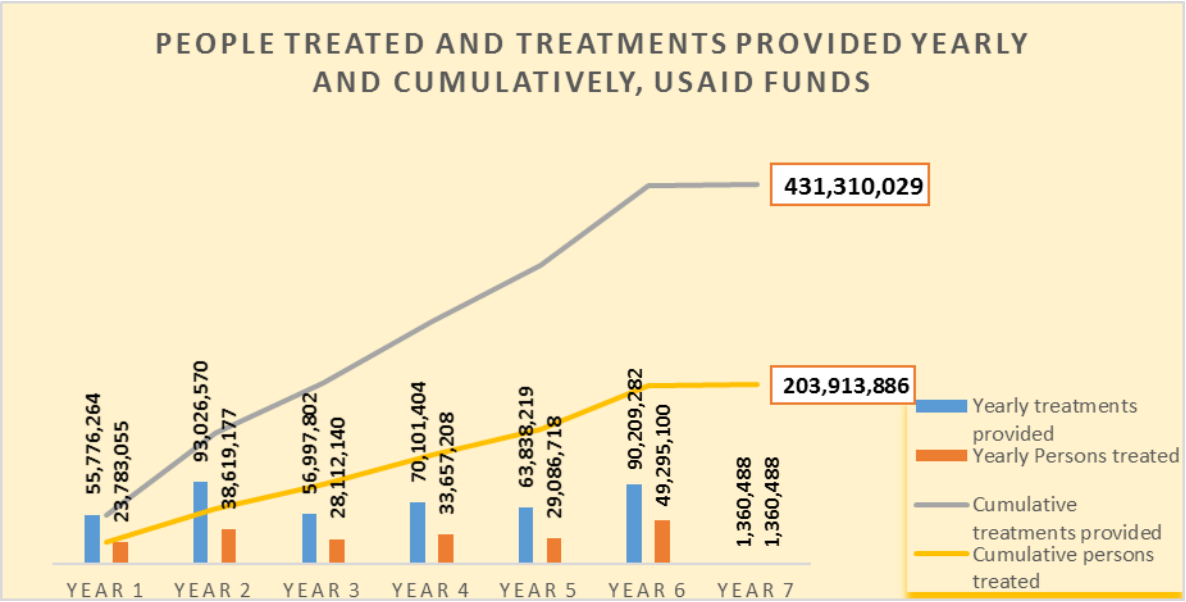
The December 2016 MDA was implemented in six districts with high STH prevalence, 15 districts with high onchocerciasis prevalence, and sub-districts within 21 districts with high schistosomiasis prevalence. The data forms have been collected, but have not yet been completely entered or analyzed.

An SAE was reported on December 13, 2016 and was investigated. The individual was a healthy 31-year-old driver who took three PZQ tablets that were left for him by a CDD. He was hospitalized for eight days with chills, headache, back pain, vomiting, and abdominal pain. He also had some

periods of facial paralysis. He recovered fully from this event. The investigation team concluded that this was an SAE of unknown cause. The team investigating the SAE also determined that the proportion of consultations at the hospital for complaints like those of the index case was not significantly higher during the MDA than during the preceding month, so this SAE appeared to be an isolated case due to this individual's idiosyncratic reaction, and not representative of a broader problem with the medication itself.

The graph below provides the total number of people treated and the number of treatments provided since the inception of the END in Africa project, by year and cumulatively.

Figure 1: Annual and Cumulative Treatments



As of the reporting period, the cumulative number of people treated for at least one NTD through END in Africa (USAID Funds) is 203,913,886 and the cumulative number of treatments provided is 431,310,029. All available FY17 MDA data in above graph is from Burkina Faso (oncho and SCH), hence the trend of number of people treated and cumulative number of treatments is stagnant. All countries have planned most of their MDAs in the next six months and complete results will be available in next reporting period.

Impact Assessment

Disease-specific assessments (DSAs) conducted during the first half of FY17 included: Pre-TAS and TAS; both Trachoma surveillance and impact assessment surveys; and SCH sentinel sites surveys.

Burkina Faso

The NTDCP conducted TAS and Pre-TAS surveys. Results from the TAS 2 and TAS 3 post-MDA surveys reinforced that LF transmission has been interrupted and there is no need to resume MDA in the districts surveyed. For TAS 2 in the Centre-Ouest evaluation unit (EU), there were 0 positives/1,785 examined; in the Centre-Nord, 2/1,835. For TAS 3, 0/1,850 and 0/1,644 in the

Hauts Bassins and Cascades EUs, respectively. These data will also be used to populate Burkina Faso's eventual elimination dossier for LF.

In the context of LF elimination, a passive surveillance plan has been implemented in the districts that completed TAS 3 and certain regions were evaluated in this regard. Passive surveillance is being implemented in the Cascades, North, and Hauts Bassins regional health directorates, which have successfully completed TAS 3. In these three regions, the two supervisions conducted by the NTDCP in FY16 revealed the activity had been carried out properly and no positive cases were found. However, surveillance activities in the Boucle du Mouhoun, Centre, Plateau Central, Centre-Nord, Sahel, and Centre-Ouest regions have not yet begun because of a lack of reagents.

In addition, during this half-year period and in FY16, trachoma surveillance surveys were conducted in seven districts for the first time. Results from the trachoma surveillance surveys ensured the NTDCP that there has not been a resurgence of trachoma in the districts surveyed: district-level prevalence among children aged 1-9 years is as follows: Banfora= 1.06%; Do= 1.20%; Lena= 1.07%; Boulmiougou= 1.68%; Ziniaré= 0.79%; Zorgho= 1.24%; Boussé= 1.74%). These data will be used in Burkina Faso's elimination dossier to substantiate its eventual claim of eliminating trachoma as a public health problem.

Trachoma impact surveys are scheduled to begin in March 2017 for the 19 districts that held the MDA in FY16. These surveys will indicate whether any further MDA is required for trachoma in Burkina Faso.

Cote d'Ivoire

LF sentinel site survey was conducted from February 1–3, 2017 in 12 health districts (Biankouma, Bouaké Sud, Boundiali, Dabou, Danané, Ferkéssédougou, Korhogo, M'Bahiakro, Ouangolodougou, Man, Tengréla, Touba). FTS kits were used to detect antigen of the adult *Wuchereria bancrofti* worm from blood collected during the day and by using detection of microfilariae of the *W. bancrofti* through thick blood films prepared using blood collected between 22:00 and 02:00 hours. Both methods were used to determine the LF prevalence in the population and participants of both studies included those within sentinel sites that were 5 years and above. Baseline data is required pre-treatment or before LF MDA is conducted in these 12 districts as these data will be used for comparison to monitor impact of MDAs on the LF situation in these districts.

An Onchocerciasis epidemiology surveillance was performed January–March 2017 in 60 villages from 6 districts (Akoupe, Bouafle, Bocanda, Dimbokro, Mankono, Odienne). A variety of tests was used for the surveillance – Skin SNIP, OV-16 rapid test, and palpation of nodes. The surveillance results are not yet available.

Ghana

The NTDP conducted pre-TAS in 9 LF endemic districts in February-March 2017 – Sunyani West, Sunyani Municipal, Bole, Nzema East, Ahanta West, Ellembele, West Gonja, North Gonja, Sawla-Tulna-Kalba. FTS was used instead of the night blood survey and microscopy. However, night blood samples were collected from persons testing positive for FTS for microscopy examination to

confirm presence of microfilaria as an indication of active infection.

TAS using FTS was conducted in 9 LF endemic districts grouped into 3 evaluations units – Bawku West, Bolgatanga, Bongo, Talensi, Daffiama-Bussie-Issa, Nadowli-Kaleo, Wa Municipal, Lambussie-Karni, Nandom. Seven out of the 9 districts conducted TAS 2 and the remaining 2 conducted TAS 1. Preliminary results indicate that all 9 districts passed the TAS. The results will be reviewed and confirmed after the NTDP convenes to discuss the results.

Niger

LF Pre-TAS was conducted in September 2016 in 11 districts (Aguié, Tessaoua, Madarounfa, Mayahi, Bouza, Keita, Konni, Illéla, Tahoua, Tchintabaraden and Gaya). Some health districts in the Tahoua and Maradi regions had previously conducted (and failed) TAS 1 (Aguié, Bouza, Keita, Tahoua, Illéla and Konni) or Pre-TAS (Tessaoua, Madarounfa, Mayahi and Tchintabaraden) evaluations. The Gaya health district conducted its first evaluation (Pre-TAS). After these failures, the MDA continued for another three years in these districts. Therefore, the Pre-TAS was conducted again in FY17 to assess the impact of the treatment provided in these districts and determine if the districts are eligible for TAS 1.

The number of individuals surveyed for the pre-TAS ranged from 300 – 351 per health district, with an average of 318 individuals surveyed per site. The target populations for nocturnal microfilaremia included five years and above. The survey was conducted by laboratory assistants (sampling) and other experienced staff, including nurses and communications experts (awareness-raising). For the pre-TAS, those health districts with prevalence below 1% will move to the TAS 1 in the following year. Those health districts that fail the TAS 1 will need additional treatment rounds before being evaluated again.

Of the districts planned and accepted by the Regional Peer Review Group (RPRG) for the FY16 TAS 1 (8/9 evaluation units submitted) (Gouré, Matamèye, Magaria, Mirriah, Zinder, Diffa, Maine Soroa and N'Guigmi), only Gouré was surveyed in October 2016, given the need to finalize FY16 activities by the end of October 2016. There were 15 positive cases over 1,559 children sampled, which was below the critical cut-off threshold of 18. Therefore, the district will stop MDA and start surveillance. Overall, now 13/44 health districts have stopped the MDA for LF. The survey was postponed to FY17 for the other health districts (Matamèye, Magaria, Mirriah, Zinder, Diffa, Maine Soroa and N'Guigmi) and are planned to start in March 2017, though they have not yet at the time of this report.

On the Trachoma front, PNSO had planned to conduct trachoma impact surveys in seven health districts and seven trachoma surveillance surveys in FY16. Each survey was conducted in four districts in October 2016 (FY17) (impact survey: Magaria, Matamèye, Gouré and Zinder Commune and surveillance survey: Kollo, Boboye, Dosso and Illéla), given the fact that the surveys could not all be completed by the end of October 2016. Following discussions with HKI headquarters, the surveys were stopped after those four districts and the remaining three of each were postponed to FY17. However, the program is currently completing the remaining three surveys (Aguié, Bilma, Tchirozérine (trachoma impact surveys); Say, Ouallam Filingué (surveillance surveys).

The PNLBG conducted sentinel site surveys in October 2016 in 17 sentinel sites. (Note: PNLBG changed the Boboye health district sentinel site from Falmado to the village of Bongou Koukou.) Both forms of SCH (S. Mansoni and S. Haematobium) are endemic in Niger and both urine and stool samples were collected from children 6-8 years of age. Results are not yet available. Based on the intensity of SCH prevalence, the results will be used to determine the number of MDA rounds needed before future re-assessment.

Other M&E activities

The integrated coverage survey that had been planned following the FY16 MDA, which planned to collect coverage data from the three NTD programs was not conducted. This activity was not reprogrammed in FY17, given that the NTDP was unable to organize the FY16 activity on time, and the NTDP preferred to use their available budget for needed DSA.

As part of post-treatment surveillance, this involves occasional surveys, implementing a behavior change communication system with information, education and communication materials focused on NTD prevention, measures to improve individual and bodily hygiene and environmental health, vector control activities, operational research, and program staff capacity-building. While both the PNDO/EFL and PNSO have developed post-endemic surveillance plans, they have not yet been validated and at present, neither program has a partner to support implementation.

Sierra Leone

Pre-TAS in 6 HDs, TAS 1 for LF in 8 HDs, and onchocerciasis transmission assessments in 8 HDs are being conducted in this reporting period, but results are not yet available.

Togo

The Togo NTDP did not conduct any impact assessments during the period under review.

Three countries (Burkina Faso, Niger, and Sierra Leone) noted challenges with M&E activities:

Challenges in Burkina Faso: The M&E challenges still involve delays in obtaining data and receiving incomplete data, particularly training data. Discrepancies in the MDA data between data from the NTDCP and the regional level. Thus, two data validation sessions were held between October 2–14, 2016 in Bobo Dioulasso and Ouagadougou. These validation meetings resulted in updates to the data from these two levels. The errors – related primarily to data entry – were corrected, providing a consolidated database at the NTDCP level.

The delay in conducting the MDAs impacted implementation of the M&E activities. MDAs were implemented later than originally planned due to delayed arrival of certain drugs, including Zithromax (delay due to global shortage of Zithromax), PZQ, and Tetracycline eye ointment (delay due to late receipt of correct paperwork from country to submit for USAID approval. Thus, the trachoma impact surveys were not held in FY16. This calls for strengthening the consultation among implementation actors, i.e. holding more frequent coordination meetings. To avoid this issue in FY17, HKI is working with the NTDCP to conduct the trachoma impact surveys in March 2017 prior to the scheduled MDA. This will give the NTDCP ample time to conduct any MDAs.

Challenges in Ghana: Late reporting of MDA results from some regions remains a key challenge.

Challenges in Niger: The main M&E challenges are attributed to three issues: use of differing population denominator since populations are not obtained from the national statistical bureau but from health center population estimates, which may be different from the statistical bureau's figures.

Additionally, data collection, management and control are very precarious in certain areas of the country that are prone to security uncertainty. Attacks carried out in certain areas (North Tahoua and Diffa region) impeded efforts to supervise the survey activities. END in Africa/HKI also notes that workers have problems obtaining data from insecure areas. For example, in the area north of Tillabéri, there are soldiers instead of MOH health workers in the CSI, this makes it difficult to obtain health information for these populations.

Lastly, campaign data collection materials are not archived adequately. Though supervisors have time and again requested health workers to develop a rational system for archiving various materials and data from prior MDA campaigns, these workers' mobility affects this process. It was recommended the health facilities set up an NTD-specific dossier to ensure traceability of information from the various campaigns conducted by each facility at each level of the health pyramid. This issue should be raised again at future meeting with the focal points (national, regional, health district and CSI directors), in collaboration with the MOH, to elicit other proposals.

Challenges in Sierra Leone: A major challenge at the various DHMTs continues to be the lack of operational vehicles to transport drugs to the various PHUs. Most of the vehicles supplied to the DHMTs are engaged in surveillance activities for post Ebola and other diseases, making it difficult to distribute drugs in a timely manner. To address these problems, motor bikes and boats were hired for MDA activities, to help the focal persons transport drugs where there was a shortage of vehicles. The vehicles purchased by USAID in FY16 are used for program supervision by NTDP national level staff.

Training

In this reporting period, a total of 34,532 people were trained to conduct and/or supervise MDAs and to perform M&E related activities. Training sessions were cascaded and organized mainly around MDA or DSA activities. Reported data shows 22,390 women and 12,142 men were trained in the first half of FY17. The number of trainees by category is presented in Table 15 of Appendix 1.

M&E Technical Assistance and Capacity Building

FHI 360 and partners continued to support the countries in developing sustainable NTDP M&E systems. During the reporting period, the END in Africa project continued to collaborate with NTD partners (Task Force for Global Health, WHO HQ, and RTI) to determine the way forward on post-MDA surveillance for LF and Trachoma, based on current WHO guidelines for the two diseases and experiences in post-MDA surveillance in the 6 END in Africa countries. TA was provided for routine activities and requested ad hoc activities, based on country needs.

The only technical assistance provided by the END in Africa M&E Specialist during the period under review was to Burkina in February 2017 on Data Quality Assessment (DQA). Data quality was evaluated for two regions (Sud-Ouest and Centre-Sud) to:

- Verify the quality of the data transmitted to the various sites sampled;
- Assess the capacity of the NTD data management systems at the various levels to gather, document and report quality data; and
- Identify the areas of the NTD data management system that need improvement.

The World Bank supported this activity, but technical assistance was provided by the END in Africa M&E Advisor. The DQA revealed several strengths, including satisfactory reporting for MDAs, the availability of data collection tools at all levels of the health system, establishment of NTD data management guidelines, and human resources dedicated to data management. Some areas that require improvement include: archiving of tools; updating the Integrated NTD Database, enforcing the use of up-to-date data collection frameworks, timeliness in reporting, and ensuring data collection registers are checked sufficiently.

Knowledge Management

END in Africa recognizes the importance of keeping the broader NTD and global health community informed about the project's and countries' progress toward eliminating and controlling NTDs. As END in Africa project lead, FHI360 carefully documents and shares information regularly through multiple formats, in addition to supporting the USAID NTD communications team as well as cultivating partnerships in the NTD and related communities. Specifically, the team:

1. Informs countries, partners, donors and colleagues in the NTD community about the project's progress and impact to date;
2. Creates or contributes to dialogue among the NTD community on shared challenges, issues and concerns;
3. Showcases cost efficiencies, improved equity in healthcare and the public health impact of NTD control efforts and advocates for the expansion of partnerships and funding for such efforts;
4. Multiplies the project's impact by informing NTD control efforts in non-END in Africa countries that are still struggling to control NTD transmission; and
5. Improves awareness about NTDs among global health professionals and the public.

Major activities completed during the first half of FY17:

- Updated content on the Approach, Progress, and Impact sections of the END in Africa website. The website is the END in Africa project's most important knowledge management and communication tool. It showcases the project's progress, results, success stories, lessons learned and impact. Posted all annual work plans, semi-annual reports and other key documents on the website.
- Coordinated, researched, wrote, edited, produced and published 6 success stories, articles or blog pieces. These included:
    1. A Reflection on the USAID NTD Program's 10th Anniversary from the Perspective of END in Africa

2. Organizational Capacity: A Building Block for Sustainability for National NTD Programs
3. END in Africa Countries Forge Ahead with New End-Game Activities in FY 2017
4. Preparing for Post-Elimination while Avoiding Further Neglect
5. Cross-Border Collaboration: Synchronizing Treatment for NTDs in West Africa
6. A Roadmap for Taking Togo off the List of Trachoma-Endemic Countries

- Composed, posted and tracked tweets and tweet conversations on the END in Africa Twitter account to broaden the reach of END in Africa's success stories, progress and news; raise awareness about project results, best practices, and lessons learned; engage and strengthen alliances with partners and colleagues in the NTD community; and increase engagement and information exchange with the public and the NTD community.
- Between October 1, 2016 and March 14, 2017, the END in Africa website had 961 unique visitors who viewed a total of 2,171 pages. Of the visitors, 76% were first-time visitors; the remaining 24% were repeat visits from people who had visited the website previously at least once.
- END in Africa's influence in the Twittersphere has grown by 9% between October 1, 2016 and March 15, 2017, increasing from 519 to 566 followers. The project has been using the @ENDinAfrica Twitter feed strategically to increase awareness and engage NTD partners and related communities on issues involving NTD control and elimination. Over this period, @ENDinAfrica was mentioned 13 times in tweets by other organizations and END in Africa tweets were retweeted 11 times by others.
- Coordinated with sub-grantees to obtain new photos and videos and updated END in Africa's SharePoint site with photos and KM-related content.
- Continued work to broaden and maintain collaborative partnerships with organizations in the broader NTD and knowledge management communities, and shared and exchanged information, publications, data, photos or other knowledge products with the same. Worked with the US CDC, HKI's MMDP project team, Sightsavers, the Carter Center, Sabin Vaccine Institute, RTI, IDA Foundation, K4Health Idea Lab, and Merck to share NTD innovations and solutions.
- Provided editorial and quality control services to END in Africa partners and sub grantees on various publications to improve product quality and ensure compliance with USAID publication guidelines and the END in Africa Branding and Marking Plan. Worked with Deloitte to provide content, feedback, editorial and branding support, and quality control services for the NTD Program Sustainability Handbook. Also, FHI 360 took on responsibility for producing and disseminating the content of the Handbook.
- Updated and expanded END in Africa's contact and information dissemination database; used this database to disseminate key project success stories and articles of interest throughout the semester.
- Continued to coordinate, support and maintain END in Africa article publication schedule and tracking tool. The tool ensures timely, well-researched, effective dissemination of information on the successes of project implementation in the beneficiary countries, including success stories, lessons learned and best practices. It is used to track publications submitted in peer-reviewed journals, as well as technical articles and blog posts. More specifically, the project team is using the tool to identify, schedule and track the progress

of articles as they move from the conception stage to final publication; it is particularly useful for ensuring the integrity and accuracy of articles and publications requiring input, collaboration and approval from multiple parties.

- Contributed to group discussions on the NTD Communicators Google Group, KM4DEV, HIPNET and the Infectious Diseases listserv. These groups aim to increase collaboration among knowledge and communications managers through information and network sharing, cross-promotions, and creation of synergies.
- Worked with staff from RTI, the Sabin Vaccine Institute, the Carter Center, HKI's MMDP project, Merck, the Trachoma Coalition, and other organizations to expand collaboration and joint communication efforts.
- Worked with ENVISION to promote ENVISION's NTD webinar series and stories and content on ENVISION's NTD website, via meetings/presentations, participation in a webinar, and social media.
- Worked with FHI 360's Infectious Diseases Division Director and staff from the office of the CEO and Corporate Communications to disseminate information on and stories about END in Africa's work on NTD control and elimination as well as its 6 country brochures at international meetings such as the ASTMH's annual meeting, at Duke University, and on FHI 360's corporate website and corporate videos. END in Africa's documentary video on trachoma in Ghana (produced in July 2016) was shown and very well received at this year's ASTMH meeting, as well.
- Disseminated END in Africa's work and successes internally in FHI 360 by contributing content for the first issue of the organization's Global Health, Population and Nutrition department e-newsletter. END in Africa is also prominent in the departmental slideshow, a primary internal and external outreach tool.

Sustainability Handbook publication

During this period, we finalized the Sustainability Handbook, which is a reference for all country NTDP teams and their organizations to use for sustainability planning. It was designed to help influence NTDP teams in how they are thinking about the trajectory of their programs as they work towards elimination and control targets and how they are sustaining the impact in a post-elimination environment. The handbook's sections are organized by building block of the sustainability planning framework: financial analysis and strategy, advocacy and communications, strategic social partnerships, and organizational capacity.

Each building block section includes the following components, which serve to familiarize the reader with the terms, approaches, and tools required to realize more sustainable programs.

- Key terms and concepts are defined in clear language to avoid using unfamiliar jargon.
- Step-by-step instructions are provided with recommended approaches for acting,

including examples and illustrative processes.

- Supplementary tools and processes are included to provide additional approaches or resources.
- Key takeaway messages summarize the core messages and highlight leading practices.
- Practical exercises offer opportunities to apply concepts and approaches presented through activities and templates.
- The handbook and executive summary will be published by April 2017 and will be available online.

Blog post publications

During this reporting period, Deloitte created three blog posts. Two have focused on the Sustainability Framework- Advocacy and Communications and Organizational Capacity- and one on post-elimination planning. These blog posts have been well received and published by END in Africa, amplifying the visibility. Our team will continue to provide blog postings on thought provoking and relevant topics.

The post on Advocacy and Communications presents key principles to better articulate program value and advance program objectives. These principles include: ensuring that NTDP goals and advocacy efforts align; identifying key change agents that must be engaged; crafting messages that speak to change agents' values; and identifying staff to conduct advocacy and strengthen their capabilities. http://endinafrica.org/news/enabling-sustainability-through-advocacy-key-principles-to-better-articulate-program-value-and-advance-program-objectives/

The November 2016 posting on Organizational Capacity was the last article on the four building blocks of the Sustainability Framework. By building organizational capacity, we provide the NTDP with enabling functions to effectively carry out the financial analysis, strategy, partnership, advocacy, and communications activities. The article introduces the maturity model, one tool that can support NTDPs as they undergo efforts to improve organizational capacity. Strong organizational capacity within the NTDPs can create a culture of performance focused on achieving sustainable programming. http://endinafrica.org/news/organizational-capacity-a-building-block-for-sustainability-for-national-ntd-programs/

The latest blog posted in January 2017, was entitled "Preparing for Post-Elimination while Avoiding Further Neglect." NTDPs have made significant achievements in the last decade and a few countries have even eliminated diseases such as lymphatic filariasis, trachoma, and onchocerciasis. Despite such progress, many countries are not yet prepared to sustain the work of the NTDPs after NTDs have been eliminated. As countries ready themselves for post-elimination, there are several activities that need to be thought through and tailored to the specific national context. Activities needed for a successful post-elimination transition, discussed in more detail in the article, include: program implementation, policy advocacy, advocacy and partnership interventions, and M&E. http://endinafrica.org/news/preparing-for-post-elimination-while-avoiding-further-neglect/

Table 2: Suggested Topics for Publications in FY2017

No.	Suggested Title	Summary	Type of publication (Peer reviewed paper-PRP; Article-A; Blog-B)			Time frame	Comments
			PRP	A	B		
1.	**A Reflection on the USAID NTD Program's 10th Anniversary from the Perspective of END in Africa**	Highlights of END in Africa's contributions to USAID's NTD Program portfolio as it marks its 10th anniversary			Yes	Oct 2016	Deloitte and Kathy
2.	**Organizational Capacity: A Building Block for Sustainability for National NTD Programs**	Series of 3–4 blog posts from Deloitte on the main activities required for NTD program sustainability (advocacy, strategic partnerships, etc.)			Yes	Nov 2016	JBK, Kathy, and Egide
3.	**END in Africa Countries Forge Ahead with New End-Game Activities in FY 2017**	Summary of the main activities in the FY17 work plan			Yes	Dec 2016	JBK, Kathy and Egide
4.	**Preparing for Post-Elimination while Avoiding Further Neglect**	Series of 3–4 blog posts from Deloitte on the main activities required for NTD program sustainability (advocacy, strategic partnerships, local resource mobilization, etc.)			Yes	Jan 2017	Deloitte and Kathy
5.	**Cross-Border Collaboration: Synchronizing Treatment for NTDs in West Africa**	This will be an article that will disseminate conclusions drawn at the Oct 2016 cross-border collaboration meeting in Ghana.			Yes	Feb 2017	JBK and Kathy
6.	**Trachoma situation in Togo – how can Togo be taken off the list of trachoma-endemic countries**	An update on the trachoma situation in Togo and remaining barriers to disease elimination			Yes	Mar 2017	JBK, Kathy, and Egide
7.	Progress on NTDs in Cote d'Ivoire	An update on END in Africa's activities in Cote d'Ivoire in the first year (or 18 months) of operations in the country			Yes	Apr 2017	Virginie, JBK, Kathy, and Egide
8.	Elements to consider for NTD Program sustainability	Series of 3–4 blog posts from Deloitte on the main activities required for NTD program sustainability (advocacy, strategic partnerships, etc.)			Yes	May 2017	Deloitte and Kathy
9.	Surveillance framework for trachoma and LF	This will be a summary on the surveillance framework that will be developed for the 2 NTDs			Yes	Jun 2017	Molly, JBK, Kathy and Egide
10.	Implementing TAS in Sierra Leone	A report of the TA that will be provided to the NTDP for the TAS	Yes		Yes	Jul 2017	JBK, Kathy, and Egide
11.	Progress on NTDs in Burkina Faso	An update on progress to date on NTD control and elimination in the country			Yes	Aug 2017	JBK, Kathy, and Egide
12.	Progress on NTDs in Niger	An update on progress to date on NTD control and elimination in the country			Yes	Sep 2017	JBK, Kathy, and Egide
13.	Witnessing mass drug administration for NTDs in END in Africa implementing countries	A report on field visit			Yes	Oct 2017	JBK and Kathy
14.	END in Africa report card for FY2017	Summary of activities and impact during the year			Yes	Nov 2017	JBK, Kathy, and Egide

**Please note some of the topics listed here can also be changed/replaced based on developments within the project. The titles can also be modified based on the final content of the publication.*

Major Activities for the Next Six Months

Program Management and Implementation (FHI 360):

- Continue to provide technical support and leadership to END in Africa sub-grantees and NTDPs in program implementation countries, including design, development, planning, implementation, execution, capacity-building, and evaluation of NTD projects and programs at the country and regional levels.
- The project technical advisor will provide technical assistance to address requests from the NTDPs in the END in Africa implementing countries in FY17.
- Continue to improve coordination and collaboration with other organizations and agencies involved in the control/elimination of the 5 NTDs targeted by the END in Africa project.
- Continue to work with sub-grantees, NTDPs and colleagues of the END in Africa consortium to document program successes, best practices and lessons learned, and to improve visibility of the END in Africa project.
- Continue to support general coordination of the END in Africa project by ensuring the NTDPs in the 6 END in Africa implementing countries submit requests for impact assessment surveys (pre-TAS, TAS, trachoma impact assessment) to the WHO NTD RPRG for approval before the surveys are conducted. We will also ensure reports from these surveys are submitted to the NTD RPRG for review, acceptance and guidance on the way forward.
- Convene the 2017 END in Africa Partners Meeting in Accra, Ghana April 26–27, 2017. This year's meeting will focus on sustaining achievements, program sustainability and local financing, and STH/SCH transition strategies for the portfolio countries.

Financial Management and Capacity Building (Deloitte):
Anticipated priorities for the next six months (April 1, 2017–September 30, 2017) listed by country:

Cote d'Ivoire

- Complete the TIPAC data analysis and develop a visualization of the results
- Mentor identified NTDP team members to build skills in data analysis and reporting
- Support the planning and delivery of the advocacy workshop
- Provide technical support and develop an advocacy action plan to prepare advocacy activities, draft messaging, and business cases

Ghana

- Mentor program managers on reporting, data analytics, and performance management focused on practical application and decision-making
- Work with the NTDP and PPMED/Strategic Social Partnership Unit to execute a partnerships action plan
- Identify key partnership opportunities for the NTDP and continue to mentor and train on key partnership enabling skills for the NTDP and the SSP Unit within the PPMED
- Support program performance management and planning through financial accountability, governance, and PMIs

Togo

- Finalize the advocacy strategy and implement the advocacy action plan

- Mentor and support the NDTP to build business cases and develop proposals for partnerships with the private sector
- Provide coaching on TIPAC analysis and financial management capacity development
- Standardize use of TIPAC data to support the finance strategy and advocacy
- Support the implementation of Togo NTDP's finance strategy through the development of a resource mobilization plan to address funding gaps

Additional anticipated priorities/activities for the next six months (April 1, 2017–September 30, 2017) are listed below by implementing partner.

Burkina Faso (HKI)

- MDAs:
  - Conduct MDAs for SCH, trachoma (if needed), onchocerciasis (round 2), LF, and STH MDAs (STH MDA combined either with LF or SCH)
  - Hold training sessions for MDA implementation at all levels (central level, regional health directorate, HD, CSPS, community distributor)
  - Conduct advocacy and social mobilization activities before and during the MDAs
- Monitoring & Evaluation:
  - Post-CDTI coverage survey, trachoma impact surveys, pre-TAS, TAS I, TAS 2 +STH, and schistosomiasis + STH surveys at sentinel sites
- Meetings/workshops (technical)
  - Organize a workshop to develop an STH-SCH transition plan
  - FY18 workplanning session
- Provide technical assistance
  - Trachoma elimination plan
  - Support for the onchocerciasis technical committee

Niger (HKI)

- MDAs:
  - Official launch of the FY17 MDA campaign
  - Phase 2 of the FY17 MDA in Agadez, Tahoua, Maradi and Zinder
  - National and regional MDA evaluations
  - Microplanning workshop for the FY18 MDA
  - FY17 post-campaign physical inventory
- Monitoring & Evaluation:
  - TAS 1 survey (carryover activity from FY16) in 7 HDs and FY17 TAS 1 survey in Tahoua HD
  - Mid-term evaluation of mf in Arlit health district
  - Training on Trachoma Survey Methodology and data collection tablets for trachoma
  - Trachoma prevalence survey (carryover activity from FY16) in 3 HDs
  - Trachoma surveillance surveys (carryover activity from FY16) in 3 HDs
  - FY17 trachoma impact surveys in Mayahi, and Guidan Roumdji
  - FY17 trachoma surveillance surveys in Tera and Tillaberi.
- Meetings:
  - 2nd meeting of the onchocerciasis elimination committee
  - FY18 work planning session
  - Two NTD coordination meetings

Sierra Leone (HKI)

- MDAs:
  - LF-STH in the WA – March 2017
  - SCH in 7 HDs – May 2017
  - LF-onchocerciasis-STH in 12 HDs – July 2017
- Monitoring & Evaluation:
  - Finish the Pre-TAS in 6 HDs in March 2017
  - TAS 1 and Onchocerciasis transmission assessments in 8 HDs – March and April 2017
  - DQA training and implementation – September 2017
- Meetings:
  - NTD and STH Task Force Meetings – April 2017
  - FY18 work planning session – July 2017
- Update TIPAC and attend training on resource mobilization skills – August 2017

Cote d'Ivoire (FHI 360)

- MDAs:
  - Conduct capacity building activities for all MDA actors – April 2017
  - Conduct advocacy and social mobilization activities for MDA – April/May 2017
  - Official launch of the FY17 MDA campaign – May 2017
  - Conduct MDAs for LF/oncho in 56 HDs, SCH in 3 HDs, and trachoma in 5 HDs – May 2017
- Monitoring & Evaluation:
  - Supervision of capacity building sessions and MDAs – April/May
  - Conduct trachoma mapping in 7 HDs – March/April 2017
  - Train technicians and implement TIS in Bouna HD – April/May 2017
  - DQA for trachoma and LF/oncho – June/July 2017
- Meetings:
  - Validation of post-MDA data for LF/oncho – April 2017
  - Debrief on Bouna TIS – June 2017
  - FY18 work planning session – June 2017
  - Annual review meeting on LF/oncho/SCH/STH activities – September 2017

Ghana (FHI 360)

- MDAs:
  - Integrated LF/oncho MDA in 100 districts
  - Synchronize oncho MDA in endemic district along common borders with Togo, Cote d'Ivoire and Burkina Faso
- Monitoring & Evaluation:
  - Onchocerciasis assessment in 154 districts to determine the status of oncho in the country using a combination of skin snip test, Ov16 rapid test, and OV16 ELISA
  - SCH assessment in 2 districts in the catchment area of the recently constructed Bui Hydroelectric dam using Urine Filtration and Kato Katz methods
  - Case search to identify estimated TT backlog for corrective surgery followed by a TT only survey in the Yendi district
- Meetings:

    - Advocacy meetings in 8 regions to communicate – implications for stopping treatment for LF in 81 districts; timelines for TAS after stopping treatment as a post-treatment strategy and how to return all unused medicines from communities to the Regional or Central Medical Stores
    - FY18 work planning session
- Complete WHO trachoma elimination validation template for submission to WHO in May 2017

Togo (HDI)

- MDAs:
    - Receive all medications; Deliver medications and materials to all districts; Finalize albendazole application
    - Conduct training of people involved in MDA: Accountants, supervisors, nurses, and CDDs
    - Implement social mobilization activities
    - Implement May 2017 MDA and begin preparations for October 2017 MDA
- Monitoring & Evaluation:
    - Onchocerciasis stop-MDA assessment in Maritime region
    - Onchocerciasis impact assessment in northern three districts
    - Conduct regional desk review of trachoma data; analyze all available trachoma data and determine any remaining trachoma mapping needs
    - Collect, enter, and analyze data from May 2017 MDA; Generate report of May 2017 MDA
    - Disseminate results of May 2017 MDA, conduct coverage validation survey
- Meetings (technical):
    - NTD Summit in Geneva, Switzerland and NTD NGDO Network meeting in Dakar, Senegal
    - END in Africa Partners meeting in Accra, Ghana
    - FY18 work planning session

Monitoring & Evaluation:

- Coordinate data management, documentation and dissemination within the END in Africa project. The M&E Advisor will coordinate the review of project data through a continuous process that involves USAID, ENVISION, sub grantees, and national NTDPs. NTD data Consistency and accuracy will be assessed considering reporting deadlines.
- Support general capacity building efforts within countries by directly providing TA to countries on M&E-related activities per approved workplans, as agreed with USAID.
- Train and advise sub grantees and national NTDPs on the use of M&E tools and implementation of M&E processes, including indicators, data collection techniques and methodologies, data collection and analysis, and reporting protocol.
- Monitor project performance including NTD program coverage and NTD program progress toward stopping district and/or sub-district MDA.
- Participate in supervision of MDA campaigns in each of the 6 END in Africa implementing countries.
- Participate in the writing and reviewing of the END in Africa Annual workplan for FY18 and the second semi-annual report for FY17.

Table 3

Travel Plans for Fiscal Year 2017

Traveler	From	To	# Trips	Duration	Month	Purpose
Bolivar Pou, Project Director	W/DC	Burkina S Leone Ghana Ivory Coast	6	1 week each	May June July	FY2017 Country work planning sessions with key stakeholders.
Egide Ndayishimye, M&E Specialist	Ghana	Burkina Niger Togo S Leone Ivory Coast	5	1 week	May June July	Participate as NTD M&E technical resource in the development of country work plans.
Joseph Koroma Assoc. Technical Director	Ghana	Burkina Niger Togo S Leone Ivory Coast	5	1 week	May June July	Participate as NTD technical resource in the development of country work plans.
Bolivar Pou, Project Director	W/DC	Ghana	1	1 week	April	Semi-annual review. Partners Meeting.
Bolivar Pou Project Director	W/DC	Ivory Coast Ghana S Leone	3	1 week each	TBD	Field trip for monitoring project implementation.
Bolivar Pou, Project Director	W/DC	Ghana	1	2 weeks	August	END in Africa Work plan 2017
Yudaya Mawanda, Senior Program Officer	W/DC	Ghana Ivory Coast	2	2 weeks in each country	April August	Preparations for END in Africa Partners Meeting Provide operations management support
Egide Ndayishimye, M&E Specialist	Ghana	Geneva W/DC Niger Burkina S Leone Ivory Coast	10	TBD	TBD	Capacity building on DQA tool & workbooks management prior to semiannual reports submission to ensure data quality and timely reporting. Technical meetings in Washington, DC. International NTD events in coordination with USAID. Special emphasis will be placed on strengthening the program in Niger.
TBD/Project Management Specialist Deloitte	W/DC	Ivory Coast Togo	2	1 week in each country	TBD	Continue support for TIPAC in Ivory Coast. In Togo and Ivory Coast: Mentoring on Project Management. Resources mobilization.
Kimberly Switlick-Prose Resources Mobilization Deloitte	W/DC	Ghana	1	1 week in each country	TBD	Continue capacity building on Resources Mobilization in Ghana.
Joseph Koroma Associate Technical Director	Ghana	W/DC WHO Niger Burkina Togo S Leone Ivory Coast	10	TBD	TBD	Provide technical support for projects implementation. Technical meetings in Washington, DC. International NTD events in coordination with USAID.
MOH NTD Focal Points TBD	Ghana Burkina Niger Togo S Leone Ivory C	TBD	5	TBD	TBD	Sponsor NTD focal points in WHO AFRO meetings, trainings, International conferences, technical meetings, and workshops. USAID individual approval will be requested for each trip.

Traveler	From	To	# Trips	Duration	Month	Purpose
US-based short-term technical assistance (STTA) provider	W/DC	Togo Ghana Burkina Niger S Leone Ivory Coast	3	TBD	TBD	Short-term technical assistance per specific countries needs per MOH requests. This is a place holder for a pool of trips for STTA in response to country requests, upon USAID approval of each individual trip.

Appendices

Appendix 1: MDA Reporting of Integrated NTD Control

Table 7: Number of people treated, All funding, FY17 SAR1

NTD	Ghana	Niger	Sierra Leone	Togo	Burkina Faso	Côte d'Ivoire	Total treated FY16
LF	0	0	0	NA	0	0	0
Oncho	0	0	0	0	161,039	0	161,039
SCH	0	0	0	0	1,199,449	0	1,199,449
STH	0	0	0	0	0	0	0
Trachoma	NA	0	NA	NA	0	0	0
Treatments provided	**0**	**0**	**0**	**0**	**1,360,488**	**0**	**1,360,488**
Treated for at least one NTD	**0**	**0**	**0**	**0**	**1,360,488**	**0**	**1,360,488**

Table 8: Number of people treated through USAID funding, FY17 SAR1

NTD	Ghana	Niger	Sierra Leone	Togo	Burkina Faso	Côte d'Ivoire	Total treated FY16
LF	0	0	0	NA	0	0	0
Oncho	0	0	0	0	161,039	0	161,039
SCH	0	0	0	0	1,199,449	0	1,199,449
STH	0	0	0	0	0	0	0
Trachoma	NA	0	NA	NA	0	0	0
Treatments provided	**0**	**0**	**0**	**0**	**1,360,488**	**0**	**1,360,488**
Treated for at least one NTD	**0**	**0**	**0**	**0**	**1,360,488**	**0**	**1,360,488**

Table 9: Gender distribution: Percentage male treated over the females by NTD and by country, FY17 SAR1

Country	LF		Oncho		SCH		STH*		Trachoma	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Burkina Faso	0	0	49.12%	50.88%	48.03%	51.97%	0	0	0	0
Côte D'Ivoire	0	0	0	0	0	0	0	0	0	0
Ghana	0	0	0	0	0	0	N/A	N/A	N/A	N/A
Niger	0	0	0	0	0	0	0	0	0	0
Sierra Leone	0	0	0	0	0	0	0	0	NA	NA
Togo	N/A	N/A	0	0	0	0	N/A	N/A	NA	NA

Table 10: Number of people treated for at least one NTD, USAID funds, annually

ACCUULATIVE NUMBER TREATED, AS OF FY17 SAR1, USAID FUNDS

Country	2011	2012	2013	2014	2015	2016	2017	Accumulative
Burkina Faso	9,953,928	11,425,882	10,766,545	9,806,303	7,896,218	11,735,579	1,360,488	62,944,943
Côte d'Ivoire	N/A	N/A	N/A	N/A	N/A	14,729,251	0	14,729,251
Ghana	0	8,932,210	8,260,837	9,620,862	4,845,599	4,967,247	0	36,626,755
Niger	8,672,220	10,226,100	960,145	9,907,579	9,068,274	8,884,258	0	47,718,576
Sierra Leone	3,908,514	5,242,394	5,214,790	4,091,497	4,065,939	5,645,521	0	28,168,655
Togo	1,248,393	2,792,591	2,909,823	230,967	3,210,688	3,333,244	0	13,725,706
Total	**23,783,055**	**38,619,177**	**28,112,140**	**33,657,208**	**29,086,718**	**49,295,100**	**1,360,488**	**203,913,886**

Table 11: Accumulative Number Treated, as of FY17 SAR1, USAID Funds

ACCUMULATIVE NUMBER OF TREATMENTS PROVIDED, AS OF FY17 SAR1, USAID FUNDS

Country	2011	2012	2013	2014	2015	2016	2017	Accumulative numbers
Burkina Faso	20,842,690	24,460,183	20,094,365	19,815,380	15,988,314	26,990,829	1,360,488	129,552,249
Côte D'Ivoire	N/A	N/A	N/A	N/A	N/A	15,943,099	0	15,943,099
Ghana	0	20,315,518	14,712,196	14,681,359	5,492,502	5,388,492	0	60,590,067
Niger	22,417,876	28,004,828	1,822,325	24,523,339	24,920,461	20,281,191	0	121,970,020
Sierra Leone	10,263,686	14,754,384	14,670,706	10,850,359	10,774,071	14,000,546	0	75,313,752
Togo	2,252,012	5,491,657	5,698,210	230,967	6,662,871	7,605,125	0	27,940,842
Total	**55,776,264**	**93,026,570**	**56,997,802**	**70,101,404**	**63,838,219**	**90,209,282**	**1,360,488**	**431,310,029**

Table 12: Districts endemic at baseline and number of districts that stopped MDA, by NTD FY17 SAR1

Country	# Known endemic districts by September 2016				
	# Districts stopped PC (at least at district level for trachoma), by end FY17 SAR1				
	LF	Oncho	SCH	STH	Trachoma
Burkina Faso	70	70	70	70	48
	45	64	0	0	29
Côte d'Ivoire	73	67	80	82	9
	0	0	0	0	0
Ghana	98	85	216	216	37
	81	0	0	0	37
Niger	31	NA	41	41	35
	10	NA	0	0	22
Sierra Leone	14	12	12	14	NA
	0	0	0	0	NA
Togo	8	32	35	28	NA
	8	0	0	0	NA
Total	**294**	**266**	**454**	**451**	**129**
	144 (48.9%)	**0 (0%)**	**0 (0%)**	**0 (0%)**	**88 (68.21%)**

#s in **red are endemic districts and #s in **black** are districts that were endemic but have stopped treatment.*

Table 13: Number of districts assessed during FY17 SAR1

Country	Pre-TAS	TAS 1	TAS 2	SCH	STH	Trachoma	Oncho
Burkina Faso	0	4	5	0	0	7	Epi Eva: 0 Ento: 0
Cote d'Ivoire	0	0	0	0	0	0	Epi Eva: 0 Ento: 0
Ghana	9	2	7	0	0	0	Epi Eva: 0 Ento: 0
Niger	0	0	0	0	0	0	Epi Eva: 0 Ento: 0
Sierra Leone	6	8	0	0	0	NA	Epi Eva: 8 Ento: 0
Togo	NA	NA	0	0	0	NA	Epi Eva: 0 Ento: 0

Table 14: Program and Epidemiological coverage, FY17 SAR1, USAID Funds

	Country											
	Burkina Faso		Côte d'Ivoire		Ghana		Niger		Sierra Leone		Togo	
NTD	Program	Epi %	Program	Epi %	Program	Epi %	Program	Epi %	Program	Epi %	Program	Epi %
LF	98.83%	79.34 %	0%	0%	0%	0%	0%	0%	0%	0%	-	-
Oncho	100.30%	23.88 %	0%	0%	0%	0%	-	-	0%	0%	0%	0%
SCH	25.81%	19.93 %	0%	0%	0%	0%	0%	0%	-	-	0%	0%
STH	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Trachoma	0%	0%	0%	0%	-	-	0%	0%	-	-	-	-

Table 15: Total trained during FY17 SAR1, by country and socio-professional category

Category	Burkina	Côte d'Ivoire	Ghana	Niger	Sierra Leone	Togo	Total
TOT	0	11	0	0	0	0	11
Supervisors	0	11	1,603*	0	0	0	1,614
Health Providers	0	0	0	0	0	0	0
CDDs	0	0	32,793*	0	0	0	32,793
Others (Lab & Program Staff)	0	0	48	9	43	14	114
Total	**0**	**22**	**34,444**	**9**	**43**	**14**	**34,532**
Total female	0	4	22,370	6	9	1	22,390
Total male	0	18	12,074	3	34	13	12,142

**Ghana data for persons trained for School-based SCH/STH and SCH treatment planned for FY16 but conducted in reporting period.*

Appendix 2: Country Program Summaries

Burkina Faso

Summary

The first half of FY17 was marked by several strikes in the public sector (health, finance, etc.) and a tenuous security environment, which led to some delays in activity implementation for the END in Africa project.

The activities that took place in this reporting period included some activities from FY16 that were finishing in FY17, as well as some FY17 activities. Activities from FY16 but finished in FY17 include TAS 2 and TAS 3, and trachoma surveillance surveys. Results from these surveys were positive, with number of positive cases in the TAS surveys under the WHO-defined critical cut-off and trachomatous inflammation follicular (TF) less than 5% in all districts. This shows there is no indication of recrudescence of either trachoma or lymphatic filariasis in any of the districts evaluated.

FY17 activities included the first community directed treatment with ivermectin (CDTI) in the Sud-Ouest region and the first FY17 round of schistosomiasis MDA in the Centre-Est region. The CDTI, which took place in December 2016 in the districts of Gaoua, Batié, Diébougou, and Dano had an overall programmatic coverage of 82.2%. The schistosomiasis (SCH) mass drug administration (MDA), which took place in January 2017 in seven districts (Tenkodogo, Koupela, Ouargaye, Zabré, Bittou, Pouytenga, Garango), had an overall programmatic coverage of 95%. CDTI and MDA activities were preceded by social mobilization and advocacy activities to ensure participation and compliance. Trainings for the personnel conducting these activities were also held.

In addition, the END in Africa project M&E Advisor offered technical assistance to the national Neglected Tropical Disease Control Program (NTDCP) for a data quality assessment (DQA) held in the regions of the Sud-Ouest and Centre-Sud in February 2017, though the activity itself was carried out with support from the World Bank.

1. MDA Assessment

The workbooks have been updated with available data.

2. Changes in MDA Strategy

The six districts that conducted TAS 1 in 2016 (Zabré, Leo, Sapouy, Boromo, Dédougou, and Dano) have all met the criteria to stop MDA and thus, will not conduct LF MDA in FY17. The results of the trachoma surveillance surveys confirmed TF prevalence in the seven districts surveyed (Do, Lena, Zorgho, Boussé, Ziniaré, Boulmiougou, and Banfora) remained below 5%, so there is no need to resume MDA. These districts have now met the active Trachoma (TF) threshold for the elimination of trachoma as a public health problem.

District Name	**Disease**	**Description of Change** (ex: Stopped MDA; or Changed from district-level treatment to community-level treatment, etc.)	**Rationale for Change** (ex: active trachoma prevalence in impact study conducted in August 2011)
UE (Boromo-Dedougou)	LF	Stopped MDA	FTS results = 0 positive/1,714 surveyed

UE (Leo-Sapouy	LF	Stopped MDA	FTS results = 4 positive/1,659 surveyed
Zabré	LF	Stopped MDA	FTS results = 1 positive/1,869 surveyed
Dano	LF	Stopped MDA	FTS results = 0 positive

3. Training

FY17 training activities began with the LF MDA/CDTI campaign in the Sud-Ouest region and the SCH MDA in the Centre-Est region. These involved training district trainers, head nurses, health workers, and community distributors. CDTI training was provided to 108 head nurses in the Sud-Ouest region, and 189 head nurses received training on the schistosomiasis MDA in the Centre-Est region. In addition, 44 management team members participated in the training of trainers in the two regions. However, complete data disaggregated by gender are not yet available.

4. Community Mobilization, IEC materials, Registers, Publications and Presentations

Social mobilization activities were conducted primarily in the Sud-Ouest and Centre-Est regions in preparation for the CDTI/LF MDA and SCH MDA, respectively. At the district level, these activities included radio broadcasts (one/district), radio spots (12/district and per region), and posters. At the health facility and community level, more than 517 public criers and 1,605 community drug distributors (CDDs) and members of the health center management committees helped to mobilize the populations; health facilities received approximately 900 posters and town criers received 650 brochures for awareness-raising and sensitization.

Per experience, it is difficult to access gold-mining sites and farming hamlets during the MDAs, and in addition, given their multiple responsibilities, women may not be present when the CDDs visit. Special efforts were made to ensure the participation of these hard-to-reach groups. Public criers were deployed at the gold mining sites and farming hamlets in these regions to inform the populations about the schedules, targets, and goals of the MDAs. Women were involved in mobilizing their peers. Lastly, CDDs were deployed at these specific locations.

One publication from the NTDCP was released during this period, though the study was supported by the Centre Raoul Follereau, not the END in Africa project: *Impact du Traitement de Masse de la Filariose Lymphatique par l'Albendazole-Ivermectine en Zone de Savane: Cas de la Région de l'Est du Burkina*.

However, other publications were released over the course of the project that were not previously reported in the semi-monthly reports. While not all publications from the NTDCP were supported by the END in Africa project, we have listed them all as they may be of interest to the project; below, we indicate whether the support is from END in Africa. They include:

- *Assessment of schistosomiasis and intestinal helminths following mass drug administration in the Center and Plateau Central regions of Burkina Faso* (funded by END in Africa)
- *Recrudescence of onchocerciasis in the Comoé valley in southwest Burkina-Faso* (not funded by END in Africa)
- *Epidemiological and clinical aspects of urogenital schistosomiasis in women in Burkina Faso, West Africa* (not funded by END in Africa)
- *Successful control of soil-transmitted helminthiasis in school age children in Burkina Faso and an example of community based assessment via lymphatic filariasis transmission assessment* (funded by END in Africa)

- *Schistosomiasis in school-age children in Burkina Faso after decade of preventive chemotherapy* (funded by END in Africa).

5. Supervision

Cascade supervision was provided for the MDAs/CDTIs in the Centre-Est and Sud-Ouest regions, from the national level to the regional and operational levels (districts and CSPS). The budget allocated for this activity was released in line with the initial planning in the FOG. Together with personnel from the regions and districts, HKI Burkina Faso's END in Africa team supervised MDA implementation. More than 90 members of the district management teams and more than 290 head nurses participated in the district- and CSPS-level supervision. The actual number of supervisors in these campaigns far exceeds the number projected during planning. This is because the funds allocated for supervision are put into a common basket and redistributed to all of those participating in the supervision. For example, if a region is given enough funds to support 4 supervisors, but the region determines that 8 supervisors are necessary to ensure that the activity is carried out correctly, those 8 supervisors share the allocated per diem amount.

NTDCP teams supervised the staff involved in the TAS and trachoma surveillance surveys that were conducted during this half-year but initially planned for FY16. Regional and district managers participated in the supervision in each district surveyed.

The supervision included ensuring respect of MDA campaign guidelines, which are based on both the national campaign implementation and WHO guidelines; Supervisors take actions to identify and address any bottlenecks in a timely manner during the MDA; distribution of data collection tools to district-level data managers, CDDs and head nurses to ensure that high-quality data is obtained and tools used by the various facilities were all in compliance.

6. Supply Chain Management

An initial shipment of 13,360 boxes of praziquantel, representing 6,680,000 tablets, was received during the period. The second batch is expected in the second quarter of FY17. A rough estimate of FY18 praziquantel needs was also quantified and sent to FHI 360 to provide USAID and the WHO of an estimated amount of praziquantel that will be required through the donation program in FY18. A physical inventory was conducted in the NTDCP warehouses and in the regions. The inventory data is currently being consolidated. The FY17 albendazole and ivermectin have not yet been delivered. Regarding Zithromax, the NTDP requested drug only for the Pô district. This district will only be treated, pending the results of the upcoming trachoma impact survey. Drug will be sent only after the International Trachoma Initiative receives and reviews the impact survey data.

7. Program Monitoring and Evaluation

The monitoring and evaluation plan developed during the FY17 work planning process addressed the need for TAS and Pre-TAS surveys, trachoma impact and surveillance surveys, and post-CDTI coverage surveys. The NTDCP received a supply of FTS from the WHO donation program to conduct TAS.

In FY16 FTS were used for the TAS 1 and ICT cards were used for the TAS 2 and the TAS 3. ICT cards will no longer be used for future TAS evaluations in Burkina Faso. In addition, during this half-year period and in FY16, trachoma surveillance surveys were conducted in seven districts for the first time.

While the FY17 post-CDTI coverage surveys have not yet been conducted, following the last post-treatment CDTI coverage survey, which took place from May 2-30, 2016 in 12 endemic villages in the Sud-Ouest region, several recommendations were formulated:

- Reinforce supervision of CDDs during the CDTI by head nurses;
- Registers should be verified for completion prior to submitting them to the epidemiological and data management personnel (CISSE);
- IEC/BCC should be strengthened at the community level;
- Mop-up should be conducted in villages/hamlets where coverage is low.

Supervision in the last round of CDTI in the Sud-Ouest indicated that these recommendations had largely been followed.

Results from the trachoma surveillance surveys ensured the NTDCP that there has not been a resurgence of trachoma in the districts surveyed: district-level prevalence among children aged 1-9 years is as follows: Banfora= 1.06%; Do= 1.20%; Lena= 1.07%; Boulmiougou= 1.68%; Ziniaré= 0.79%; Zorgho= 1.24%; Boussé= 1.74%). These data will be used in Burkina Faso's elimination dossier to substantiate its eventual claim of eliminating trachoma as a public health problem.

Results from the TAS 2 and TAS 3 post-MDA surveys also reinforced that LF transmission has been interrupted and there is no need to resume MDA in the districts surveyed. For TAS 2 in the Centre-Ouest evaluation unit (EU), there were 0 positives/1,785 examined; in the Centre-Nord, 2/1,835. For TAS 3, 0/1,850 and 0/1,644 in the Hauts Bassins and Cascades EUs, respectively. These data will also be used to populate Burkina Faso's eventual elimination dossier for lymphatic filariasis.

In the context of LF elimination, a passive surveillance plan has been implemented in the districts that completed TAS 3 and certain regions were evaluated to that end. Passive surveillance is being implemented in the Cascades, North, and Hauts Bassins regional health directorates, which have successfully completed TAS 3. In these three regions, the two supervisions conducted by the NTDCP in FY16 revealed the activity had been carried out properly and no positive cases were found. However, surveillance activities in the Boucle du Mouhoun, Centre, Plateau Central, Centre-Nord, Sahel, and Centre-Ouest regions have not yet begun because of a lack of reagents.

Trachoma impact surveys are scheduled to begin in March 2017 for the 19 districts that held the MDA in FY16. These surveys will indicate whether any further MDA is required for trachoma in Burkina Faso.

These surveys are key activities toward the achievement of trachoma and LF elimination as a public health problem.

Data quality was evaluated for two regions (Sud-Ouest and Centre-Sud) in February 2017 to:

- Verify the quality of the data transmitted to the various sites sampled;
- Assess the capacity of the NTD data management systems at the various levels to gather, document and report quality data; and
- Identify the areas of the NTD data management system that need improvement.

The World Bank supported this activity, but technical assistance was provided by the END in Africa M&E Advisor. The DQA revealed several strengths, including satisfactory reporting for MDAs, the

availability of data collection tools at all levels of the health system, establishment of NTD data management guidelines, and human resources dedicated to data management. Some areas that require improvement include: archiving of tools; updating the Integrated NTD Database, enforcing the use of up-to-date data collection frameworks, timeliness in reporting, and ensuring data collection registers are checked sufficiently.

DSA Type	# DSA Targeted with USAID Support	Names of districts where DSA to take place
FY16 DSAs conducted with END in Africa support during the 2017 SAR 1 Reporting Period		
TAS 2	4	Nouna, Solenzo, Tougan, Toma
TAS 3	5	Ndorola, Orodara, Banfora, Sindou, Mangodara
Trachoma surveillance survey	7	Banfora, Do, Lena, Boulmiougou, Ziniaré, Zorgho, Boussé
FY17 DSAs planned with END in Africa support (none of these surveys have been conducted yet in FY17)		
Trachoma impact survey	15	Po, Reo, Nanoro, Leo, Tenado, Nongremassom, Houndé, Zabré, Boussouma, Kaya, Kongoussi, Fada, Gayeri, Manni, Pama
TAS1	11	Boulmiougou, Nongremassom, Signoghin, Pouytenga, Garango, Bogandé, Manni, Diapaga, Gayeri, Pama, Sebba
TAS3	7	Boussé, Ziniaré, Zorgho; Dori, Gorom, Djibo, Baskuy
Pre TAS	12 SS/SC	Bitou, Ouargaye, Koupela

8. Transition and Post-Elimination Strategy

The Ministry of Health and its partners adopted the 2016-2020 strategic plan to combat NTDs in the first half-year of FY17. This approved document is currently awaiting the signature of the Minister of Health, which will give it official status.

Passive surveillance is being implemented in the Cascades, Nord, and Hauts Bassins regional health directorates, which have successfully completed TAS 3 in all districts. In these three regions, the two supervisions conducted by the NTDCP in FY16 revealed that the activity had been carried out properly and no positive cases have been detected. However, surveillance activities in the Boucle du Mouhoun, Centre, Plateau Central, Centre-Nord, Sahel, and Centre-Ouest regions have not yet begun because of a lack of reagents. The World Bank has planned to provide funds for these reagents.

9. Short Term Technical Assistance

The NTDCP received support from the FHI 360 M&E Specialist to implement the DQA in the Sud-Ouest and Centre-Sud regions.

10. Government Involvement

Burkina Faso's 2011-2020 national health development plan (PNDS) gives priority to combating neglected tropical diseases. NTD control efforts are included in health action plans at all levels (NTDCP, regional health directorates, and districts). This priority was the basis for developing an initial 2012-2016 strategic plan to combat NTDs and, subsequently, a second 2016-2020 plan, which was adopted on December 27, 2016, but which has not yet been officially signed by the Minister of Health.

The Government of Burkina Faso provides financial support to the NTDCP to carry out communications activities, including supplemental support for social mobilization. Some health facility management committees (COGES) are responsible for managing the community drug distributors, using COGES resources. However, it is difficult to quantify these amounts because they are not recorded fully and completely at the district level.

The onchocerciasis subcommittee met from 11-12 January 2017 and reviewed the results of the entomological and epidemiological studies conducted in the Cascades region. Recommendations were made to improve efforts to combat onchocerciasis, specifically vector control and reopening the onchocerciasis laboratory for ELISA tests. See attached meeting notes in the appendices.

In addition, an activity planning meeting for the NTDCP and HKI was held on 26-27 January 2017 to jointly plan activities for the coming months.

11. Proposed Plans for Additional Support to National NTD Program

In relation to the opportunities to combat NTDs, the systematic deworming of children aged 6 – 59 months, integrated with Vitamin A supplementation, is ongoing and receives support from UNICEF. It constitutes an opportunity to combat soil-transmitted helminths at the health district level.

Related to the treatment of trachoma and LF morbidity, implementation of Morbidity Management and Disabilities Prevention (MMDP) project activities in the Centre-Nord and Hauts Bassins regions and the project financed by the World Bank will help to improve management of morbidity. MMDP project activities involve TT surgery, lymphedema management, and hydrocele surgery. In addition, support for the World Bank morbidity management project is planned, but has not yet started.

12. Lessons Learned/Challenges

The lack of daily MDA data monitoring at the health facilities in certain districts (i.e., Kampti, Diébougou, Dano, and Batié) has a negative impact on monitoring the CDTI campaign coverage trends. To address this, it was recommended to share lessons learned from Gaoua district, where daily monitoring occurs in all health centers (CSPS) and at the district level. As a reminder, daily data monitoring is among the NTDCP directives for the MDA and must be carried out at all levels (CSPS, district, and region). Materials have been specifically designed for this purpose.

Another best practice from the Natenga CSPS (Pouytenga district, Centre-Est region) is the use of disposable spoons during drug administration so that the CDDs do not handle the drugs, which can be a source of contamination. The CSPS management committee funded the purchase of the disposable spoons.

Supervision of the MDA also revealed that close contacts of health workers (including relatives and other members of their immediate circle) are often among the persons who do not take the drugs, including the Guéguéré CSPS manager, who refused to take the MDA drugs for more than 10 years. To set a good example and ensure the quality of the campaign, it was recommended that the head nurses confirm that the members of their immediate families and close associates take the drugs (the “success story” at the end of this report elaborates on this).

Lastly, pockets of temporary supply disruptions related to poor drug distribution at the CSPS level were noted in certain CSPS (for example, the Bouni CSPS in Dano district and the Nako CSPS in

Gaoua district). This situation can harm the quality of the campaign, so to correct it, we recommend conducting polls within the villages and strengthening grassroots supervision throughout the campaign, and especially during the campaign's last few days to ensure that treatment guidelines are followed through to the end.

Supply Chain Challenges

The NTDCP logistics unit conducts an inventory at the end of each campaign. This inventory is included in the minimum package of activities of the NTDCP's logistics unit and, thus, is funded by the Government of Burkina Faso, and not by the END in Africa project. In addition, drug consumption is monitored during the campaign and the theoretical inventories remaining are transmitted to the districts at the end of the campaign.

There were no problems clearing the recent PZQ shipment from customs upon arrival in Burkina Faso. However, delays were noted in transferring remaining drug inventories from the districts to the regions. After the MDAs, remaining drugs must be transferred to the regions. However, this poses a difficulty for hard-to-reach areas in the Sud-Ouest where ongoing treatment is recommended (which requires that drugs remain at the health facilities after the CDTIs). Delays in transferring drugs from the CSPS to the districts due to lack of fuel for transport have also been reported.

M&E Challenges

The monitoring and evaluation challenges still involve delays in obtaining data and receiving incomplete data, particularly regarding the data on training. Discrepancies in the MDA data were also noted between data from the NTDCP and the regional level. Thus, two data validation sessions were held between 2-14 October 2016 in Bobo Dioulasso and Ouagadougou. These validation meetings resulted in updates to the data from these two levels. The errors – related primarily to data entry – were corrected, providing a consolidated database at the NTDCP level. The data validation meetings held in FY16 will be repeated in FY17.

The delay in conducting the MDAs impacted implementation of the monitoring and evaluation activities. MDAs were implemented later than originally planned due to delayed arrival of certain drugs, including Zithromax (delay due to global shortage of Zithromax; supplies received on 10 May 2016), praziquantel (received on 31 May 2016), and tetracycline eye ointment (delay due to a delay in receiving correct paperwork from country to submit for approval from FHI 360 and USAID, as well as lengthy review process within USAID; TEO received on 7 July 2016). Hence, the trachoma impact surveys were not held in FY16. This calls for strengthening the consultation among implementation actors; for example, holding more frequent coordination meetings.

To avoid this issue in FY17, HKI is working with the NTDCP to conduct the trachoma impact surveys in March 2017 prior to the scheduled MDA. This will give the NTDCP a larger window of time to conduct any MDAs.

13. Major Activities for the next six months

- Organize a workshop to develop an STH-SCH transition plan
- Hold training sessions for MDA implementation at all levels (central level, regional health directorate, HD, CSPS, community distributor)
- Conduct advocacy and social mobilization activities before and during the MDAs

- Implement the SCH, trachoma (if needed), onchocerciasis (round 2), LF, and STH MDAs (STH MDA combined either with LF or SCH)
- Carry out monitoring/evaluation activities (post-CDTI coverage survey, trachoma impact surveys, pre-TAS, TAS I, TAS 3+STH, and schistosomiasis + STH surveys at sentinel sites)
- Hold an FY18 workplan development workshop (work planning)
- Provide technical assistance (trachoma elimination plan, support for the onchocerciasis technical committee)

Cote d'Ivoire

Summary

After a successful launch, the Cote d'Ivoire Neglected Tropical Disease Program (NTDP) of the Ministry of Health and Public Hygiene (Ministere de la Santé et de l'Hygiene Publique or MSHP) is implementing the United States Agency for International Development (USAID)-funded END in Africa Project in Cote d'Ivoire managed by FHI 360. The project is progressing well with technical and administrative support from both FHI 360 and Deloitte Consulting LLP. This first semi-annual report (SAR1) of FY17 outlines the progress made during the period October 2016 – March 2017. FY17 is the second year of implementation for the END in Africa Cote d'Ivoire program.

Cote d'Ivoire's current epidemiological situation is as follows: 67 districts are endemic for oncho, 73 districts for LF – 61 in FY16 plus 12 new districts added after confirmation mapping in FY16, and 64 districts are co-endemic for the 2 diseases (oncho and LF); all 82 districts are endemic for STH; 80 out of 82 districts are endemic for SCH; and 9 districts are currently endemic for trachoma. Mapping is completed for LF, oncho, SCH and STH, while mapping for trachoma is still ongoing.

The NTDP is integrated into Cote d'Ivoire's current health system and implements its activities using the existing health system organized at Central, regional and district levels. The NTDP at central level currently has the appropriate human resources with basic public health background to facilitate the implementation of END in Africa project activities. Regional and district health personnel, including frontline health workers, are engaged accordingly to collaborate with community volunteers and ensure proper implementation of activities within targeted communities.

All activities included in the FY17 workplan for the reporting period were successfully completed and can be put in 3 categories: coordination and capacity building of technical and administrative staffs of the NTDP, advocacy and social mobilization to improve visibility of the NTDP, and DSAs. Coordination and capacity building activities included four workshops: to update M&E tools; for the development of an operational action plan for FY17; for data managers of the Gkeke and Belier regions on the integrated NTD database; and updating the TIPAC with FY17 work plan activities. Advocacy and social mobilization activities implemented include a meeting with Prefects of the 20 health regions of Cote d'Ivoire to improve their knowledge on NTDs and improve their collaboration with the NTDP, a workshop to develop IEC and BCC materials for health education and social mobilization, and a workshop to review and validate the IEC/BCC materials. DSAs includes an epidemiological evaluation for onchocerciasis to measure the impact of MDA on the onchocerciasis situation in 6 districts and baseline survey for LF to obtain data that will be used to monitor impact of treatment. No MDA was conducted during this period.

The NTDP will implement the remaining activities in the FY17 USAID-approved work plan over the next six months including MDA campaigns and an annual meeting to review and validate the FY18 work plan and budget that will be submitted to USAID for review and approval.

1. MDA Assessments

No MDA assessments for FY17 activities conducted during the reporting period.

2. Changes in MDA Strategy

There has been no change in MDA strategy based on DSAs conducted during the reporting period.

3. Training

During this semester, two capacity building sessions were organized of which included a Data Managers' Training Workshop on the Tool for Integrated Planning and Costing (TIPAC) on February 6–10, 2017, and the workshop on Integrated NTD Database on February 20–24, 2017. Only 22 (4 women and 18 men) NTD actors were trained during the 2 workshops noted above. The bulk of planned trainings will take place in the second half of the fiscal year.

4. Community Mobilization, IEC materials, Registers, Publications, and Presentations

A workshop to develop information, education and communication (IEC) and behaviour change communication (BCC) materials for health education and social mobilization, and a workshop to review and validate the IEC/BCC materials were conducted on January 3–5, 2017. The IEC/BCC materials (29,012 t-shirts, 2,448 posters and pamphlets) with NTD messages are being reproduced currently in preparation for the upcoming MDA campaigns and will be used for health education and social mobilization to improve visibility of the NTDP and to improve compliance to treatment within targeted communities.

No publication or presentations for the period under review.

5. Supervision

The supervision activities implemented during the reporting period were in relation to epidemiological evaluations of LF and oncho and the different trainings conducted. During the workshops/trainings of district health workers including staff of frontline health facilities, FHI 360 and NTDP central level staff supported by regional level health personnel supervise and monitor the training of district health workers while the district health management teams supervise trainings of CDDs conducted at community level. The epidemiological evaluations of LF and oncho were also supervised jointly by FHI 360 and NTDP central level staff. This primarily consisted monitoring the MTN program activities.

6. Supply Chain Management

As stipulated in an agreement signed in May 2016 between the NTDPs (PNSOLO and PNLSGF) and the National Medical Store known as New Pharmacy of Public Health of Côte d'Ivoire (NPSP-CI in French), NPSP-CI continued to provide storage and monitoring of manufacturing dates to avoid drug expiration. This support includes package of the right amount of drug per region and district based on instructions received from the NTDPs. The drugs and other medical supplies needed for MDAs are taken to the district level and subsequent distribution from the district level to frontline health facilities and communities is accomplished using district-level trainings conducted before the MDA campaigns.

During this reporting period, FHI 360/END in Africa project procured and delivered to the NTDPs the following items:

- 140 Filaria Test Strips (FTS) kits (30 tests/kit) used to conduct the LF baseline survey.
- 528 SD Bioline OV16 rapid diagnostic test kits (25 tests/kit) used for onchocerciasis epi evaluation in 6 districts (10 communities per district) that was conducted to determine impact of MDAs conducted in the past 6 years on the onchocerciasis situation in these 6 districts.
- 39,972 tubes of Tetracycline eye ointment (HCI 1% 5g) used for the treatment of trachoma in children that are below six months.

All procured diagnostics and drugs arrived in-country in December 2016, January 2017, and February 2017, respectively.

7. Program Monitoring and Evaluation

Baseline survey was conducted in sentinel sites of 12 health districts on February 1–13, 2017. The survey was conducted using a questionnaire for interviews to obtain relevant information on the sentinel sites, FTS that detects antigen of the adult *Wuchereria bancrofti* worm from blood collected during the day and by using detection of microfilaria of the *W. bancrofti* through thick blood films prepared using blood collected between 22:00 hrs. and 02:00 hrs. Both methods were used to determine the prevalence of LF in the population and participants of both studies included those within sentinel sites that were ≥5 years. Baseline data is required pre-treatment or before MDA is conducted for LF in these 12 districts as these data will be used for comparison to monitor impact of MDAs on the LF situation in these districts.

Epidemiology evaluation for oncho was conducted between January and March 2017 in 60 villages of 6 districts using the skin snip method among all those ≥5 years of age, OV16 rapid diagnostic test among children 5-9 years and palpation of nodules. Results obtained will be reviewed and analyzed with technical support from the END in Africa project to determine current situation of onchocerciasis in these 6 districts.

The reports for the abovementioned activities are still pending and will be reported in the next SAR.

DSA Type	# DSA Targeted with USAID Support	Names of districts where DSA to take place
Baseline survey of sentinel sites for LF	12	Biankouma, Bouaké Sud, Boundiali, Dabou, Danané, Ferkéssédougou, Korhogo, M'Bahiakro, Man, Ouangolodougou, Tengréla, and Touba
Epidemiology evaluation for oncho	6	Akoupé, Bouafle, Bocanda, Dimbokro, Mankono, Odienne

8. Transition and Post-Elimination Strategy

None

9. Short Term Technical Assistance

The technical assistance provided to the NTDP was in relation to TIPAC training that took place March 6–10, 2017, and the NTD partner coordination meeting March 30–31, 2017. On February 6–10, 2017, Deloitte worked with some central level NTDP personnel and FHI 360 staff in Abidjan to provide guidance and update the TIPAC with FY17 activities and their related costs. The technical assistance provided by Deloitte made it possible for the NTD program to conduct an analysis of the contribution of each NTD partner and results of the analysis were factored into the TIPAC.

10. Government Involvement

The government's commitment towards NTD control continues to be very high since the END in Africa project was launched in FY16. During the first half of FY17, it had representation by high level MSHP officers in all activities conducted by the NTDP and a very good participation by Prefects of the 20 regions during the March 9–10, 2017 coordination meeting.

11. Proposed Plans for Additional Support to National NTD Program

Nothing to note for the reporting period.

12. Lessons Learned/Challenges

Nothing to report for the period under review.

13. Major Activities for the next six months

- Trachoma mapping in 7 health districts (March/April 2017)
- Capacity building/training for all actors involved in the MDAs – district technical advisors and NTD focal persons, pharmacists, district data managers, supervisors, and CDDs (April 2017)
- Trachoma impact survey (TIS) in Bouna district (April/May 2017)
- Media plan and broadcasting / LF-oncho-STH-trachoma (April 2017)
- Development of IEC materials for SCH and trachoma (April 2017)
- Sensitization and social mobilization for LF/oncho and trachoma MDAs (April/May 2017)
- Launch ceremony for NTD MDAs (May 2017)
- Implement and supervise LF/oncho MDA in 56 health districts (May 2017)
- Implement and supervise SCH MDA in 3 health districts (May 2017)
- Implement and supervise trachoma MDA in 5 health districts (May 2017)
- Conduct post-MDA drug inventory (June 2017)
- Workshop to validate LF/oncho post-MDA data (June 2017)
- Workshop to debrief on TIS (June 2017)
- Workshop to validate FY18 workplan and budget (June 2017)
- Conduct DQA for LF/oncho and trachoma (June/July 2017)
- Annual review meeting on LF-oncho-SCH-STH-trachoma activities (September 2017)

Ghana

Summary

The Director General of the Ghana Health Service has set up two important committees – the Trachoma Elimination Committee (TEC) and the Ghana Onchocerciasis Elimination Committee (GOEC). The GOEC has held one major meeting and 2 ad hoc meetings since December 2016 and is currently working with the NTDP to organize existing data to serve as a basis for developing a comprehensive oncho elimination strategy for Ghana. The GOEC has also approved a protocol for oncho assessment survey in Ghana, which is expected to be carried out from March to May 2017. The TEC is currently working to complete a dossier for validation of elimination of trachoma in Ghana by the World Health Organization (WHO). The dossier is expected to be completed by 28th April for submission to WHO in May 2017.

END in Africa held a one-day Cross Border Coordinating Meeting in Accra, Ghana on October 27, 2016 to discuss and facilitate synchronization of mass drug administration (MDA) for oncho and lymphatic filariasis in endemic districts along the borders of countries supported by END in Africa Project. The participating countries agreed to synchronize round 1 and 2 oncho MDA in 2017 to be conducted in May and November respectively across endemic districts along common borders.

The NTDP conducted pre-TAS in 9 LF endemic districts in February-March 2017. For the first time in Ghana, FTS was used instead of night blood survey and microscopy. However, night blood samples were collected from persons testing positive for FTS for microscopy examination to confirm presence of microfilaria as an indication of active infection. Seven out of the 9 districts conducted TAS 2 and remaining 2 conducted TAS 1. Preliminary results indicate that all 9 districts passed the TAS.

The NTDP in collaboration with Access and Delivery Partnership project and PATH organized a 2-day NTD Supply Chain Stakeholders meeting, February 8-9, 2017 in Accra. The aim of the meeting was to assist the program to effectively manage NTD logistics through development of NTD specific supply chain management (SCM) guidelines and standard operating procedures (SOPs). The meeting brought together NTDP SCM stakeholders at the National, Regional, District and sub-district levels; NTDP partners (FHI 360, Sightsavers and WHO) to develop the SCM guidelines and SOPs. Content and structure of the SOPs were developed for finalization by the PATH by June 2017.

Three cases of severe adverse reaction following mass drug administration were recorded during the school-based schistosomiasis and soil-transmitted helminthiasis conducted during the reporting period. They all recovered and have been discharged from hospital.

1. MDA Assessment

No MDA assessment were conducted during the reporting period.

2. Changes in MDA Strategy

No changes have been made to the MDA strategy during the period under review.

3. Training

The NTDP conducted a refresher training for 15 laboratory personnel and program staff at the national level on March 18, 2017 to orient them on the use of filariasis test strips (FTS). Since it was the program's first time to use FTS, the NTDP had to ensure adherence to the standard guidelines for pre-TAS and TAS, which was conducted in varying districts (TAS = 9 and pre-TAS = 9). Forty-eight (35 males and 13 females) staff were trained during the pre-TAS, TAS and quality improvement (QI) training

conducted in the Birim North district. In addition, a total of 1,603 supervisors and 32,793 community drug distributors (CDDs) were trained. These are persons trained for school-based SCH/STH and SCH treatment planned for FY16 but conducted in the period under consideration. In total 34,444 people were trained during this reporting period.

4. Community Mobilization, IEC Materials, Registers, Publications, and Presentations

The school-based SCH and STH MDA and community SCH MDA were preceded by social mobilization including radio and television announcement and discussions; announcement using community public address systems and vehicle-mounted public address systems at the regional, district and community levels. A press conference was organized at the national level that invited both print and electronic media, with a national reach, prior to the school-based SCH/STH MDA in 204 out of the 216 districts. The NTDP identified absence of tools for CDDs training as well as community and pupil sensitization. Development of flip charts to address these gaps are currently at the production stage and a vendor has been competitively selected to produce the flip charts. First samples were sent to the NTDP in February 2017 for comments. Similarly, the procurement process is underway in the GHS to print school posters (6,000 copies), community posters (6,500 copies) and parent notification forms (500,000 copies) for community and school-based MDA.

The NTDP submitted an article on the trachoma pre-validation survey conducted in 2015-2016 to the PLOS NTD Journal on March 9, 2017.

5. Supervision

The NTDP supervised school-based SCH/STH MDA in 206 districts and community-based SCH MDA in 47 hyperendemic districts. Budget allocations were made for cascaded supervision where the regional MDA teams supervised the districts which in turn supervised the sub-districts. Sub-districts also supervised the community level activities by CDDs. The NTDP team at the national level also sent out program staff to supervise MDAs in all implementing regions. Partners working with the NTDP including FHI 360, Sightsavers and School Health Education Program of the Ghana Education Service also conducted supervisory visits during MDAs. All supervisors were trained on standard protocols for the MDAs. Supervisors provide onsite advice to address challenges observed and reported field observations to regional and district teams for immediate redress.

6. Supply Chain Management

The NTDP received 19,800 FTS kits and 31,500 Ov16 rapid test kits procured by USAID through FHI 360 on January 3 and 27, respectively. The FTS kits were used in February and March 2017 for Pre-TAS in 9 districts and TAS in 9 districts grouped into 3 evaluations units.

In the FY17 workplan the NTDP proposed to develop and produce job aides specific for NTDP SCM to address the NTDP's SCM problem with reverse logistics for NTD medicines. The NTDP accepted a proposal from PATH to support the program develop SCM tools to improve SCM for NTDs in Ghana under the Access and Delivery Partnership project. A 2-day NTD Supply Chain Stakeholders meeting was held on February 8 – 9, 2017 in Accra. The aim of the meeting was to assist the NTDP effectively manage NTD logistics through development of NTD specific SCM guidelines and standard operating procedures (SOPs) as well as training of trainers to facilitate training of end users of the tools across the country. The meeting brought together NTDP SCM stakeholders at the National, Regional, District and sub-district levels; NTDP partners (FHI 360, Sighsavers and WHO) to develop the SCM guidelines and SOPs. Content and structure of the following documents were developed for finalization by PATH by June 2017:

a. SOP for NTD Medicines Management: From Central Medical Stores (CMS) to district level

b. SOP for NTD Medicines Management: Health Centres and Community Health Planning Services (CHPS) facilities
c. Logistics Management of NTD Medicines – Standard Operating Procedures
d. Training Curriculum
e. SOP for NTD MDA

END in Africa will support production of SOP for NTD Medicines Management in line with the FY17 Work Plan since PATH support is limited to development and training but not production. The NTDP ensured that this SOP captured the issues that the job aide for NTDP SCM was expected to address.

National MDA monitoring teams had expired albendazole at a few regional medical stores but quantities are not provided yet.

7. Program Monitoring and Evaluation

The NTDP conducted pre-TAS in 9 LF endemic districts in February-March 2017 – Sunyani West, Sunyani Municipal, Bole, Nzema East, Ahanta West, Ellembele, West Gonja, North Gonja, Sawla-Tulna-Kalba. FTS was used instead of the night blood survey and microscopy. However, night blood samples were collected from persons testing positive for FTS for microscopy examination to confirm presence of microfilaria as an indication of active infection.

TAS using FTS was conducted in 9 LF endemic districts grouped into 3 evaluations units – Bawku West, Bolgatanga, Bongo, Talensi, Daffiama-Bussie-Issa, Nadowli-Kaleo, Wa Municipal, Lambussie-Karni, Nandom. Seven out of the 9 districts conducted TAS 2 and the remaining 2 conducted TAS 1. Preliminary results indicate that all 9 districts passed the TAS. The results will be reviewed and confirmed after the NTDP has had a meeting to discuss the results.

8. Transition and Post-Elimination Strategy

Nothing to document this reporting period.

9. Short Term Technical Assistance

The NTDP hired the services of 2 consultants to work with the Ghana Onchocerciasis Expert Committee (GOEC) to complete the WHO template for validation of trachoma elimination. The consultants started work on March 13, 2017 and expected to submit final dossier by April 28, 2017. In addition, two technical assistance requests were made to END in Africa:

- Assist NTDP to transition from oncho control to elimination program – Guide activities including assessments, transmission zone demarcation and provide supervision and quality control
- Develop strategy for STH treatment after LF elimination – LF treatment platform used for STH treatment is now reduced from 98 to 17 districts and expected to end before 2020. There is need to support the NTDP to determine the strategies for STH after LF treatment.

10. Government Involvement

The government continued its support to the project by letting the program use the health system structures at all levels – national, regional, district and sub-districts to support NTDP activities. Medical stores at all levels keep NTD medicines and health system vehicles are used to support NTD activities.

11. Proposed Plans for Additional Support to National NTD Program

Nothing to document during the period under review.

12. Lessons Learned/Challenges

Late reporting of MDA results from some regions remains a key challenge.

13. Major Activities for the next six month

- Conduct onchocerciasis assessment in 154 districts to determine the status of oncho in the country using a combination of skin snip test, Ov16 rapid test, and OV16 ELISA
- Integrate LF/oncho MDA in 100 districts
- Synchronize oncho MDA in endemic district along common borders with Togo, Cote d'Ivoire and Burkina Faso
- Conduct case search to identify estimated trachomatous trichiasis (TT) backlog for corrective surgery followed by a TT only survey in the Yendi district
- Complete WHO trachoma elimination validation template for submission to WHO in May 2017
- Conduct advocacy meetings in 8 regions to communicate implications for stopping treatment for LF in 81 districts, timelines for TAS after stopping treatment as a post-treatment strategy and how to return all unused medicines from communities to the Regional or Central Medical Stores
- Conduct assessment of SCH in 2 districts in the catchment area of the recently constructed Bui Hydroelectric dam using Urine Filtration and Kato Katz methods.

Appendix 1

Adverse Events and Drug Details

Drug	
Suspected Drug	Tablet Praziquantel, 600mg
Dose, frequency	One and half tablets of Praziquantel
Date of Administration	3/10/2016
Drug sample obtained?	Yes. Samples of the drug taken and sent to the Food and Drugs Authority for analysis.
Batch no. of suspected drug	Praziquantel: BN M55372 EXP 10/2017

Drug Administration	
Source of drug	Ghana Health Service/WHO
How was the medicine stored prior to delivery to the districts? Any contamination?	Stored at the Regional Medical Stores No obvious indication of contamination
Who administered the medicines? Any likelihood of administration errors?	Class Teacher No likelihood of administration error
Drug administration mode & route	Drug was administered orally with water and under supervision
Was the whole MDA supervised by nurses or teachers or community volunteers?	MDA was supervised by head teacher who had undergone training conducted by the DHMT.

Concomitant Medication and Past medical history	
Presenting complaint	difficulty in breathing
Immediate past medical history. Malaria? Upper respiratory tract infection?	Nil of note
Existing medical conditions - diabetes, asthma, liver function, kidney impairment etc.? Known or unknown?	Partial hearing and speech deficit
If child had any condition, was she administered any medicines? If so, which ones? Dosage, frequency etc.	N/A

Outcome of post-mortem	
Post-mortem report obtained?	N/A

Case-causality assessment	
Certain, Probable, Possible, Unlikely, Not assessable	(To be done by panel of experts)

SAE Forms	
SAE form filled?	Yes
Obtained copy of SAE form?	Yes
Who filled the original SAE form? Details	District Disease Control Officer.
What is the view of the "receiving doctor" on the patient's condition?	Respiratory distress 2®drug ingestion

Drug

Suspected Drug	Tablet Praziquantel, 600mg, Tablet albendazole
Dose, frequency	One and half tablets of Praziquantel, one tablet albendazole
Date of Administration	3/10/2016
Drug sample obtained?	Yes. Samples of the drug taken and sent to the Food and Drugs Authority for analysis.
Batch no. of suspected drug	Praziquantel: BN M55372 EXP 10/2017

Drug Administration

Source of drug	Ghana Health Service/WHO
How was the medicine stored prior to delivery to the districts? Any contamination?	Stored at the Regional Medical Stores No obvious indication of contamination
Who administered the medicines? Any likelihood of administration errors?	Class Teacher No likelihood of administrative error
Drug administration mode & route	Drug was administered orally with water and under supervision
Was the whole MDA supervised by nurses or teachers or community volunteers?	MDA was supervised by head teacher who had undergone training conducted by the DHMT.

Concomitant Medication and Past medical history

Presenting complaint	Itching all over the body and swollen face
Immediate past medical history. Malaria? Upper respiratory tract infection?	No significant past medical history
Existing medical conditions - diabetes, asthma, liver function, kidney impairment etc.? Known or unknown?	No known existing medical condition.
If child had any condition, was she administered any medicines? If so, which ones? Dosage, frequency etc.	N/A

Outcome of post-mortem

Post-mortem report obtained?	N/A

Case-causality assessment

Certain, Probable, Possible, Unlikely, Not assessable	(To be done by panel of experts)

SAE Forms

SAE form filled?	Yes
Obtained copy of SAE form?	Yes
Who filled the original SAE form? Details	District Disease Control Officer.
What is the view of the "receiving doctor" on the patient's condition?	Angioedema secondary to ingestion of tablets Praziquantel/ albendazole

Drug

Suspected Drug	Tablet Praziquantel, 600mg
Dose, frequency	Two and half tablets of Praziquantel
Date of Administration	3/10/2016
Drug sample obtained?	Yes. Samples of the drug taken and sent to the Food and Drugs Authority for analysis.
Batch no. of suspected drug	Praziquantel: M536260 EXP 12/2017

Drug Administration

Source of drug	Ghana Health Service/WHO
How was the medicine stored prior to delivery to the districts? Any contamination?	Stored at the Regional Medical Stores No obvious indication of contamination
Who administered the medicines? Any likelihood of administration errors?	Class Teacher No likelihood of administrative error
Drug administration mode & route	Drug was administered orally with water and under supervision
Was the whole MDA supervised by nurses or teachers or community volunteers?	MDA was supervised by school based school health education program staff who had undergone training conducted by the DHMT.

Concomitant Medication and Past medical history

Presenting complaint	Generalized oedema
Immediate past medical history. Malaria? Upper respiratory tract infection?	Nil of note
Existing medical conditions - diabetes, asthma, liver function, kidney impairment etc.? Known or unknown?	Nil of note
If child had any condition, was she administered any medicines? If so, which ones? Dosage, frequency etc.	N/A

Outcome of post-mortem

Post-mortem report obtained?	N/A

Case-causality assessment

Certain, Probable, Possible, Unlikely, Not assessable	(To be done by panel of experts)

SAE Forms

SAE form filled?	Yes
Obtained copy of SAE form?	Yes
Who filled the original SAE form? Details	District Disease Control Officer.
What is the view of the "receiving doctor" on the patient's condition?	Acute Renal failure 2®drug ingestion

Niger

Summary

The main activities carried out in this reporting period included preparing for the first FY17 mass drug administration (MDA) campaign, holding planning meetings for program activities, and conducting monitoring and evaluation (M&E) activities.

As in FY16 and per the FY17 workplan, the FY17 MDA was organized into two separate campaigns. The first campaign, which began in January 2017, covered Diffa, Dosso, Niamey and Tillabéri regions. The second, scheduled to start in March 2017, will include the remaining four regions of Agadez, Maradi, Tahoua and Zinder. The two campaigns were planned to minimize the expiry of drugs, and to ensure logistical workload was more manageable at the central level. During the first campaign, one focus was on strengthened central level supervision. This was possible because instead of needing to supervise eight regions at once, the supervisors could focus on just four. Sixteen persons formed the central-level supervisory team. The objective is to see increased coverage, fewer data problems, and quicker response to implementation issues. However, the second campaign, scheduled for March 2017, may be delayed slightly because the Mectizan (MEC) and Albendazole (ALB) have not yet arrived in Niger. In the districts that have already conducted their MDAs, evaluation meetings have begun to review the MDA data, discuss strengths and weaknesses and formulate any recommendations to improve the next campaign.

Prior to the MDA campaign, three missions to sign the FOG agreements were carried out in all eight regions of the country. A post-campaign physical inventory was also conducted in all regions except Agadez, where insecurity did not allow the physical inventory to take place. The data from the physical inventory enabled the redeployment of drugs across health districts and identified any drug expiring soon.

In terms of planning and coordination, several meetings were held: 1) coordination meeting with all NTD partners was held in preparation for the MDA campaign; 2) a working meeting with the Minister of Health and his top aides as part of efforts to strengthen collaboration between the Ministry of Health (MOH) and HKI; 3) a working meeting with HKI and the MOH's NTD coordination team to discuss the FY17 approved work plan and the budget, given the numerous iterations and changes that occurred during the workplanning process; and 4) a working meeting with HKI, the World Bank and WHO to address integration of the World Bank's new NTD/malaria project.

The new 2017–2021 NTD master plan was also finalized and forwarded to the Minister of Health's office for validation and signing. This new strategic plan is based on the MOH's Health Development Plan (PDS 2016–2020) and the WHO guide on writing master plans.

In terms of M&E, several surveys scheduled for FY16 were conducted in FY17 because of the delayed MDA and to comply with directives that call for an interval of at least six months between the MDA and the surveys. The national schistosomiasis (SCH) and soil-transmitted helminth (STH) control program (PNLBG) thus conducted a SCH assessment in 17 sentinel sites, but results are not yet available. The national eye health program (PNSO) conducted trachoma impact surveys (TIS) in four districts, and trachoma surveillance surveys in another four districts. The TIS results show that two of three districts can now stop MDA (Zinder Commune and Matamèye), while the third, Gouré, requires three additional MDA rounds. The surveillance survey results show that trachomatous inflammation follicular (TF) prevalence thresholds remain <5%.

The national elimination program for onchocerciasis and lymphatic filariasis (PNDO/EFL) also conducted some activities. Pre-TAS was conducted in 11 districts. Six of the 11 districts had mf prevalence <1% and will be submitted to the RPRG for TAS 1 approval. Those that failed will continue MDA. In addition, TAS 1 was carried out in Gouré health district and the results indicate MDA may be stopped. As part of onchocerciasis elimination, an entomological survey was completed in four of five endemic health districts. The samples were sent to the lab for analysis and results will be shared with FHI 360 once available. An epidemiological survey was conducted in Boboye health district only.

Lastly, Niger held its first onchocerciasis elimination committee (OEC) meeting in January 2017. This committee has been established to formulate an action plan in the form of a roadmap to help Niger's PNDO/EFL prepare its dossier for certification of interruption of onchocerciasis transmission.

1. MDA Assessment

The workbooks have been completed.

2. Changes in MDA Strategy

Overall, official reports for the DSAs discussed in this report are not yet available, other than for the TAS 1 in Gouré. While official changes to treatment strategy have not yet been made in the districts undergoing trachoma impact assessment, preliminary TF prevalence is available for these health districts, which can give an indication of the changes that will occur.

Changes in MDA Strategy

District Name	Disease	Description of Change (ex: Stopped MDA; or Changed from district-level treatment to community-level treatment, etc)	Rationale for Change (ex: active trachoma prevalence in impact study conducted in August 2011)
Gouré	LF	Stop MDA, start surveillance	TAS conducted in October 2016 15 positives/1,559 children surveyed; critical cut-off = 18
Magaria	Trachoma	Continue MDA (1 round) before survey	Trachoma impact survey conducted in October 2016, Prevalence = 6.08%
Matamèye	Trachoma	Stop MDA, start surveillance	Trachoma impact survey conducted in October 2016, Prevalence = 1.26%
Gouré	Trachoma	Continue MDA (3 rounds) before a new survey	Trachoma impact assessment conducted in October 2016, Prevalence= 12.28%
Zinder Commune	Trachoma	Stop MDA, start surveillance	Trachoma impact survey conducted in October 2016, Prevalence = 4.97%

3. Training

Most of the data for training done during this reporting period are not available/incomplete. For instance, the 2017 MDA training data will only be available after the campaign evaluations. Also, the independent monitoring training was not held because the activity was postponed to the second phase of the MDA. In addition, the PNDO/EFL has not yet transmitted the training data on the surveys.

4. Community Mobilization, IEC Materials, Registers, Publications, and Presentations

The first round of the MDA campaign was launched in January 2017 in the regions of Tillabéri (Téra, Say, Kollo and Tillabéri districts), Niamey (Niamey I, Niamey II, Niamey III, Niamey IV and Niamey V), Dosso (Boboye and Gaya) and Diffa (Diffa, Mainé and N'Guigmi). To encourage participation by the target

population, several social mobilization activities were carried out: using community radio stations, public criers and female community health workers to transmit messages in the targeted villages and hamlets. This involved approximately 3,100 public criers, 3,100 female community health workers (CHW) and 69 community radio stations for the campaign. Each public crier and health worker was responsible for covering a certain number of villages, based on the number assigned per district. We estimate the town criers and health workers each reached 1,000 – 1,200 residents, on average. The public criers used megaphones to disseminate information as they traveled through the villages and hamlets. The female CHWs held educational talks on the importance of the NTD drugs, through delivering messages at wells, markets and household visits. On most community radio stations, the programming directors recorded interviews with the health center directors in the health areas covered by the radio station. The interviews were conducted in the local dialect and addressed the following:

- Diseases targeted by the drug distribution;
- Drugs, their importance, age range covered, dosage and how to take them,
- Surveys that will help to demonstrate the impact of treatment on disease prevalence.

Some weaknesses identified with the social mobilization activities included the lack of educational materials (posters, brochures and flip charts) and inadequate coverage for all villages involved in the MDA due to insufficient numbers of health workers and town criers relative to the number of villages. In addition, the lack of formal training for the female CHWs and town criers meant they were unable to answer some key questions posed by community members, such as what the drugs do. These female CHWs have received briefings by the head nurses, but it is evident the briefings have not been exhaustive. This may be a consideration for a new training activity in the future.

Another short coming concerned the national radio and television not being able to broadcast the MDA messages planned for FY17 in the first four regions because of the MOH's delay in communicating the exact date of the campaign. END in Africa is working to ensure these messages are transmitted for the second part of the MDA.

Strengths included provision of information provided at the time of the distribution, the importance of taking the drugs, and the mobilization of women in certain concessions that are off-limits to men (for the female CHWs).

No best practices were documented and published during the period.

5. Supervision

This period coincided with the end of the first phase of the campaign in four regions (Diffa, Dosso, Niamey and Tillabéri). As with the trainings, supervision is also conducted on a cascade basis, based on the health pyramid structure and a supervision guide is used to gather useful information during this field activity. And during supervision, the central- and regional-level teams conduct community visits with the authorities (village, religious or customary leaders) to obtain their views and discuss appropriate solutions.

In addition, the collection tools (including registers, forms and templates) are verified during supervision to ensure compliance with age range, gender and quantity of drugs provided. The collection materials are also verified to ensure they comply with current materials. They are corrected if earlier versions are found to have been used. Inadequate supplies of new materials may explain the use of earlier materials or tools. The CDDs are monitored at the various stages of their work, from the moment they arrive at each household up to administering the drugs, including checking individuals off in the register. After

observation, weaknesses are corrected on site to ensure the work is performed properly. When the supervision is complete, the district team is debriefed, with the CSI directors present, so they can monitor implementation of the corrections needed.

Several problems have been identified through the supervision such as: drug stock-outs, side effects, lack of data archives from prior campaigns, weaknesses in filling out data collection materials and low incentives for the CDDs, particularly compared with other mass activities, such as national vaccination days (which has been brought up every year as one reason that Niger continues to report low coverage in many districts). Quite a few suggestions were made by the supervisors during the first part of the FY17 campaign to improve MDA campaigns:

a. Integrate NTD activities into other health district activities; this is intended to remind people about NTD control efforts during the health centers' other activities (treatment, vaccination, information sessions), rather than NTDs just being a once per year effort.
b. Suggest that people eat before taking the drugs to reduce side effects that lead some to be hesitant about taking the drugs.
c. Conduct directly observed therapy to ensure people swallow the drugs in the presence of the CDD; do not simply give out tablets without knowing whether they are taken (or not).
d. Archive NTD data materials for later use to preserve information about all the campaigns that the health facility has conducted. Archiving will help to prepare for validation of disease elimination; workers sometimes cannot locate the materials used in previous campaigns at some facilities, which could bring into question what was done, should a validation team visit those health facilities.
e. Document problems by encouraging staff to write down and keep records of their observations during the activity. This will help to identify solutions in the future.
f. Verify the CDDs' registers before they leave the health center when the activity is complete. This will reduce data inconsistencies, make it easier to count the drugs and provide information on any inconsistencies noted.
g. Verify which targets have not been reached and redeploy the remaining drugs and the teams. This involves assessing the areas and individuals treated and identifying any areas that were not covered or were inadequately covered and require mop-up or additional distribution.
h. Complete the distributor's register after every distribution. This involves automatically checking off each person in the register to avoid over- or under-estimates of the number of persons treated.
i. Ensure proper interpersonal interaction in the households (greet members of the household, explain the reasons for the drug distribution and the benefits).
j. Some of the health center directors also raised the issue of inadequate incentives for the CDDs, particularly compared to those the same CDDs receive for other mass activities, such as national vaccination days. The community nature of the NTD MDAs should be noted. In addition, the MOH is reviewing proposals to harmonize the activity and incentive packages for the CDDs and CHWs, as noted above with the World Bank-funded meeting in October 2017.

In addition to the MDA, supervision also covered the DSAs conducted during this half-year. In September 2016, the PNDO/EFL coordinator and the HKI monitoring and evaluation specialist supervised the pre-TAS (planned for FY16 but not reported in the SAR2 FY16) at the Gaya health district. The objective was to confirm compliance with the steps noted in the protocol. This nighttime activity was conducted at two sites, with blood draws for laboratory analysis to confirm the presence or absence of microfilariae, which are signs of LF. Strengths include survey training for the actors involved at the district level (lab assistants and CSI directors), the availability of labor inputs, the population's awareness

of the survey goal, the use of facilitators to keep the population engaged (video screening), contributions of soap to parents and candy to children as incentives, slide drying and staining in the field, and the determination and devotion of the team. Weaknesses primarily involve some individuals' hesitations about having blood drawn at night, despite educational efforts. The recommendation is to increase community awareness efforts during the pre-TAS to facilitate the collection of blood samples.

The onchocerciasis entomological survey was also supervised in September 2016, but not included in FY16 SAR 2. The team comprised of HKI NTD M&E Specialist, a WAHO intern from HKI and the PNDO/EFL coordinator. The objective was to review the process of larvae collection at sites in the Tapoa area (Say health district). The sites located in the bottomlands traversed by rivers are difficult to reach. Some of the collectors had problems because of the limited presence of larvae at certain times. The problem is not in capturing the larvae but, rather, the very limited presence of flies at certain sites at certain times. Strengths include the determination and dedication of the collectors at the various sites, the PNDO/EFL's regular supervision of those individuals, the coordinators' reminder of certain points, such as the target to be achieved during the capture; and the supervisory visit to sites along the Diamangou River and the Gosso water sources, which enabled the team to better understand the situation.

In addition, trachoma impact surveys were conducted in four health districts: Magaria, Matamèye, Gouré and Zinder Commune. Trachoma surveillance surveys were also conducted in the four health districts of Boboye, Dosso, Illéla and Kollo. The HKI NTD M&E Specialist and the PNSO's data manager supervised the Magaria, Dosso and Boboye districts in October 2016. Teams of ophthalmologists monitored the entire survey process, from start to finish, in the clusters targeted. Certain individuals were absent because of work in the fields, suggesting inadequate interpersonal communication. Reminders and/or suggestions for improvement were provided. This inadequate communication arose about the refusal by Fulani residents of a village in Boboye district to have their eyes examined. The team had problems convincing the population. The supervisors stepped in and, after negotiations, the health center director had to confirm the activity was being conducted under the auspices of the MOH. This community's negative reaction had to do with a prior event that led to the death of a pregnant woman, allegedly caused by a mobile surgery team whose identity and origin was unknown to them.

Awareness-raising activities were carried out in the community on hygiene measures and risk factors for trachoma transmission. Certain teams were informed that they provided inadequate feedback on results and that the survey was conducted too quickly. The supervisors suggested to the teams that they work through the health centers associated with the clusters before going to the survey villages and reminded them they must comply with the protocol.

Also, during October 2016, the SCH sentinel site surveys were supervised in the Tessaoua, Gaya and Boboye health districts. The main weaknesses included: the failure of the schools to open on time made it difficult to recruit school-aged children, and inadequate skills of the laboratory assistants. These laboratory assistants were not all central-level staff, and not all had been previously trained and thus needed to be trained in the field. The amount of time allocated for training time was found to be insufficient for the assistants to improve their understanding and provide substantial support to the surveys. Some of the laboratory assistants did not like spending the night in the field. Finally, the number of available microscopes, HemoCue equipment and the micro-cuvettes were inadequate.

6. Supply Chain Management

During the period under review, the PNSO received 17,232 boxes of Zithromax (500 tablets/box) and 122,304 bottles of Zithromax syrup on October 28, 2016. In terms of drug forecasting, the PNSO has

also been working on finalizing its 2018 request for Zithromax with the International Trachoma Initiative.

No other drugs were received in the reporting period, and the join request form for the Albendazole, Mectizan and Praziquantel has not yet been submitted; however, the NTD Programs plan to submit the application to the WHO by April 15, 2017.

In the request for drugs for the FY17 MDA, Niger was late in notifying the WHO of its Ivermectin, Praziquantel and Albendazole needs because of the delay in evaluating the campaigns and conducting the post-campaign physical inventory. Thus, the ivermectin and albendazole have not yet arrived in Niamey (no Praziquantel is planned to be shipped in FY17).

SCM challenge

Drugs are monitored from the time they are stored at the ONPPC until supplies are sent to the health districts. However, the health districts' drug management capacity is still inadequate, particularly post-campaign in conducting the reverse logistics. This situation is often the result of changes in the staff responsible for drugs at the district level. Many of the warehouse employees at the district level who were previously trained in SCM have been assigned to other positions and replaced by employees without drug management experience.

Supply chain management strengths and weaknesses

The supply chain's strengths include:

- The agreement with the ONPPC (appropriate storage of the drugs, availability of trucks to transport drugs)
- Post-campaign physical inventory (it is now conducted on a routine basis after each campaign)
- Training for all actors, with a component addressing SCM at the start of the campaign.

However, several weaknesses remain:

- Inadequate reverse logistics (see above for proposed solution)
- Inadequate information feedback from the NTD programs to the districts, leading to the expiry of certain drugs
- Delays in transmitting the utilization reports and drug orders (particularly MEC, PZQ and ALB). For the drug orders, HKI is working with the NTD programs to determine the support the project can provide to ensure an on-time and quality submission for FY18 drug needs.

7. Program Monitoring and Evaluation

Several surveys were conducted during the reporting period with support from END in Africa. The surveys involved a range of staff, including laboratory assistants, epidemiologists, ophthalmologists, nurses and communications specialists. Changes in strategy will follow once the programs disseminate the official results.

LF/Onchocerciasis – LF Pre-TAS was conducted in September 2016 in 11 districts (Aguié, Tessaoua, Madarounfa, Mayahi, Bouza, Keita, Konni, Illéla, Tahoua, Tchintabaraden and Gaya). Some health districts in the Tahoua and Maradi regions had previously conducted (and failed) TAS 1 (Aguié, Bouza, Keita, Tahoua, Illéla and Konni) or Pre-TAS (Tessaoua, Madarounfa, Mayahi and Tchintabaraden) evaluations. The Gaya health district conducted its first evaluation (Pre-TAS). After these failures, the MDA continued for another three years in these districts. Therefore, the Pre-TAS was conducted again in FY17 to assess the impact of the treatment provided in these districts and determine if the districts are

eligible for TAS 1.

The number of individuals surveyed for the pre-TAS ranged from 300 – 351 per health district, with an average of 318 individuals surveyed per site. The target populations for nocturnal microfilaremia included five years and above. The survey was conducted by laboratory assistants (sampling) and other experienced staff, including nurses and communications experts (awareness-raising). For the pre-TAS, those health districts with prevalence below 1% will move to the TAS 1 in the following year. Those health districts that fail the TAS 1 will need additional treatment rounds before being evaluated again.
The provisional results by district, based on the site, are summarized as follows:

Region	District	Sentinel Site (Prevalence)	Control Site (Prevalence)
Tahoua	Birni n'Konni		Tsernaoua (0.28%)
Tahoua	Illéla	Badaguichiri (0.61%)	Illéla (0%)
Tahoua	Keita		Kirari (0.63%)
Tahoua	Bouza		Karofane (0%)
Tahoua	Tahoua		Danfane (0%)
Tahoua	Tchintabaraden		Kaou (0.58%)
Maradi	Madarounfa		Inkouregaou (2.33%); Safo Tchikaji (2.08%)
Maradi	Mayahi		Jantoudou (2.33%); Sherkin Haussa (2.00%)
Maradi	Aguié	Saja Manja (1,92%)	Dogon Dawa (1.20%)
Maradi	Tessaoua	Gaba Wouri (0,49%)	Nahouta (2.66%)
Dosso	Gaya		Dole (3.34%); Tounouga (13.88%)

Of the districts planned and accepted by the Regional Peer Review Group (RPRG) for the FY16 TAS 1 (8/9 evaluation units submitted) (Gouré, Matamèye, Magaria, Mirriah, Zinder, Diffa, Maine Soroa and N'Guigmi), only Gouré was surveyed in October 2016, given the need to finalize FY16 activities by the end of October 2016. There were 15 positive cases over 1,559 children sampled, which was below the critical cut-off threshold of 18. Therefore, the district will stop MDA and start surveillance. Overall, now 13/44 health districts have stopped the MDA for LF. The survey was postponed to FY17 for the other health districts (Matamèye, Magaria, Mirriah, Zinder, Diffa, Maine Soroa and N'Guigmi) and are planned to start in March 2017, though they have not yet at the time of this report.

The onchocerciasis entomological survey was held during August/September 2014 in four health districts (Téra, Say, Kollo and Boboye) and the epidemiological survey was conducted in just one (Boboye). The results are not yet available, though the analysis of the entomological data should be available in time for the second meeting of the onchocerciasis elimination committee; epidemiological data will be analyzed once there is consensus on which ELISA test to use.

Trachoma – The PNSO had planned to conduct trachoma impact surveys in seven health districts and seven trachoma surveillance surveys in FY16. Each survey was conducted in four districts in October 2016 (FY17) (impact survey: Magaria, Matamèye, Gouré and Zinder Commune and surveillance survey: Kollo, Boboye, Dosso and Illéla), given the fact that the surveys could not all be completed by the end of October 2016. Following discussions with HKI headquarters, the surveys were stopped after those four districts and the remaining three of each were postponed to FY17. However, the program is currently completing the remaining three surveys (Aguié, Bilma, Tchirozérine (trachoma impact surveys); Say, Ouallam Filingué (surveillance surveys).

The trachoma impact and surveillance survey results completed thus far are as follows:

Region	District	Prior trachoma survey prevalence	New trachoma prevalence	Impact or surveillance survey?	Action
Zinder	Magaria	42.78%	6.08%	TIS	1 round of MDA
Zinder	Matamèye	42.26%	1.26%	TIS	Stop MDA; start surveillance
Zinder	Gouré	14.4%	12.28%	TIS	3 additional rounds of MDA
Zinder	Zinder Commune	12.9%	4.97%	TIS	Stop MDA; start surveillance
Tillabéri	Kollo	1.70%	0.13%	Surveillance	Continue surveillance
Dosso	Boboye	4.60%	0.00%	Surveillance	Continue surveillance
Dosso	Dosso	2.50%	0.33%	Surveillance	Continue surveillance
Tahoua	Illéla	3.70%	3.97%	Surveillance	Continue surveillance

SCH – The PNLBG conducted sentinel site surveys in October 2016 in 17 sentinel sites. (Note: PNLBG changed the Boboye health district sentinel site from Falmado to the village of Bongou Koukou.) Both forms of SCH (S. Mansoni and S. Haematobium) are endemic in Niger and both urine and stool samples were collected from children 6-8 years of age. Results are not yet available. Based on the intensity of SCH prevalence, the results will be used to determine the number of MDA rounds needed before future re-assessment.

Other M&E activities

The integrated coverage survey that had been planned following the FY16 MDA, which planned to collect coverage data from the three NTD programs was not conducted. This activity was not reprogrammed in FY17, given that the NTDP was unable to organize the FY16 activity on time, and the NTDP preferred to use their available budget for needed DSA.

A DQA has not yet been conducted either, although planned for two previous fiscal years. Although this activity should have been carried out in prior fiscal years when funds were available, it has been postponed because of lack of preparation and unavailability of NTD programs. The NTDP had planned to conduct a DQA in FY16 but could not find time to do so, given the heavy load of activities; however, the NTDP recognizes that DQA can help identify areas where major data reporting issues exist and find a solution to them. DQA has not been reprogrammed for FY17 because the NTDP prefers to ensure that the MDA and the DSA take place per the planned schedule. In FY17 again, there is a heavy DSA schedule and because the END in Africa project will end in two years, the NTDP recognizes that activities need to take place on time during this fiscal year.

Post treatment surveillance

As part of post-treatment surveillance, this involves occasional surveys, implementing a behavior change communication system with information, education and communication materials focused on NTD prevention, measures to improve individual and bodily hygiene and environmental health, vector control activities, operational research, and program staff capacity-building. While both the PNDO/EFL and PNSO have developed post-endemic surveillance plans, they have not yet been validated and at present, neither program has a partner to support implementation.

DSA Type	# DSA Targeted with USAID Support	Names of districts where DSA to take place
Lymphatic filariasis	Sentinel site mid-term evaluation	1 (Arlit)
	TAS 1	Gaya
	TAS 1	8 (Matamèye, Magaria, Mirriah, Zinder, Diffa, Maine Soroa, N'guigmi) (FY16 activity postponed to FY17)

Trachoma	Impact evaluation	3 (Tchirozérine, Bilma, Aguié) (FY16 activity postponed to FY17)
	Impact evaluation	2 (Mayahi, Guidan Roumdji)
	Pre-validation surveillance survey	3 (Say, Filingué, Ouallam) (FY16 activity postponed to FY17)
	Pre-validation surveillance survey	2 (Téra and Tillabéri)

M&E Challenges

Denominator issue: The NTD programs continue to use different populations. For example, the PNLBG uses the notion of "endemic villages" and those populations to determine treatment targets, rather than district-wide populations. These populations are not obtained from the national statistical bureau but from health center population estimates, which may be different from the statistical bureau's figures.

Security issue: Data collection, management and control are very precarious in certain areas of the country. This is related to problems gaining access to regions at risk in terms of security. Attacks carried out in certain areas (North Tahoua and Diffa region) impeded efforts to supervise the survey activities. We also note that the workers have problems obtaining data from insecure areas. For example, in the area north of Tillabéri, there are soldiers instead of MOH health workers in the CSI, this makes it difficult to obtain health information for these populations.

Archiving: Campaign data collection materials are not archived adequately. During supervision, supervisors inform the health workers of the need to develop a rational system for archiving the various materials and data for later use. However, these workers' mobility affects the ability to preserve older documents from prior mass campaigns. It was recommended that the health facilities set up an NTD-specific dossier to ensure traceability of information from the various campaigns conducted by each facility at each level of the health pyramid. As things stand today, several NTD focal points (regional, health district) or health center directors have been reassigned or have left their health facilities. Their replacements have had problems accessing data from prior campaigns. Some focal points used their own computers for work and took the data with them when they left. Ideally, this discussion would be held again at meetings with the focal points (national, regional, health district and CSI directors). However, since then, we have asked the health workers to archive information on NTDs, as with Guinea worm. The issue should be raised again in the future, in collaboration with the MOH, to elicit other proposals.

8. Short Term Technical Assistance

No technical assistance was provided during the reporting period.

9. Government Involvement

A coordination meeting was held in November 2016 and chaired by the MOH Director of Studies and Programming. The objective was to review MDA campaign preparations, the treatment of the Diffa refugee camps and the overlap with the activities of the new World Bank NTD project. The regions involved in the first MDA were confirmed and an MDA timeline was developed.

A meeting of the NTD steering committee, which serves as the NTD Task Force: This committee, which was created when the NTD/World Bank malaria project launched, assembles all the MOH partners working on NTD control efforts in Niger. The new project's annual action plan was validated at the meeting. It should be noted that efforts had been made for several years to reinvigorate the NTD Task Force; however, government support lacked. We view this as a positive indication of interest by the government.

While no new staff were hired to support the NTDP or disease programs, the MOH reminded the national NTD focal point of her role, that is, responsibility for the role of coordinating all the partners involved in this work. Whether she improves her performance remains to be seen, during coming activities (e.g. NTD coordination meeting, steering committee meeting or meeting with MOH officials). No additional office space was provided to the NTDP during the reporting period, and no additional budget was made available.

10. Transition and Post-Elimination Strategy

In terms of the measures taken after the withdrawal of donor funds, a positive reply from the Ministry of Health has not been forthcoming. The NTD budget line, voted in the amount of FCFA 100 million, still exists but has not been increased and is difficult to access. It is unlikely that this will change soon, given the fact that the overall Ministry of Health's budget has been cut for the Government of Niger to increase its spending on security. Integrating all the programs into a single program, which would incorporate all activities and thus reduce the costs of the various activities, is still being considered.

As part of implementation of the post-elimination strategies proposed by the NTD program, the PNSO conducted several trachoma surveillance surveys to ensure that there has not been resurgence of the disease. This is required as part of the trachoma dossier for validation of elimination. A surveillance plan was thus developed and implementation has begun in a few areas. This plan involves primarily increasing Facial cleanliness & Environment improvements (F&E)/WASH activities, to decrease chance of disease recrudescence and integration of surveillance into the health system.

For onchocerciasis, the PNDO/EFL held a meeting of the onchocerciasis elimination committee in Niamey, from January 25-26, 2017. The meeting received support from END in Africa. The overall purpose of the committee is to help Niger make decisions regarding preparation and submission of its dossier for validation of the interruption of onchocerciasis transmission.

Several items were discussed during the meeting:

- Draft decree on the roles, responsibilities and composition of the membership of Niger's OEC;
- WHO criteria for country verification of the interruption of onchocerciasis transmission;
- Key areas of work that will help to develop the action plan for certification of the interruption of onchocerciasis transmission in Niger.

A second meeting will be held in the next six months.

11. Proposed Plans for Additional Support to National NTD Program

The MOH is reviewing the possibility of integrating programs that conduct mass activities to ensure their continuation and reduce costs.

HKI was awarded a grant from the Conrad N. Hilton Foundation to continue providing support to the PNSO for trichiasis surgery, as well as some health education and sanitation activities in Niger and Mali. The grant totals $5.975 million for three more years of support to both countries.

12. Lessons Learned/Challenges

In the past, Niger has tried to organize one single campaign, covering the entire country and all diseases (each of the drug packages (IVM+ALB for LF, Zithromax + TEO for trachoma; and PZQ±ALB for SCH±STH)) would be distributed one right after the other. However, this entailed an enormous logistical burden on

all actors; in addition, the entire campaign would be delayed until all drug arrived. Therefore, this year, the NTDP has split the campaign into two phases (each consisting of 4 regions) to overcome those issues. In addition, the fact that the campaign is divided into two phases increases the available central-level personnel to provide oversight to each region: there are 16 central-level persons (from the different NTD programs and HKI Niger) who can supervise the campaign. Splitting the campaign into two phases enables 4 persons to oversee each region, rather than just two. Given the large geographical size of the country, this will enable them to cover more territory.

Niger has organized independent monitoring for several years, which has enabled several issues to be detected during the campaign, including populations who have not yet received drug, shortages of certain medications, poor social mobilization, and difficulties in understanding correct dosing or other issues related to distribution. Independent monitors signal to health center heads if certain populations have not been reached; these health center heads then send CDDs to those zones to distribute the medications. In addition, where drug shortages are discovered, the health center heads arrange to have additional drug shipped to that areas. As for poor social mobilization (here, referring to public criers and female community health workers who have not been able to transmit messages everywhere or correctly), this is reviewed during the MDA evaluation to determine whether capacity-building is required. As for incorrect dosing, MDA training for CDDs focused more on role play this year, rather than theory.

13. Major Activities for the next six months

- Official launch of the FY17 MDA campaign
- Phase 2 of the FY17 MDA in the other four regions (Agadez, Tahoua, Maradi and Zinder)
- Regional and national MDA evaluations
- Microplanning workshop for the FY18 MDA
- Workshop to develop the FY18 work plan
- TAS 1 survey, (carryover activity from FY16) in districts of Diffa, Mainé, N'Guigmi, Magaria, Matameye, Mirriah and Zinder Commune
- FY17 TAS 1 survey in Tahoua health district
- Mid-term evaluation of *mf* in Arlit
- Training on Trachoma Survey Methodology
- Data Collection Tablets for Trachoma
- Trachoma prevalence survey, (carryover activity from FY16) in Aguié, Bilma and Tchirozérine
- Trachoma surveillance surveys (carryover activity from FY16) in Ouallam, Say and Filingué
- FY17 trachoma impact surveys (Mayahi, and Guidan Roumdji)
- FY17 trachoma surveillance surveys (Tera and Tillaberi).
- FY17 post-campaign physical inventory
- 2nd meeting of the onchocerciasis elimination committee

Sierra Leone

Summary

During the reporting period END in Africa supported social mobilization, MDA for schistosomiasis (SCH) in 7 health districts (an FY16 activity not completed before the end of the fiscal year), conducted training and community sensitization for pre-TAS, TAS and onchocerciasis epidemiological assessments and participated in national and international planning and coordination meetings.

Social mobilization

Social mobilization meetings were held September 26–30, 2016 in various communities to gain the support and commitment of stakeholders for mass drug administration (MDA) for SCH in 7 health districts (HDs). This is the FY16 SCH MDA that was not reported in the FY16 second semi-annual report, due to the timing of the activity. The participants ranged from religious leaders, section chiefs, youth groups, women's groups, ward councilors, village health committee chairmen and head teachers. These stakeholders helped sensitize target populations prior to and during the MDA. In addition, town criers also played a great role in sensitizing the communities including the importance of eating at least one hour before Praziquantel (PZQ) can be administered.

MDA

SCH MDA in 7 HDs was successfully implemented. The MDA was conducted October 12–19, 2016 and targeted school-aged children (SAC) and high risk adults (HRA). Overall, 1,038,783 eligible persons were treated, achieving 81% program coverage. The MDA was planned as part of the FY16 workplan but was delayed due to heavy rains and the closure of schools.

End process independent monitoring (IM) for SCH MDA in the 7 HDs showed 83% of eligible persons ingested the drugs, which is close to the reported coverage. Overall monitoring and supervision exercises were conducted at the national, district and community levels. At the national level, staff from the National Neglected Tropical Diseases Program (NTDP) supervised the MDA, whilst at district and community levels, District Health Management Teams (DHMTs) and community leaders took leadership in the supervision. HKI also provided supportive supervision during the MDA.

Mano River Union Meeting

The NTDP and its partners were invited to participate in the ninth Mano River Union (MRU) meeting held October 19–21, 2016 in Monrovia, Liberia. The MRU meeting is a sub-regional meeting involving Sierra Leone, Guinea, Liberia and Cote d'Ivoire. It serves as a platform to strengthen collaboration among member countries in the fight against NTDs. The meeting brings together National Coordinators and Program Managers of NTD programs, World Health Organization (WHO) Representatives, NTD Donors, Non-Governmental Organizations, and civil society organizations.

The key discussion points included development of a joint surveillance protocol and a proposal to implement and synchronize NTDs activities along the borders; integration of NTD surveillance into the national surveillance system by adding NTD indicators into health management and information systems; maintain drugs at the border health facilities to do "mop up" treatment following the MDAs; establish NTD Ambassadors in each MRU country to advocate for fundraising for NTD activities; establish an NTD Expert Advisory Committee in all MRU countries and development of a case management strategic plan in all MRU countries similar to the Liberian strategic plan.

Annual Review Meeting

In early January 2017, the NTDP held an annual review meeting with participants from the DHMTs of all 14 HDs and partners to review the previous year's NTD activities including results, challenges and recommendations to address the challenges. During the review meeting, the proposed timeline for FY17 activities implementation was adopted.

Pre-Disease Specific Assessments (DSAs) Sensitization and Microplanning

The annual review meeting was followed by micro planning meetings to discuss timelines and pre-survey sensitization for pre-TAS in 6 HDs, TAS 1 in 8 HDs, and Onchocerciasis assessments in 8 HDs (to be combined with the TAS 1 surveys), to ensure communities are well informed prior to the surveys and fully comply during the surveys. Frequently asked questions (FAQs), position statements and a community sensitization guide were developed to ensure the harmonized messages are conveyed to selected communities and schools. The training of survey teams took place February 22–24, 2017 in Makeni, Northern Sierra Leone and the field work started immediately after; HKI Senior Scientific Advisor, Dr. Yaobi Zhang, provided technical assistance. The pre-TAS took place February 26–March 9, 2017 and the TAS 1 and onchocerciasis assessment will take place March 15–April 15, 2017.

1. MDA Assessment

No MDA assessments for FY17 activities were conducted during the period under review.

2. Changes in MDA Strategy

There has been no change in MDA strategy based on disease-specific assessments during the reporting period.

3. Training

Training for the survey teams was completed February 22–24, 2017 for the pre-TAS, TAS 1 and onchocerciasis surveys, with technical assistance from HKI's Senior Scientific Advisory, Dr. Yaobi Zhang. A total of 43 personnel were trained at the Northern Polytechnic Laboratory in Makeni. Participants included NTDP staff, HKI, laboratory technicians from the 14 HDs and other survey teams support staff. All other trainings in preparation for the MDAs are scheduled to be completed in the third quarter of FY17.

4. Community Mobilization, IEC Materials, Registers, Publications and Presentations

During the reporting period, several activities were undertaken to mobilize communities to achieve high drug coverage for the SCH MDA in 7 HDs and pre-survey sensitization to prepare communities for DSAs for pre-TAS, TAS 1 and onchocerciasis impact assessments.

NTDP, HKI and representatives of the DHMTs conducted a series of radio programs, which were hosted on commercial and community radios prior to and during the MDA for SCH in 7 HDs to sensitize communities about the importance of taking PZQ, exclusion criteria from the MDA, and the roles of community stakeholders to support health workers during MDA.

Social mobilization guidelines and FAQs were revised for the SCH MDA to include community concerns such as adverse events, feeding of primary school children prior to MDA, the sub-district units (Chiefdoms) targeted and exclusion criteria from participation in the MDA. At the village level, the services of at least 2,000 town criers were utilized to inform over 6,500 communities about the availability of PZQ and the need for every eligible person to comply with the treatment. A total of 14,000 tally sheets, 6,000 adverse drug reaction forms, 3,100 treatment summary sheets and 15,000 copies of FAQs were printed and distributed in all 7 HDs for the SCH MDA.

Community radio stations were used to publicize messages through interactive and live panelist broadcasts. Position statements for each radio broadcast were developed to ensure key NTD messages are repeatedly delivered in various forms during each broadcast by the panelists. The public continued to participate through text messages and phone calls during the live panelist broadcasts to enhance the discussion. Jingles were revised and translated into the main local languages (Mende, Temne, Limba, Krio, Kissi, Loko and Kono) and aired for two weeks at main community radio stations prior and during the MDA to increase compliance.

Community sensitization guidelines, FAQs and position statements were also developed to sensitize communities prior to the pre-TAS in 6 HDs and TAS 1 and Onchocerciasis assessments in 8 HDs to ensure communities are well informed of the purpose of the surveys. These pre-sensitization materials were developed to avert the possibility of refusals due to the devastation and mistrust caused by the Ebola outbreak. These meetings targeted key stakeholders at district and village levels including: city/town council chairmen, councilors, deputy directors of education, senior district officers, health committee chairmen at local councils, religious leaders, section chiefs, members of the DHMTs, youth leaders and women's groups.

Social mobilization activities for the three FY17 MDAs will be conducted immediately after the DSAs for LF and Onchocerciasis.

During the reporting period, the NTDP Program Manager, Dr. Yakuba M. Bah made a presentation at the 65th annual conference of the American Society of Tropical Medicine and Hygiene in Atlanta, Georgia on November 14, 2016. The presentation "Challenges in achieving mass drug administration coverage in the context of epidemics: a case study of Ebola in Sierra Leone" was part of the RTI organized symposium on the topic: *Terrorism, conflict, epidemics and acts of God: the impact of the unpredictable on NTD programs.*

5. Supervision

As in previous MDAs, funds were made available to the NTDP for regular maintenance of their vehicles to enable supervision of the SCH MDA in 7 HDs and all DSAs. At district level, funds were provided in the DHMT budgets to cover the cost of hiring motorcycles and providing fuel to aid effective supervision by the NTD focal persons. Furthermore, at PHU level, funds were provided to cover the cost of transportation for PHU staff to supervise their catchment communities.

To ensure WHO guidelines are adhered to and Ministry of Health and Sanitation (MoHS) regulations followed, a series of meetings were held prior to each activity to explain the guidelines and protocols before implementation. The WHO manual for monitoring and epidemiological assessment of MDA was fully utilized during the planning stage for pre-TAS, TAS 1 and onchocerciasis assessments.

As a way of ensuring MDA targets were met, HKI conducted IM of SCH MDA in 7 HDs during the reporting period. The monitoring was conducted to validate the NTDP reported tallies and understand reasons for non-compliance and MDA challenges. In addition to the independent monitoring, supportive supervisions were also undertaken by HKI, the national school and adolescent health program (NSAHP), and NTDP staff during trainings, advocacy and community meetings and the MDA. The DHMTs also supervised the MDA and community meetings implemented by PHU staff at village level. With support from the community leaders, the community health officers and assistants supervised the PHU staff to ensure all protocols were observed and adequate drugs provided during the MDA.

The IM and the supportive supervision helped to identify poor practices and challenges prior and during MDA. During the SCH MDA in the 7 HDs, the monitors reported their findings to HKI, NTDP and the NTD focal persons daily. All issues encountered during supportive supervisions were communicated to the NTDP. The common problems reported were refusals due to previous adverse events, community members demanding for food, directly observed treatment not followed, drug distribution delays in some communities, inadequate drugs for adverse events, etc. These issues were addressed during the MDA and a three-day mop-up exercise was conducted in communities where eligible people were missed.

6. Supply Chain Management

During the period under review, the Supply Chain Management (SCM) activities included distribution of logistics, materials and drugs for the SCH MDA in 7 HDs.

The PZQ for the SCH MDA in 7 HDs conducted in October 2016 arrived in December 2015 and was cleared and transported to the NTD warehouse in Makeni. PZQ was supplied to the DHMTs in the 7 HDs from the NTD store in Makeni. These were then distributed to the PHU staff based on the target population of their catchment villages. During the MDA, drugs were distributed to the health workers daily.

Other logistics, such as the dose poles (used for MDA in semi-urban and urban settings), pencils, pens, and polythene bags were distributed to the various DHMTs and onwards to the PHUs and community drug distributors (CDDs) at the community level. Following the SCH MDA in the 7 HDs, the remaining PZQ was quantified at the PHU level, and returned to the district pharmacists and onwards to NTDP warehouse in Makeni. SCM topics were part of the training of supervisors, PHU staff and DHMT members. The topics ranged from reporting, reverse logistics, completing the treatment and reporting forms, and waste management of empty cups.

In addition to the PZQ shipment that arrived in December 2015, a second shipment of 4,929,500 tablets of PZQ arrived in September 2016 (this shipment was not reported in the FY16 SAR2). There were no issues of custom clearance at the port of entry. The drugs were transported by NTDP vehicles and delivered to the NTD warehouse manager in Makeni.

Once NTD drugs are available in the warehouse in Makeni, there were no issues in distribution to the respective DHMTs. There was no issue with warehouse and stock management during the reporting period. All the necessary drug requisition and MDA forms were provided through the district pharmacists. The issue of expiration or wastage did not arise during the reporting period. Drugs were distributed based on the “First to Expire, First out” rule. No physical inventory was conducted after the SCH MDA; however, 680 tablets of PZQ were lost/spoiled during the distribution per the MDA reports received from the NTDP.

Waste management was also not an issue. Empty cups, which used to be reused by the community for domestic purposes following the completion of MDA, were returned to the PHUs based on recommendations from previous SCM trainings.

A major challenge at the various DHMTs continues to be the lack of operational vehicles to transport drugs to the various PHUs. Most of the vehicles supplied to the DHMTs are engaged in surveillance activities for post Ebola and other diseases, making it difficult to distribute drugs in a timely manner. To

address these problems, motor bikes and boats were hired for MDA activities, to help the focal persons transport drugs where there was a shortage of vehicles. The vehicles purchased by USAID in FY16 are used for program supervision by NTDP national level staff.

The key strength in the supply chain system is the exemption of all NTD drugs and other supplies from customs payment. In addition, there is a special warehouse for NTD drugs and logistics. This makes it easier to access and distribute NTD drugs in time for MDA.

The major weakness, as stated above, is the lack of functional vehicles at DHMTs to transport drugs and other logistics during MDAs. The DHMTs vehicles are no longer road worthy following their utilization during the Ebola outbreak. To ensure that drugs and logistics are distributed in time for MDA activities, motor bikes and boats were hired, especially in hard to reach areas, to help the focal persons transport drugs where there was a vehicle constraint.

7. Program Monitoring and Evaluation

During the reporting period, funds were provided by HKI to the NTDP to support all data collection for the SCH MDA in 7 HDs. M&E tools such as tally sheets, census forms and summary sheets are provided to members of the DHMTs and PHU staff during trainings. To determine the effectiveness and efficiency of health workers' trainings and community sensitization meetings for the SCH MDA, HKI developed questionnaires to evaluate the knowledge gained by communities and impact of health workers' training on the SCH MDA strategy. The findings from this evaluation was presented in the form of a poster during the annual review meeting for NTDs in January 2017. The key findings highlight the need for a better understanding of the signs and symptoms of SCH, exclusion criteria from participation in the MDA, common adverse events associated with MDA, and good hygiene practices. These topics need to be emphasized during trainings and community meetings.

To validate the reported coverage of the SCH MDA, an end-process IM was conducted by HKI two weeks after the MDA. The results showed no significant difference in coverage between IM reports and NTDP coverage. In addition, questionnaires were administered to individuals both at household and community locations to assess the reasons for non-compliance. The main reasons were: 'my house not visited', 'fear of side effects', 'out of the area', 'did not eat', and 'had no water to take the drugs'. These issues were discussed during the review meeting and it was agreed social mobilization activities in the next MDA should address these concerns to ensure control is achieved by 2020.

There was no change in M&E strategy during the reporting period. DSAs including, pre-TAS in 6 HDs, TAS 1 for LF in 8 HDs and onchocerciasis transmission assessments in 8 HDs are being conducted in this reporting period, but results are not yet available. Prior to the commencement of the field activities for pre-TAS, a total of 43 personnel were trained at the Northern Polytechnic Laboratory in Makeni. The training was facilitated by Dr. Yaobi Zhang, HKI's Senior Scientific Advisor. Participants included NTDP staff, HKI, laboratory technicians from the 14 HDs and other support staff which made up the survey teams.

The NTDP received training on data quality assessment in August 2016; this training will be rolled-out to NTD focal persons and district M&E officers in August 2017. Following the training, the NTDP will conduct its first DQA to strengthen data quality, consistency and reporting at all levels. This is scheduled in September 2017.

A major M&E challenge facing the NTDP and other partners in the country are population denominators.

The summary results[3] of the national population and housing census conducted in December 2015 indicate a gross underestimation of population figures in some districts. Another challenge encountered by the national program during the SCH MDA is the poor road network, especially in hard-to-reach (HTR) districts (Kailahun, Kono and Koinadugu). DHMTs must spend additional days to monitor and supervise some of these HTR communities.

8. Transition and Post-Elimination Strategy

As mentioned above, DSAs (pre-TAS, TAS 1 and onchocerciasis assessments) will be conducted between February and March 2017. The results from the TAS 1 will determine whether LF MDA should be stopped in the 8 HDs.

During the period under review, no specific post-elimination strategy was developed. However, the onchocerciasis elimination committee (OEC), with support from Sightsavers, convened two meetings in September and December 2016 and began discussions on onchocerciasis elimination. The NTDP and partners are scheduled to hold two task force meetings in April 2017 to discuss the way forward for NTD treatments in Sierra Leone based on the outcome of the DSAs.

9. Short Term Technical Assistance

No external Technical Assistance (TA) was received during the period under review. The TA to update the TIPAC and resource mobilization at local level is scheduled for August 2017 when all MDA activities and DSAs will have been completed.

10. Government Involvement

The national program and its partners held three coordination meetings to discuss timelines for the DSAs and the three MDAs for LF-STH in the Western Area, SCH in 7 HDs and LF-OV-STH in 12 HDs.

NTD and SCH/STH Task Force meetings are scheduled for April 2017 to discuss the outcome of TAS 1 in 8 HDs and the onchocerciasis assessment survey. These meetings will establish the necessary steps to take if LF MDA is stopped in those districts and the impact it will have on the treatment for STH and oncho for hypo-endemic communities. Although the taskforce meeting is a routine meeting, considering the FY17 DSA results, participants will be encouraged to discuss the future of STH and SCH treatment and explore opportunities for integrating these treatments into other platforms.

The MoHS annual work plan includes a budget line to cover administrative costs for the NTDP secretariat. However, the release of these funds to implement NTD activities remains a major challenge. During the reporting period, no additional funding was received by NTDP from the government or other partners. A new staff (deputy program manager) was assigned to the NTDP to assist the Program Manager but has not yet commenced his duties. No additional office space was provided during the reporting period.

11. Proposed Plans for Additional Support to National NTD Program

No activity was implemented to support integration of NTDs with other platforms during the reporting period. However, as discussed above, the SCH/STH task force meeting scheduled for April 2017 will bring WASH partners such as UNICEF, WHO, NSAHP to discuss STH transition post LF MDA in 8 HDs (pending the results of the TAS) and the Western Area if TAS 1 is passed by 2018.

[3] https://www.statistics.sl/wp-content/uploads/2017/01/final-results_-2015_population_and_housing_census.pdf

No activities were implemented to support morbidity management during the reporting period. In the FY17 workplan, HKI in support of the NTDP submitted a cross portfolio request for support to conduct an LF morbidity assessment, but is still awaiting response.

12. Lessons Learned/Challenges

During the SCH MDA (FY16 activity completed during this reporting period), intensive use of community radios, town criers and the airing of jingles several days prior to and during the MDA helped to keep coverage high. The social mobilization messaging and advocacy efforts integrate lessons learned from previous MDA rounds. For example, during the FY15 MDA, specific messaging was developed to allay community fears caused by the Ebola outbreak. The NTDP, DHMTs and HKI addressed these concerns during the advocacy meetings at national and district level and the community sensitization meetings at village level. No district fell below the WHO recommended epidemiological coverage threshold during the FY16 SCH MDA.

The IM conducted during the MDA has been very influential in improving the final MDA coverage. The monitors report to HKI, NTDP and DHMT daily on issues affecting MDA coverage, such as noncompliance, mal-distribution, stock-outs, etc. Any issues that might deter a successful MDA are resolved quickly.

13. Major Activities for the next six months

- DSAs for LF and onchocerciasis:
  - Finish the Pre-TAS in 6 HDs in March 2017
  - TAS 1 and Onchocerciasis transmission assessments in 8 HDs – March and April 2017
- MDA LF-STH in the WA – March 2017
- MDA SCH in 7 HDs – May 2017
- MDA LF-onchocerciasis-STH in 12 HDs – July 2017
- FY18 work planning meeting – July 2017
- NTD and STH Task Force Meetings – April 2017
- Updating TIPAC and training on resource mobilization skills – August 2017
- DQA training and implementation – September 2017

Togo

Summary

This six-month period has been very productive in Togo. During this time, the Ministry of Health (MOH) conducted a variety of activities, including a mass drug administration (MDA) in December 2016, planning for the May 2017 nation-wide MDA, meetings to discuss elimination (onchocerciasis, trachoma), and advocacy and resource mobilization meetings led by Deloitte. In addition, the MOH paid the individuals who did not receive payment previously for their involvement in the 2015 nation-wide MDA due to a theft at the central level. Finally, some staffing changes occurred at the MOH – the NTD Focal Point and the Onchocerciasis Program Manager have both retired and have been replaced.

An MDA was held in December 2016 in those high prevalence areas requiring two treatments per year: six districts for soil-transmitted helminths (STH), 15 districts for onchocerciasis (oncho), and high-risk sub-districts in 21 districts for schistosomiasis (SCH). The MDA was successful, data sheets were collected in February 2017, and data entry is under way. We expect the coverage rates to be quite high (>95%). During the 2015 nation-wide MDA, someone, reportedly a MOH accountant, stole the final payments for many of the actors in the MDA, and these individuals were not paid by the MOH for work that they performed. To ensure that all workers receive their payment for the December 2016 MDA, HDI decided to implement the December 2016 MDA as a direct expense, not as a fixed obligation grant (FOG). In late 2016, the MOH paid the individuals the money that was due to them from 2015, and we are confident that the May 2017 MDA can be implemented as a FOG.

The MOH is currently planning the May 2017 nation-wide MDA, which will provide treatment for onchocerciasis, SCH, and STH in areas that require it, based on local prevalence of those diseases. The training materials are being reviewed and edited. An NTD coordination meeting involving all the major stakeholders was held in January 2017, and a micro-planning meeting to finalize the details of the May 2017 MDA is ongoing.

Elimination of NTDs is a priority for the MOH, and there have been several meetings to discuss NTD elimination during this period. Two meetings were held to discuss oncho elimination (in mid-October 2016 and mid-February 2017) with key partners, and one meeting was held to discuss trachoma elimination in early March. Next steps were defined during these meetings, and actions are being taken to collect data and implement surveys where needed. There was also a cross-border meeting organized by FHI 360 in Ghana in October 2017, with a focus on synchronization of oncho treatment across borders.

Deloitte conducted two technical assistance activities for the Togo MOH during this period. The MOH personnel were trained on TIPAC, as well as advocacy and resource mobilization in October 2016. In February 2017, they developed a resource mobilization plan, identifying gaps and potential funding sources.

Finally, two key MOH staff retired during this period. The NTD Focal Point retired and was replaced by the head of the Blindness Prevention Program. In addition, the Onchocerciasis Program Manager retired and was replaced.

1. MDA Assessment

The workbooks have not yet been updated with the December 2016 MDA numbers. We will update them as soon as they are finalized and confirmed by the MOH.

2. Changes in MDA Strategy

District Name	Disease	Description of Change	Rationale for Change
Amou, Anie, Haho, Ogou	Onchocerciasis	2015: Increased frequency of treatment to two times per year	Onchocerciasis Program decision based on programmatic information

3. Training

Deloitte organized two trainings to develop advocacy and resource mobilization skills in the Togolese government/MOH. A total of only 14 people were trained during the period under review. This was a refresher training for 13 men and 1 woman.

4. Community Mobilization, IEC Materials, Registers, Publications, and Presentations

As with all the Togo MDAs, town criers were successfully utilized to publicize the December 2016 MDA. Training materials for the May 2017 MDA are being revised.

One best practice to highlight was The LF Program coordinator's attendance of the COR-NTD and ASTMH meeting in Atlanta in November 2016. HDI presented the following two oral presentations on her behalf: "Prevalence of Ov16 antibiodies among school-age children after twenty years of mass treatment with ivermectin in Togo" and "Using a door-to-door mass drug administration campaign to identify trichiasis and hydrocele in Togo". Two poster presentations were also given at ASTMH: "Prevalence of antibodies to Wb123 six years after elimination of lymphatic filariasis as a public health problem in Togo", and "Comparison of the onchocerciasis Ov16 IgG4 rapid test and Ov16 ELISA among children in Togo: experiences with a new surveillance tool".

5. Supervision

The Togo Integrated NTD Program conducts training and supervision using a cascade approach. Each level trains and supervises the next lower level, from central to region-, district-, and finally to the peripheral health unit (PHU)-level. During MDA activities, drugs are delivered to each level, and ultimately reach the CDDs. After the MDA is complete, CDDs return any remaining medication along with treatment records to their local nurse supervisor, who then collates the medications and data and returns them to his or her district supervisor. Supervisors also examine registers and summary sheets to confirm that data have been correctly recorded in the registers. Problems in implementation of the integrated MDA are identified during field supervisory visits, during post-MDA reviews when drugs and data are returned to the nurses and district supervisors, and at the central level after data are analyzed. Problems identified during supervision are corrected immediately. If implementation problems are identified in a particular geographic area, these problems are addressed during the next round of training and more attention is paid to that area during future MDAs by the central supervisors to resolve the issues.

PHU-level drug distribution guides that conform to WHO treatment guidelines (based on disease prevalence) are distributed to every PHU. After the MDA, reported coverage is calculated and compared to the intended distribution plan. Feedback on any errors is given to the PHUs and CDDs where the error occurred.

6. Supply Chain Management

Albendazole, Ivermectin, and PZQ were distributed to the districts in which a second MDA occurred in December 2016 and, after the MDA, the remaining medications and data forms were collected. The Togo MOH has consistently achieved success in the distribution and collection of MDA medications, and continues to refine the process. However, recently there have been some issues identified with supply

chain management that require attention. For example, in preparing for the December 2016 MDA, some praziquantel was identified that was very near the expiration date. This should not have occurred if the 'First in, first out' policy was being followed and if the individuals responsible for distributing and collecting medications were closely paying attention to the expiration dates.

In addition, during the investigation of a severe adverse event (SAE) during the April 2016 MDA, investigators discovered that after an MDA, leftover medications from different lots were sometimes combined in a single bottle. Finally, during the investigation of an SAE in December 2016, it was discovered that a community drug distributor had left the medication in a household for someone who was not present, which does not follow the directly observed treatment guidelines the MOH has set. These issues highlight the need for wide-scale retraining in SCM and appropriate medication handling guidelines. Overall, the preparation of applications, forecasting, and supply planning has been accurate and losses of medications have been minimal.

7. Program Monitoring and Evaluation

The Togo MOH is continuing to use the existing M&E framework and tools supplied by FHI 360. An integrated impact assessment for SCH and STH occurred in early 2015, and the results of that survey indicate that MDA has been very successful in most places, resulting in decreased prevalence of these diseases compared to the mapping results from 2009. However, there are some areas that have persistently high levels of disease where more frequent treatment has been implemented.

8. Short Term Technical Assistance

During this period, Deloitte conducted two activities in Togo related to advocacy and resource mobilization, the first in October 2016 and the second in February 2017. These trainings used the TIPAC results to calculate funding gaps in the integrated NTD program, and then identified potential funding sources to fill those gaps. This activity will build local capacity to fund integrated NTD activities, and make the integrated program more sustainable.

9. Transition and Post-Elimination Strategy

The MOH is demonstrating commitment to the integrated NTD project in several important ways. The Togo MOH has had an NTD five-year plan in place for several years and is taking on additional responsibility for management and analysis of the Integrated NTD Program data, including the completion of drug requests, analysis of the MDA data, and FOG deliverables. The Togo MOH has submitted a portfolio to WHO for verification of the elimination of LF as a public health problem in Togo. Finally, the MOH has recently organized several NTD elimination meetings for onchocerciasis and trachoma.

10. Government Involvement

The government of Togo continues to be strongly supportive of the Integrated NTD Control Program. The MOH has held numerous coordination meetings over the past six months to discuss the December 2016 MDA implementation and May 2017 MDA preparations, as well as the elimination of onchocerciasis and trachoma. The Togo MOH is also developing their data management and analytical capabilities.

The MOH is developing partnerships within the government (e.g., WASH, malaria, onchocerciasis, education, etc.), as well as with other non-governmental organizations (UNICEF, Red Cross, Plan Togo, etc.) to participate in the integrated MDA. Collaborations among the Integrated NTD Program, HDI-Togo, Sightsavers and the Onchocerciasis Program are being strengthened as a step to moving toward

onchocerciasis elimination. The MOH, HDI, and Onchocerciasis Program are developing ways to further integrate onchocerciasis into the integrated platform, including collaborative development of detailed and integrated implementation plans for distribution of medications and data analysis. HDI is also working to bring together other partners (CDC, the Taskforce for Global Health) to support onchocerciasis surveillance and elimination activities, and operational research on onchocerciasis. HDI is continuing to work with the Bill & Melinda Gates Foundation to identify cases of trichiasis in the community using the MDA platform.

11. Proposed Plans for Additional Support to National NTD Program

The Togo Integrated NTD Program has relied on broad partnerships to accomplish goals and continues to encourage active participation by a variety of partners. For example, the Integrated NTD Program works with the WHO to successfully obtain the duty-free release of the MDA medication and materials for epidemiologic assessments from Customs, and with the Onchocerciasis Program to implement integrated MDAs. The increased partnership of the Onchocerciasis Program with the Integrated NTD Program has facilitated integrated MDAs, and will facilitate onchocerciasis elimination in Togo. Finally, HDI has used USAID-funded activities to leverage support from multiple other organizations: PATH, the NTD Support Center at the Task Force for Global Health, Emory University, and the Bill & Melinda Gates Foundation. As an example, the MOH has recently received funding from the CDC to implement onchocerciasis research.

12. Lessons Learned/Challenges

MDAs in Togo have had very high coverage rates, yet the Togo MOH continues to seek out ways to improve the MDAs. The Togo MOH, along with HDI, is currently reviewing community education and training materials in preparation for the May 2017 MDA. Some problems have cropped up recently involving supply chain management that require additional time and training for the May 2017. Those problems are described in more detail in the next section.

13. Major Activities for the next six months

- April 2017 – Receive all medications; Deliver medications and materials to all districts; Conduct training of accountants involved in the MDA; Implement training of supervisors, nurses; Implement social mobilization activities; Attend NTD Summit, END in Africa Partners meeting; conduct regional desk review of trachoma data; analyze all available trachoma data and determine any remaining trachoma mapping needs
- April-June 2017 – Implement onchocerciasis stop-MDA assessment in Maritime region; Implement onchocerciasis impact assessment in northern three districts
- May 2017 – Implement training of CDDs; Implement May 2017 MDA; Finalize albendazole application; Draft FY2018 Work Plan for discussion
- June 2017 – Collect, enter, and analyze data from May 2017 MDA; Generate report of May 2017 MDA; Work Plan meeting for FY18
- July 2017 – Disseminate results of May 2017 MDA, conduct coverage validation survey; Revise FY18 Work Plan based on meeting results
- August 2017 – Begin preparations for October 2017 MDA
- September 2017 – Finish preparations for Oct 2017 MDA; Attend NTD NGDO Network meeting