Progress Report

October 2013 – March 2014

Integrated Control of Schistosomiasis and Intestinal Helminths in sub-Saharan Africa (ICOSA)

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Submitted by
The Schistosomiasis Control Initiative
in collaboration with
Centre for Neglected Tropical Diseases, Liverpool School of Tropical Medicine
Liverpool Associates in Tropical Health
Crown Agents

CONTENTS

ABBREVIATIONS and ACRONYMS

ADP	Accenture Development Partnerships
APOC	African Programme for Onchocerciasis Control
CIFF	Children's Investment Fund Foundation
CCA	Circulating cathodic antigen
CNTD	Centre for Neglected Tropical Diseases
DFID	Department for International Development
DRC	Democratic Republic of Congo
epg	Eggs per gram
FY	Financial year
GAHI	Global Atlas of Helminth Infections
GSK	Glaxo SmithKline
ICOSA	Integrated Control of Schistosomiasis and Intestinal Helminths
LSTM	Liverpool School of Tropical Medicine
M&E	Monitoring and Evaluation
MDA	Mass Drug Administration
MDG	Millennium Development Goal
MTR	Mid Term Review
MoH	Ministry of Health
NTD	Neglected Tropical Diseases
PZQ	Praziquantel
PCT	Preventive chemotherapy
SAC	School-aged children
SCH	Schistosomiasis
SCI	Schistosomiasis Control Initiative
SCORE	Schistosomiasis Consortium for Operational Research
STH	Soil-transmitted Helminths (intestinal helminths)
VFM	Value for money
WHO	World Health Organization
ZEST	Zanzibar Elimination of Schistosomiasis Transmission

Introduction

DFID is providing £25 million over five years to deliver treatments for schistosomiasis (SCH) and intestinal helminths (STH) in 8 countries in sub-Saharan Africa. Of the £25 million, £14.5 million was allocated to Crown Agents largely for the procurement of praziquantel (PZQ), with £10.5 million provided to the Schistosomiasis Control Initiative (SCI) to provide technical support to the national control programmes within the countries for the delivery of treatment through mass drug administration (MDA). Recipient countries are Cote d'Ivoire, Liberia and Malawi (Group one); Mozambique, Tanzania and Zambia (Group two); and Niger, Uganda and Zanzibar (Group three). The programmes in Liberia, Mozambique and Zambia receive management support through the Centre for Neglected Tropical Diseases (CNTD), Liverpool School of Tropical Medicine (LSTM) under a sub-contract with Imperial College.

The project commenced in October 2010 and has now completed 42 (out of 66) months of operation. The project has just completed Financial Year 4 (FY4). This report covers the progress made specifically during the period 1st October 2013 – 31st March 2014.

Progress against Mid-Term Review Recommendations

During July to September 2013, a mid-term review (MTR) was conducted by two external consultants engaged by SCI to report to DFID on the overall progress of the ICOSA project. After personally visiting the programmes in Tanzania, Zanzibar and Zambia in September, they presented a series of recommendations in October 2013 to improve the overall management and efficiency of the project. During the reporting period, ICOSA has focused on implementing the recommendations of the review alongside the provision of the technical and managerial support to the nine country programmes. Activities have included engaging Deloitte and Accenture Development Partnerships (ADP) to provide the broader financial and systems support required in addition to those conducted by SCI and CNTD staff. Progress in the implementation of the recommendations has been provided at regular intervals to DFID and the current status is summarised in Annex 1.

In summary the practices that have changes to date since the mid term review are :

A **programme management process** has been designed to enable a central oversight of all programmes. The process includes regular reporting on status of programme milestones, risk and issues and a monthly senior management team review of all programmes. Standardised programme management tools have been created for use across all ICOSA countries, which include a programme plan, risk and issue tracker, travel report, non-financial requests template and monthly status report. A **finance management process** has been designed to ensure the finance department has a central oversight of all financial data so that informed and timely financial decisions can be made. Programme managers will be able to proactively plan for funds to be transferred further in advance, monitor actual against budget expenditure, and review funds available in bank accounts. Financial management tools have been created for use across all ICOSA countries, which include a standardised budget template, cash book and process, actual vs budget report, bank balance forecasting tool and a summary overview.

Progress against Log Frame

IMPACT

The **impact** of the project will be to contribute to the achievement of the human-development-related MDGs, in particular MDG6, through the control and treatment of schistosomiasis (SCH) and soil-transmitted helminths (STH). There are two indicators at impact level:

Impact indicator 1 relates to the health impact of the project by measuring the reduction of intensity of infection over time. Intensity of schistosomiasis infection is an accepted proxy for disease morbidity[1]; therefore regular collection of this data gives a direct measurement of the effects of treatment on the occurrence of infection and an indirect measurement of the effectiveness of treatment in improving health status[2]. Intensity is measured as the number of eggs per gram of faeces (epg) for *Schistosoma mansoni* and as the number of eggs per 10 ml of urine (eggs/10ml) for *S. haematobium*.

Impact indicator 2 relates to the performance of the project whereby the impact of treatment at the population level will be maximised if more people are reached during drug distributions. The World Health Organization (WHO) recommends that reaching at least 75% of school-aged children (SAC) is the minimal coverage target for endemic countries.

Impact Indicator 1

Intensity data are collected through longitudinal parasitological surveys from a cohort of school-aged children who are successively followed-up pre- (at baseline) and post treatment. The establishment of sentinel sites and subsequent baseline data collection has been completed in all ICOSA-supported countries.

IMPACT Indicator	Baseline by March 2014	Milestone by end 2014
1. Mean intensity of infection in treated areas by country (CI – Confidence Interval)	Liberia: Sm = 16.32 epg (CI 11.99 – 20.65) Sh = 42.36 eggs/10ml (CI 19.09 – 65.64)	*Schistosoma mansoni* (Sm): 50-65% reduction from baseline *Schistosoma haematobium* (Sh): 65-80% reduction from baseline Malawi 1st follow-up*: Sm = 0.096 epg reduction from baseline 94.7% Sh = 1.56 eggs/10ml reduction from baseline 32.8%
	Malawi: Sm = 1.83 epg (CI 0.02 – 3.65) Sh = 2.32 eggs/10ml (CI 0.53 – 4.11)	
	Tanzania: Sm = 109 epg (CI 50 – 151) Sh = 18 eggs/10ml (CI 13 -23)	
	Zambia: Sm = 2.36 epg (CI 0 – 4.7) Sh = 9.2 eggs/10ml (CI 0 – 19.4)	

[1] Van der Werf et al (2003) Quantification of clinical morbidity associated with schistosome infection in sub-Saharan Africa. Acta Tropica 86:125-139

[2] Helminth Control in School-Aged Children, 2nd Edition, World Health Organization ISBN9789241548267.

	Niger: Sm = 9.18 epg (CI not available?) Sh = 5.59 eggs/10ml (CI not available?)	
	Uganda: Sm = 2.96 epg (CI 0 – 6.66) Sh = 0 (not endemic in Uganda)	

*data received April 2014, preliminary results only

Data entry and cleaning prior to analysis is still being conducted for Cote D'Ivoire and Mozambique. Data access is strictly limited in Mozambique and statistical support for analysis will be undertaken in country. As reported this was scheduled for the last quarter of FY4 but has been postponed due to the limited availability of the NTD programme manager[3].

Follow-up data collection from the established cohorts has been undertaken through surveys in Liberia and Malawi during the reporting period. Data entry and cleaning is currently being conducted for Liberia, with Malawi in the early stages of analysis. The preliminary results for Malawi indicate that significant reductions in intestinal SCH infections have occurred with a lesser impact of urogenital SCH Final results for both countries will be included in the next ICOSA report. In addition, the Zanzibar Elimination of Schistosomiasis Transmission project is undertaking a full review in June 2014 and further results collected as part of this consortium will be made available.

Impact Indicator 2

During the reporting period, the Monitoring & Evaluation (M&E) team within SCI has finalised an updated protocol for validating coverage through post-treatment surveys for all ICOSA countries, building on that first undertaken in Malawi. Coverage surveys, as distinct from reported coverage captured during routine reporting, have been undertaken in Cote D'Ivoire and Uganda.

IMPACT Indicator	Baseline	Achieved by March 2014	Milestone by end 2014
2. Validated treatment coverage in school-aged children (5-14 years) (disaggregated by gender) by country	Zanzibar* (June 2013): Unguja 91.9% Pemba 82.6%	Zanzibar* (November 2013): Unguja 82.7% Pemba 87.5%	At least 70%
	Malawi (October 2012): 75.9% female; 79.9% male		
	Cote D'Ivoire (February 2014): 80.6% female; 79.0% male		

[3] The NTD programme manager was involved in a road traffic accident in Mozambique which required hospitalisation for several weeks. She is recovered and again working in her full capacity within the Ministry of Health.

*As previously reported, the Government of Zanzibar undertake their own coverage survey which currently does not disaggregate by gender or age. ICOSA is working with the MoH and SCORE partners to adapt the ICOSA coverage survey protocol for implementation after the next scheduled MDA in June 2014 which will provide the breakdown of coverage data by age and gender. Dr Steffi Knopp at the Natural History Museum is leading on the development of the adapted protocol with input from the SCI M&E team.

The cleaned Uganda dataset is scheduled to be provided to ICOSA in early May 2014 for analysis. For the first time, the ICOSA project used mobile phone technology to capture data in real time which will reduce the resource required for downstream data management. Following the successful trial in Uganda, this technology will be utilised for future surveys where practically implementable and will be explored for real-time data capture in other settings, including sentinel site surveys. The coverage survey expected to be conducted in Liberia during the last reporting period will now take place in early FY5 as a result of the delayed Liberian NTD treatment campaign, which began in March 2014. Of the treatment campaigns which took place during the last quarter of FY4, coverage surveys will be implemented in Mozambique, Liberia, Malawi, Zambia and Zanzibar.

OUTCOME

The **outcome** of the project will be to contribute to the WHO global strategic plan for SCH (2012-2020) by providing a total of 75 million treatments.

OUTCOME Indicator	Milestone by 2012	Achieved by March 2014	Milestone by end 2014
Number of treatments delivered, in millions (cumulative)	14.25	21.76	43.98 (for current countries only)

Treatment has been delivered in all ICOSA countries through MDA campaigns (Table 1) with certain countries having undertaken their second round of MDA. The project has delivered a total of 21.76 million treatments to date with a further 3.1 million targeted treatments still ongoing in Zambia (1.7 million) and Mozambique (1.4million). Although this total is below the target at this stage for treatment delivery, a number of project and country-specific factors have influenced the speed and scale at which ICOSA has supported treatment[4].

One factor which has significantly altered the expected treatment delivery target are the mapping results generated with ICOSA support. Accurate target treatment numbers for each

[4] For example, delays occurred in the initial procurement of praziquantel such that all countries had not received a consignment of drugs until 30th May 2012 (with the exception of Zambia) which subsequently delayed any planned treatment until FY3. An anticipated 14.25 million treatments had been planned within this same timeframe. Similarly, political influences (eg elections, Ministerial restructures) also impacted scheduled activities in a number of countries. All such delays and mitigating actions have previously been discussed in previous annual and semi-annual ICOSA reports.

country are only known when mapping has been completed within each implementation unit across the country. This not only refines the target population, i.e. the extension of treatment beyond SAC to include adults in high endemic areas, but also defines the frequency at which that population is treated. For example, at the outset of ICOSA, it was estimated that Malawi would require approximately 5.5 million SAC to be treated on an annual basis. However, mapping results have indicated that treatment is only required on a biennial basis which has resulted in a decrease of 11 million predicted treatments expected to be supported by ICOSA within this country alone. As other countries have been completing mapping or are still scaling up their programmes during the initial years of the project, it has not been possible to reassign these treatments elsewhere. However, during FY4, all countries have been implementing MDA at an increasing rate, with over 7 million treatments delivered in the last six months of the project alone (Table 2). Financial and technical resources for the delivery of 24.9 million treatments across the existing ICOSA-supported countries have been requested during FY5, which is in line with the milestone of 43.98 million treatments delivered by end 2014.

More accurate forecasting of treatment requirements is also now possible with the completion of mapping activities in all countries (with the exception of five counties in Liberia, see Output 1). Treatment numbers across all countries have been estimated until December 2018 using these results and the project expects to meet the treatment targets provided the assumptions within the log frame remain valid.

Table 1: Total number of treatments delivered by country throughout the project.

COUNTRY	FINANCIAL YEAR					TOTAL FY4 only	TOTAL PROJECT
	FY1	FY2	FY3	FY4			
	Oct 10 - Mar 11	*Apr 11- Mar 12*	*Apr 12 - Mar 13*	*Apr 13 - Sep 13*	*Oct 13 - Mar 14*	*Apr 13 - Mar 14*	**Oct 10 - Mar 14**
Cote d'Ivoire	0	0	649,859	0	853,708	853,708	1,503,567
Liberia	0	17,400	0	322,253	303,379	625,632	643,032
Malawi	0	2,071,817	2,037,487	0	0	0	4,109,304
Tanzania	0	0	122,996	564,342	398,343	962,685	1,085,681
Mozambique	0	2,391,871	1,819,000	0	3,823,821	3,823,821	8,034,692
Zambia	0	19,800	0	0	0	0	19,800
Niger	0	482,028	272,994	610,321	728,132	1,338,453	2,093,475
Uganda	0	308,305	0	0	263,691	263,691	571,996
Zanzibar	0	945,282	1,059,318	852,253	842,011	1,694,264	3,698,864

TOTAL	***0***	***6236503***	***5,961,654***	***2,349,169***	***7,213,085***	***9,562,254***	***21,760,411***
Cumulative Total	**0**	**6236503**	**12,198,157**	**14,547,326**	**21,760,411**		

Table 2: Total number of treatments delivered by the end of FY4 by country.

Country	Total no SCH treatments delivered to end September 2013	Total no treatments delivered 1st October 2013 – 31st March 2014	Total no treatments delivered by end FY4	Reported treatment coverage	Month(s) during FY4 when treatment was delivered
Cote d'Ivoire	649,859	853,708	1,503,567	84.42%	Nov 2013
Liberia	339,653	303,379*	643,032	71.90%	Mar 2013
Malawi	4,109,304	0	4,109,304†	-	NA
Mozambique	4,210,871	3,823,821*	8,034,692	81.61%	Dec 2013 – ongoing
Tanzania	687,338	398,343	1,085,681	30.49% (DSM) 86.03% (Mwanza)	June - Sep 2013
Zambia	19,800	0	19,800	-	Mar 2014 - ongoing
Niger	1,365,343	728,132	2,093,475	-	Dec 2013 – Feb 2014
Uganda	308,305	263,691*	571,996	-	Nov-Dec 2013 Feb-Apr 2014
Zanzibar	2,856,853	842,011	3,698,864	80.90%	Nov 2013
TOTAL	**14,547,326**	**7,213,085**	**21,760,411**		

*Treatment ongoing and data still being received at central level. Final treatment numbers are expected to revise upwards.

†Mapping results for Malawi indicate that biennial treatment is required in all implementation units. MDA was conducted in 2012 and the next MDA round will take place in first quarter FY5, exact timing dependent on national elections.

OUTPUTS

The five project **outputs** are:

1. 100% at-risk areas mapped in all supported sub-Saharan African countries
2. Over 500 million tablets will have been delivered to treat infections
3. National programmes will be implementing mass drug administration (MDA) in the most effective ways as a result of monitoring and evaluation activities
4. Strategies will have been identified to promote elimination of SCH in low endemic settings
5. Reduced costs of treatment as a result of efficient implementation

Output 1: Priority areas identified through mapping of infected populations (Group 1&2 countries)

Output Indicator	Milestone by December 2012	Achieved by March 2014	Milestone by end 2014
1.1 Number of country* specific mapping protocols available	6 available	6 available (complete by October 2012)	8 available (including Phase II countries)
1.2 Target areas mapped for disease by country	100% Malawi	100% Malawi	100% all countries
	30% Liberia	66% Liberia (10 complete out of 15 counties)	
	20% Cote d'Ivoire	100% Cote d'Ivoire	
	40% Zambia	100% Zambia	
	100% Tanzania	100% Tanzania	
	100% Mozambique	100% Mozambique	

*There are 8 countries: Group 1 countries are Malawi, Liberia, Cote d'Ivoire (Phase I) and Ethiopia, DRC (Phase II – to be incorporated if project expansion occurs); Group 2 countries are Tanzania, Mozambique, Zambia (Phase I)

The results of mapping continue to be used to define the treatment strategy within each of the target implementation units and as the basis for selection of sentinel evaluation sites prior to MDA. Mapping was complete in Tanzania and Mozambique prior to ICOSA and has been completed in Cote D'Ivoire, Malawi and Zambia with ICOSA support. The remaining 5 counties of Liberia which have not yet been mapped will be completed during FY5 thus the project is expected to reach the end 2014 milestone.

Challenges

The primary challenge for Liberia in completing mapping has been surrounding the infrastructure of the country in terms of ease of access for survey teams. Road conditions are deteriorated to such a degree that the NTD programme vehicles have proven inadequate,

resulting in high costs for appropriate vehicle rental and subsequent negotiations on previously approved budgets. Lack of dedicated vehicles for the implementation of programme activities has been cited as an integral factor in delays occurring through FY4. During FY5, it has been agreed to provide the NTD programme with vehicles suitable for the Liberian terrain, subject to EU procurement regulations.

Opportunities

Evidence: The goal of ICOSA's mapping approach has been to advise countries on an evidence-based treatment strategy at the appropriate implementation level. When the final mapping survey has been undertaken in Liberia later this year, the mapping phase of the ICOSA project will be complete. All current and potential (Ethiopia and DRC) ICOSA-supported countries will have been nationally mapped for the prevalence of SCH. However, the WHO strategic approach to SCH mapping is still under review . During the reporting period, SCI has engaged with WHO and a number of other implementing agencies including the Task Force for Global Health who are in receipt of a recent grant from the Bill and Melinda Gates Foundation to work with AFRO to complete mapping of SCH in Africa to take their guidance on the optimal means of ensuring the project's scientifically validated practical approach and results generated are widely circulated. In consultation with other members of the London Centre for NTD Research SCI will publish its approach and the underlying statistical rationale in a peer reviewed journal to ensure wide circulation to all stakeholders including the WHO. We expect to submit a manuscript on our approach by the end of August.

Data generation: As complete datasets from mapping surveys become available, countries continue to be encouraged to share their data with the Global Atlas of Helminth Infections (GAHI)[5] (http://www.thiswormyworld.org/). GAHI is based within the London School of Hygiene and Tropical Medicine (LSHTM) which, along with SCI, is part of the London Centre for NTD Research. This collaboration provides close links between the ICOSA project and GAHI such that regular updates on status of data sharing are provided.

Output 2: Drugs procured and delivered

Output Indicator	Milestone by December 2012	Achieved by March 2014	Milestone by end 2014
2.1 No of tablets delivered to countries	35.6 million	127.2 million	143 million (including Phase I and Phase II)
2.2 No of countries implementing MDA according to their National Strategic Plans	4	8	8

[5]GAHI is supported by Wellcome Trust, Bill and Melinda Gates Foundation, The Partnership for Child Development, GSK and the Mectizan Donation Programme and is housed within the London School of Hygiene and Tropical Medicine.

127 million PZQ tablets have been procured and delivered to all ICOSA supported countries, with the exception of Zanzibar who receive all their PZQ from the Merck Praziquantel Donation Programme through WHO (Table 3). These tablets equate to approximately 50 million treatments, as a single treatment of a school-aged child is estimated to require 2.5 tablets of PZQ. Discounting the treatments which have taken place to date (21.76 complete and 3.1 ongoing), the current in-country drug stock is approximately 65 million tablets. These will support the forthcoming FY5 treatments. All stocks in country are usually held in the National Medical Stores Departments (or similar) who manage the storage and delivery of other essential and non-essential drugs and vaccines for MoH programmes and facilities. Approaching the time of the MDA, the NTD programme works closely with these departments to create a drug distribution list to supply PZQ to the implementation units, using a first-in, first-out policy to ensure that expiry dates are managed appropriately. ICOSA will document the procedure being followed for drug flow within each country, with the assistance of the NTD Drug Logistics Officer (where present), to ensure that appropriate storage and distribution procedures are being followed. If not already being conducted, the procedure will include inspections of the storage facility at appropriate time points (eg, on arrival of a new consignment, prior to dispatch for MDA).

Procurement for FY6 will be undertaken during this financial year. Forward planning for drug delivery is required due to often lengthy manufacturing lead times (3+ months) and the limited number of suppliers of approved quality PZQ, which are also meeting the demand of other PZQ buyers such as the USAID NTD programme. Coordination between ICOSA and other drug procurers and suppliers is therefore essential. During the reporting period, ICOSA participated in the PZQ Coordination Group meetings held at the WHO, Geneva in October 2013 and January 2014. Currently only Zanzibar is a recipient of Merck-donated PZQ however as this donation programme scales up through 2014-2015, allocations to existing and potential future ICOSA countries have been earmarked. The ICOSA project is on target to reach the end 2014 milestone.

Table 3: Total number of tablets procured and delivered by March 2014 by country.

Country	Total number of PZQ tablets procured and delivered by March 2014
Cote d'Ivoire	9,830,500
Liberia	4,875,500
Malawi	28,100,000
Mozambique	48,200,000
Niger	6,500,000
Uganda	4,110,000
Zambia	9,825,000
Tanzania	15,750,000
TOTAL	**127,191,000**

MDA Implementation

The strategic approach for MDA in all countries is a reflection of the target population with distribution through schools in all countries and community-based distribution occurring in those countries where the levels of endemicity require the target population to include adults. The decision for this is made at country-level and is often based on strategies employed by the NTD programme for the delivery of drugs for other diseases, particularly where integrated NTD control is being implemented.

All countries are now implementing MDA according to their National NTD Strategic Plans, with strategies primarily surrounding control of SCH but in some instances expanding to SCH elimination where feasible.

Challenges

PZQ Coordination: One of the key challenges in drug procurement for the project is the continued coordination between drugs procured and those donated into supported countries. As new partners such as World Vision emerge as significant potential PZQ donors, ensuring continued supply of high quality drugs remains a priority for the project. To this end, Crown Agents are working closely with current suppliers on the WHO pre-qualification process for PZQ. Going forward, the project will also aim to engage with other suppliers not currently holding framework agreements to encourage registration and pre-qualification of their PZQ products on the open market.

Political influences: The project is sensitive to political changes as a result of working directly with the Governments of supported countries.

- In **Zambia**, the relocation of the NTD Department from the Ministry of Health to the Ministry of Community Development, Mother and Child Health has continued to impact on project activities. Although all technical planning with the NTD programme has proceeded, internal transfers under the jurisdiction of the Zambian Government from central level to the accounts of the local offices, for financing programmatic activities at the district level, were significantly delayed. In order to mitigate these challenges, CNTD has engaged with the Zambian office of Sightsavers to act as recipients for ICOSA funds and provide direct support to the relevant Ministry or local District office as required.
- In **Malawi**, national MDA was scheduled to take place in April 2014 with all planning and training activities completed during the last quarter of FY4. Due to political elections taking place on 20th May 2014, the MDA will now be implemented in June as experience (prior to ICOSA) has indicated coverage rates can be adversely affected by political campaigning during the same period. However, three districts demonstrating high organisational capacity in training, advocacy and sensitisation were selected to conduct an early treatment campaign in March 2014. Preliminary results from Karonga district indicate that reported coverage of 89% was achieved which will serve as an excellent advocacy tool for initiating momentum for the MDA campaign in the rest of the country post-elections.

Opportunities

ICOSA has previously reported on leveraging opportunities (such as co-funding, operational research, and integration of activities) within the framework of the project, where feasible, in each country. During the reporting period, no new country-level opportunities have arisen. However, as part of the mandate by DFID to ensure coordination by implementing partners who are recipients of UK Government funding for NTDs, opportunities to coordinate approaches to implementation are being explored between the organisations (SCI, CNTD, Sightsavers, Malaria Consortium, APOC) and with DFID beyond those which currently exist (see Annex 2).

Output 3: National programmes using monitoring and evaluation results to refine strategies

Output Indicator	Milestone by December 2012	Achieved by March 2014	Milestone by end 2014
3.1 Percentage of targeted districts submitting reports 90 days after MDA	40%	Not yet formally evaluated for FY4.Part of the systems strengthening in response to the MTR recommendations.	50%
3.2 Validated coverage of children not at school by gender	At least 50% in 1 country	Malawi: Males 15.49% (n=45, range 4%-27%) Females 14.76% (n=52, range 3%-26%)	At least 50% in 4 countries
3.3 Percentage of people with heavy infections in treated areas by country (Group 1 and 2 countries only)	None set	Tanzania baseline: Sh = 7%, Sm = 4.1%	Decline in percentage from baseline by 60% (Sh) and 40% (Sm)
		Liberia baseline: Sh = 9.3%, Sm = 0.2%	
		Malawi baseline: Sh = 1.0%, Sm = 0.1%	
		Zambia baseline: Sh = 2.0%, Sm = 0.1%%	

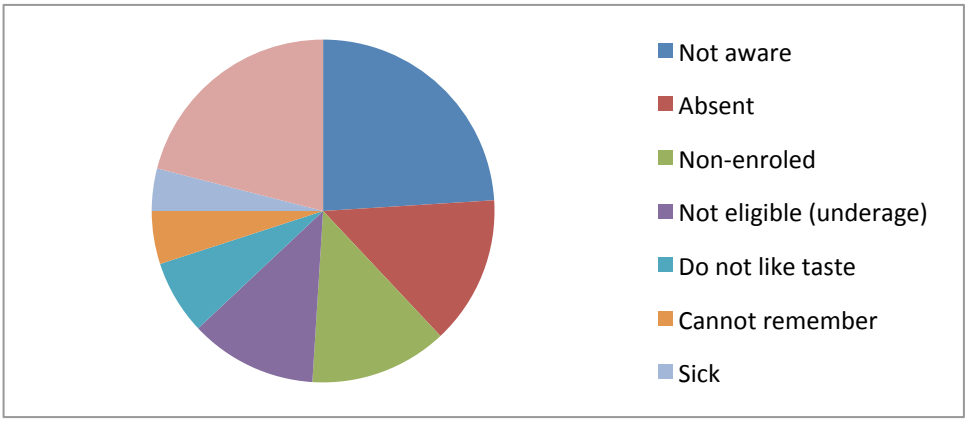
The work stream for validating treatment coverage has been summarised in the Impact section of this report.

Survey data from Malawi detailed in the ICOSA mid-year report 2013 suggested that there is no differentiation by gender in accessing treatment. Preliminary results from Cote D'Ivoire indicate that gender differentiation does not occur within this West African setting either, with validated coverage ranging from 63.7-88.7% in females and from 66.8-86.0% in males. However, school enrolment did play a critical role in whether a child was treated or not in Malawi. In Cote D'Ivoire early results indicate that of those children who stated they did not receive treatment, 13.36% reported that they are not currently enroled in school. The primary

reported reason for not receiving treatment was due to lack of awareness that the campaign was taking place, followed by non-attendance at school on the day of treatment (Figure 1). One additional point about training of drug distributors is that we stress that children who are obviously ill should not be treated. This is because the parents may wrongly assume the praziquantel will cure them and therefore not take any other medication, and then if the child deteriorates that deterioration will be blamed on the MDA.

The results from Cote D'Ivoire will be finalised and provided to the NTD programme for discussion on improvements that could be addressed to ensure that high coverage is achieved in all demographic groups. Such improvements are likely to focus on activities to increase social mobilisation and thus ensure that individuals, both parents and children, are not only aware that the treatment programme will be taking place and when but also the importance of taking treatment when offered. Engaging with local officials in advance of the campaign will assist with improving the information cascade at community level, to ultimately ensure that the MDA campaign is widely popularised and treatment-seeking behaviour is encouraged. In addition, the NTD programme may need to alter the treatment strategy to ensure that children who are not enroled within the school are either reached within the community or are motivated to attend school for treatment without any repercussion to the parents. The approaches on how to undertake these activities is country dependent and will rely on the discussions between the NTD programme manager within the country and ICOSA technical support to decide on the appropriate strategy in each case. This will be further guided through the implementation of the MTR recommendations (see Annex 1).

Figure 1: Reasons for not taking PZQ on treatment campaign day in Cote D'Ivoire as assessed on interview with school-aged children. All 'other' reasons accounted for <3% individually and included fear of side-affects, the drug distributor did not come at the designated time, the child had not eaten etc.



The work stream for determining health impact has been summarised in the Impact section of this report. To date, sentinel sites have been established in all group one and two ICOSA countries: Mozambique (23), Malawi (22), Liberia (38), Zambia (32), Tanzania (10) and Cote d'Ivoire (26).

Challenges

There is currently a period of transition on the provision of technical support to Liberia, Mozambique and Zambia due to the unexpected departure of the Country Manager and

overall Data Manager for the project, Dr Maria Rebollo, previously based at LSTM. In light of this development, SCI and CNTD have undergone discussion on how to ensure continued optimal SCH/STH technical guidance for control implementation to these countries. The agreed approach is that CNTD will maintain the overall management of the MDA implementation of each country programme, with technical support on SCH implementation provided direct from SCI to CNTD as required. The provision of SCH M&E expertise housed within SCI will be provided direct to each country which will enable standardised approaches to be maintained across all ICOSA countries whilst not detracting from the established relationships developed between CNTD and the country programme managers. We expect that this will have minimal short-term impact on the project as the newly designated CNTD programme manager completes her internal handover.

Opportunities

As for mapping, the baseline and follow-up data generated within the sentinel sites will provide a wealth of data on the impact of treatment in numerous inter- and intra-country settings. Strategies for engaging adults and non-enroled SAC will be evaluated, encouraging countries to adopt similar approaches in matched settings. This is being further explored within operational research settings under the remit of the DFID Operational Research bid on Integrated Implementation of NTDs.

Since the last ICOSA report, the WHO standardized database has been completed and the training programme for endemic country staff has been initiated. SCI has engaged with the WHO to provide a similar training workshop for UK-based donor agencies in anticipation that the database can be extrapolated for standardized reporting. This is also being addressed in the NTD Implementing Partners Coordinated Action paper (see Annex 2).

Output 4: Development of strategies for the elimination of SCH as a public health problem in Zanzibar, Niger and Uganda

Following the recognition of the long term health impact of disease elimination outlined in the World Health Assembly Resolution 66.12 in May 2013 (reference http://www.who.int/neglected_diseases/mediacentre/WHA_66.12_Eng.pdf) ICOSA is supporting the development of elimination strategies in Zanzibar, Uganda and Niger.

Output Indicator	Milestone by December 2012	Achieved by March 2014	Milestone by end 2014
4.1 Transmission hotspots (areas with persistent transmission) treated with adjusted preventive chemotherapy (PCT)	30% hotspots treated by adjusted PCT	Niger: 100% hotspots treated by adjusted PCT	70% hotspots treated by adjusted PCT
		Zanzibar: 100% hotspots treated by adjusted PCT	

		Uganda: 54% hotspots treated by adjusted PCT (30 out of 56 districts)	
4.2 Percentage of heavily infected individuals in hotspots	None set	Baseline: 15.0% in Zanzibar (Sh only)	Decline in percentage by 25% (Sh and Sm)
		Baseline: 0.83% in Uganda (Sm only)*	

*As determined by CCA test level 3 scores.

The **Zanzibar Elimination of Schistosomiasis Transmission (ZEST)** is the Government-endorsed strategy for eliminating schistosomiasis from Zanzibar. ICOSA finances the adjusted PCT, in this case bi-annual MDA to all eligible individuals, and provides technical guidance as requested. All evaluation activities are conducted by partners including the University of Georgia (SCORE), Swiss Tropical Institute, Natural History Museum London and CDC Atlanta. In addition to MDA, the SCORE elimination project has been implementing additional control elements through a randomised control setting, testing the impact of MDA only, the impact of MDA plus molluscicide and the impact of MDA plus behavioural change interventions.
The NTD programme has now completed four rounds of MDA, two in 2012 and two in 2013. Baseline data has been published in open-access format in the Public Library of Science for NTDs. Follow-up data has been collected by SCORE in 2013. The ZEST Mid-Term Review is scheduled for June 2014 in Zanzibar to assess all impact data to date and determine the recommendations for the programme going forward.

The **Uganda** MoH has been annually treating for SCH on a national scale for 10 years with partner support. Following Uganda's reassessment in 2013 of districts with low prevalence of infection deemed to not qualify for MDA, 127 'hot-spot' subcounties across 30 districts were identified as requiring MDA. After extensive consultation on the sensitivity of the Kato Katz technique to accurately identify infection in low prevalence settings, the MoH opted to utilise the Circulating Cathodic Antigen (CCA) test to determine prevalence and as a proxy for intensity of infection. Baseline results across 7102 SAC in 119 schools indicate that CCA is an appropriate test for detecting infection at low levels in Uganda compared to Kato Katz; prevalence by CCA was 21.4% (CI 13.4-33.0%) compared to 6.32% (CI 2.3-16.0%) by Kato Katz thus had Kato Katz been used alone, infection levels would have been underestimated resulting in undertreatment. As CCA tests do not measure eggs per gram of faeces, the proxy measure for intensity of infection is the intensity of the positive line. The highest intensity denoted as CCA test level 3 was denoted as a high intensity infection.

In **Niger,** ICOSA activities remain focused in 7 low prevalence districts which takes the programme to 100% geographical coverage alongside the USAID support for NTDs. Hot-spot areas of transmission are receiving annual MDA. Impact assessments are scheduled for FY5.

Challenge and Opportunity

As previously reported, the WHO recommends that countries move toward elimination after 5-10 years of PCT to control morbidity. Zanzibar, Uganda and Niger fall into this category and

each has decided on an adjusted PCT strategy; Zanzibar is undertaking bi-annual treatment of the entire eligible population, Uganda is treating SAC annually in identified hotspot areas within low transmission settings and Niger is treating SAC annually in high transmission settings through MDA and providing clinic-based treatment as required in low transmission settings. The evidence generated from coverage and sentinel site data will contribute significantly to identifying the most effective ways of adjusting the PCT strategy as more countries move towards elimination in time.

The data generated within Uganda using CCA tests and validated through Kato Katz will provide a valuable addition to the availability of data on the use of this technique in low endemic settings. The low sensitivity of the gold standard diagnostic test Kato Katz in low endemic settings for SCH has come to the fore of the operational research agenda as countries reach the prevalence thresholds to adjust their treatment strategies and move towards elimination. Currently treatment recommendations are based on Kato Katz but thresholds for treatment based on prevalence as determined by CCA are urgently required as the elimination agenda for SCH becomes increasingly more relevant. The relative paucity of CCA data has prevented these from being set to date, but as additional data is generated through field-based approaches to implementation, it is hoped that guidance on treatment based on CCA results will be forthcoming.

Output 5: Lower cost per treatment achieved

Financial data on the cost per treatment is available for five ICOSA country programmes, with estimates available for the remaining four which are still receiving data to finalise treatment numbers for FY4. The financial data analysed relates to DFID support only at this stage, however cost-share with other donors for implementation will be increasing as additional funds are leveraged to support programme scale-up.

Output Indicator	Milestone by December 2012	Achieved by March 2014	Milestone by end 2014
5.1 Number of countries with financial cost per treatment determined	None set	6	Costs determined in 6 countries
5.2 Direct financial cost per treatment by country	None set	Cote d'Ivoire: £0.28 *Liberia: £0.31 Malawi: £0.12 Mozambique: £0.04 *Zambia: £0.27 Tanzania: £0.45 Niger: £0.17 *Uganda: £0.27 Zanzibar: £0.08	4 countries achieving cost per treatment reduced from baseline

* Treatment ongoing and numbers treated still being received at central level. Costs are assuming all targeted individuals will be reached so cost per treatment is likely to revise upwards.

Given the low cost per treatment for SCH, the project is sensitive to both external and internal factors which may produce fluctuations in project inputs (eg variations in budget lines) and outputs (eg lower than expected achievements). In terms of project inputs, any increases in budget lines within any ceiling contracted year can result in significant impacts on the number of individuals treated or the timeline for implementation. Such instances include the

necessary expenditure on vehicle rental, as was the case in Liberia, or the rapidly rising price of fuel currently being observed in Malawi. Similarly, if project outputs are not achieved, a significant impact on the cost per treatment of the programme would be observed. For example, the low coverage rate in Dar es Salaam region in Tanzania resulted in fewer treatments observed for the same investment in funding, thus inflating the cost per treatment within Tanzania. The major contributing factor for the observed coverage is thought to be due to the low SCH endemicity within the region, which is the largest urban area with the highest population density within Tanzania. Drug uptake is often motivated by perceived importance in terms of personal health impact. In areas where SCH is not deemed a major contributor to poor health in the population, treatment seeking for SCH is usually at very low levels, as has likely been the case in Dar es Salaam. In contrast, the coverage within Mwanza region where SCH is considered a high public health problem was over 85%, despite the identical implementation of NTD programme activities in both these urban areas. Additional focus on SCH social mobilisation activities will be required prior to the next round of MDA scheduled for the Dar area in 2015.

Challenge and Opportunity

A revised accounting system has been developed to allow routine monthly financial reporting with cost centre coding for allocating real-time expenditure against original budgets. This has been implemented in Malawi, Uganda, Tanzania, Niger and Cote D'Ivoire and is being reviewed for adaptation in Liberia, Mozambique and Zambia.

A full review of ICOSAs financial processes is currently being conducted in conjunction with ADP and the mechanism for capturing appropriate data within a strengthened finance system will be implemented through the first quarter of FY5 (see Annex 1). As part of these plans, the countries are finalising a single workplan and budget to encompass the full scale of programme activities they plan to undertake during FY5, supported by multiple donors including DFID. The complete financial dataset generated from expenditure in country will allow the overall cost per treatment to be calculated. In addition, by applying a matrix, it will be possible to track the proportional expenditure by donor income which will allow the cost to each funding source to also be calculated. ICOSA is also working with other partners receiving DFID investments on developing more standardised approaches across disease specific programmes (See Annex 2) which ultimately can be harmonised to determine the overall cost per treatment for all NTDs as applicable in each country.

Combining the financial and health impact data will also enable additional analysis on the value for money on long term investment in elimination countries versus achieving a high, short-term health impact in untreated populations.

Progress and Results

Summary of overall progress

The project has currently delivered a confirmed 21.76 million treatments by the end of March 2014 across all 8 ICOSA countries, with further treatment data still being reported. Planned treatment figures for FY 5 as a result of progress and scale-up within each country suggests that the end 2014 target of 44 million treatments will be met.

Reported coverage rates have been above the WHO recommended threshold of reaching at least 75% in all countries (with the exception of Dar es Salaam region, Tanzania). In the 3 countries where numbers have been validated, coverage in SAC still met this threshold.

Key challenges

Integration

Although integrated approaches to NTD control and elimination are promoted, the coordination of the complex scope of activities at country level is often a challenge to timely implementation.

District treatment schedules can differ according to the diseases present which can affect the ability to successfully plan for joint pre-MDA activities, particularly training and advocacy. If it is necessary for SCH treatment to occur out of sync with other NTD interventions (often 6 month intervals between SCH control activities and other MDA activities), for epidemiological or logistical reasons, pre-MDA activities need to be repeated in the same districts involving additional financial resource and logistical planning, as has been the case in Uganda.

Similarly where delays in funding or commodities (i.e. drugs) have occurred which have delayed the implementation of the NTD interventions, of which SCH is part, the full treatment campaign will often be delayed until all necessary resources are available in country. The project works closely with all implementing partners in each country to ensure optimal harmonisation in approaches to mitigate these risks. This is being further explored through the proposed coordination of DFID-resourced implementing partners for NTDs (Annex 2),

Technical

Each country has had a unique set of challenges in undertaking activities with ICOSA support. As part of addressing the recommendations of the MTR, ICOSA undertook a country needs assessment to provide each country with the opportunity to feedback how ICOSA support can be better delivered within their own context. This was supplemented with a request form to detail specific support which may be required for their programme delivery. This form is being further developed as a planning tool for the project going forward to gauge support required to deliver their programme objectives and tailor support to each specific context.

Finance and Management

With the increased scope of the project, financial management and project planning systems require strengthening at the central level to increase accountability at all levels. This is being undertaken through a scope of work contracted with ADP (see Annex 1).

In summary, a finance management process has been designed to ensure the finance department has a central oversight of all financial data so that informed and timely financial decisions can be made. Programme managers will be able to proactively plan for funds to be transferred further in advance, monitor actual against budget expenditure, and review funds available in bank accounts. Financial management tools have been created for use across all ICOSA countries, which include a standardised budget template, cash book and process, actual vs budget report, bank balance forecasting tool and a summary overview.

SCI is also undertaking an audit programme of all overseas accounts, with Cote D'Ivoire completed in December 2013, Mozambique scheduled for early May 2014 and Liberia later that month. The outcome of these audits will drive any required changes within the country-based financial processes and identify areas of risk or where procedures require strengthening through training, tool provision or a combination of both. The Cote D'Ivoire audit highlighted that the existing system was not adequately robust to manage the financial transactions being generated within the NTD programme. Alternative mechanisms were explored and as a result, SCI is in the process of engaging a local partner, MAP International to manage the finances on behalf of SCI. MAP already assists the NTD programme with any necessary customs clearance procedures for ICOSA and is engaged with the NTD programme to support international research activity on behalf of a US based organisation. As such, it is well-placed to act as an appropriate local partner to the programme and more notably is accepted as a resource by the NTD programme manager.

Evidence and Evaluation

SCI and WHO have an established relationship which has existed prior to the onset of the ICOSA project, including maintaining a seat on the SCI Board. WHO's involvement is evident in every aspect of the approach SCI adopts and recommends to countries towards the control and elimination of SCH, with both maintaining frequent dialogue over optimal approaches for mapping, M&E and frequency of treatment which can inform policy and practice in the future. Although data is generated through the activities which ICOSA supports, one important point to note is that these data are not wholly owned outright by the project or SCI. These data are generated by the country for the country to inform on progress and achievement and it is therefore their right to decide how and when they would like this information to be shared. Similarly WHO do not accept data submissions direct from SCI but require data to be submitted by the country for inclusion in the WHO PCT databank. Likewise, the newly developed NTD Database which is currently being rolled out to country programmes will allow countries to maintain their own data flow of all NTD specific information at the country level and generate donor reports on request.

The project encourages countries to share the data at all opportunities, for example adding mapping results to open-access databases. In addition, ICOSA offers technical support to undertake analysis of country data on the country programmes behalf where the skill set may be lacking within their team. In other instances, the data generated may be used for capacity building purposes, whereby assistance is provided direct to the programme team in how to

undertake the analysis, thus improving the statistical capabilities within the country. Alternatively, the programme manager or member of the team may use partial data to answer a research question within an MSc/ PhD context thus data flow may be restricted until this limited aspect is complete.

Generally, all programmatic data reports are circulated amongst all country stakeholders and discussions proceed to develop the results further into scientific publications or formal reports internal or external to the country. In all instances, the country programme manager guides how the programmatic data is distributed beyond the direct project beneficiaries, including circulating to WHO.

In relation to research data, there are a number of significant leveraged opportunities to use the ICOSA-supported programmes as platforms for undertaking key operational research activities, in addition to the direct contribution data generated from ICOSA is achieving:

- The data generated from ICOSA-supported mapping and sentinel sites will be invaluable in guiding the strategic approaches towards mapping and treatment delivery in countries which are currently engaged in or embarking on control of morbidity.
- For countries moving towards elimination, the data generated in Output 4 will similarly contribute vastly to the data available for analysis to determine approaches in these largely unknown situations.
- The Schistosomiasis Consortium for Operational Research and Evaluation (SCORE) has also awarded grants to SCI to undertake operational research in high and moderate endemic settings in Niger and Mozambique with additional studies being undertaken in Cote d'Ivoire and Zanzibar. Additional data collected as part of these SCORE studies will additionally contribute to the body of evidence on the impact of treatment and can inform best practice for each of the country programmes going forward.
- A grant from CIFF to SCI is also using the ICOSA-supported platform in Uganda and Liberia to inform the optimal timeframe to reassess disease distribution in making potential strategic changes to implementation.
- The Bill and Melinda Gates Foundation funded cysticercosis project is also using the ICOSA platform to contribute to the evidence base for integrating neglected zoonotic disease control into existing SCH control programmes.

Risk

The programme risks have been most recently evaluated in the project Phase II business case.

As part of the systems strengthening within SCI, risk assessments and profiles across a variety of themes will be developed. These include but are not limited to programmatic, financial, personnel and political risks. Mitigation strategies for risk will be documented and included in monitoring processes going forward (see Annex 1).

Value for Money

In terms of commercial practise by ICOSA and value for money (VFM), Crown Agents adhere to EU procurement regulations. It remains important that procurement of PZQ (valued at approximately 80% of the £14.5 million allocation to Crown Agents) is not only driven by low cost but balanced with quality and longevity of supply. In the short term, value for money has been reduced by the procurement of vehicles unsuitable for the terrain in Liberia. The vehicles procured have matched the specifications for other countries to undertake the same activities, but the condition of the infrastructure in Liberia was not adequately assessed in advance to provide suitable specifications. The procured vehicles are already at the end of their lifespan comparable to other countries where the same vehicles are still roadworthy, thus additional investment in this commodity will be required. VFM is increased where Crown Agents make active cost savings where possible within their procurement activities. Within the reporting timeframe, a cost saving of £10,934 was achieved by utilising in-house freight forwarding agents compared to the suppliers of the procured goods.

The key VFM measure in this project is the cost per treatment delivered over time. As part of the actions to address the MTR recommendations, Value for Money is a key component in the allocation of human resource to the project. ADP are assisting in the development of a suitable job description and person specification for a Value for Money officer who will have, as part of their responsibility, the tracking of all budget versus actual financial data. They will also maintain a catalogue of prices for each country to ensure that fluctuations in major cost drivers of the project (such as per diem rates, fuel price) can be mitigated during the planning process.

Health impact as a key to effectiveness in the VFM equation will be incorporated as data becomes available through impact monitoring (health and coverage impact). The Senior M&E Manager has engaged with appropriate health economics expertise housed within the Department of Infectious Disease Epidemiology alongside SCI to ensure that data collection going forward in relation to VFM is captured from the outset of the implementation of any new financial processes.

Key Cost drivers

There are four cost drivers of the ICOSA project:

KEY COST DRIVERS	Expenditure Location	Budget Lines include:
1. Commodities	UK-based (by Crown Agents)	Procurement and delivery of Praziquantel (88% of budget)
		Vehicles
		IT equipment (desktop computers, scanners, printers)

		Laboratory Equipment (Microscopes, HemoCue machines)
		Laboratory Consumables (urine filters, microcuvettes, Kato Katz supplies)
2. Programme Expenses **(all MDA activities)**	Country-based (by recipient governments)	Training (Staff, teacher, volunteer, supervisor) (>50% budget)*
		Treatment delivery (>20% budget)*
		Information, Education and Communication (IEC) strategies
		Drug Logistics
		Supervision
		Social mobilisation
3. Management	UK-based (by SCI and CNTD)	Management Personnel
		Management Travel and associated costs
4. Technical	UK and Country-based (by SCI and CNTD)	Technical Personnel
		Technical Travel and associated costs
		Short-term technical assistance

*Expenditure data from Cote d'Ivoire, Mozambique and Liberia (April 2011-March 2013)

Figure 2 indicates the actual expenditure incurred across the key budget lines of the project between October 2010 and March 2013, the end of FY3. Commodities represent the major expenditure on the project, comprised primarily of the purchase of PZQ (Figure 3).

Figure 2: Proportional allocation of actual expenditure incurred on key budget lines since project inception until end March 2013.

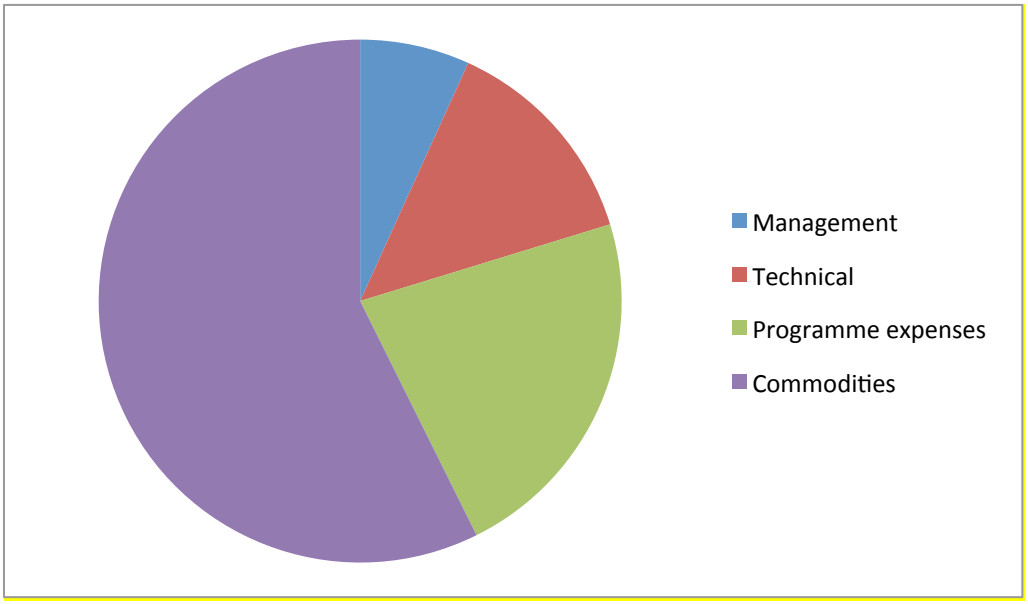
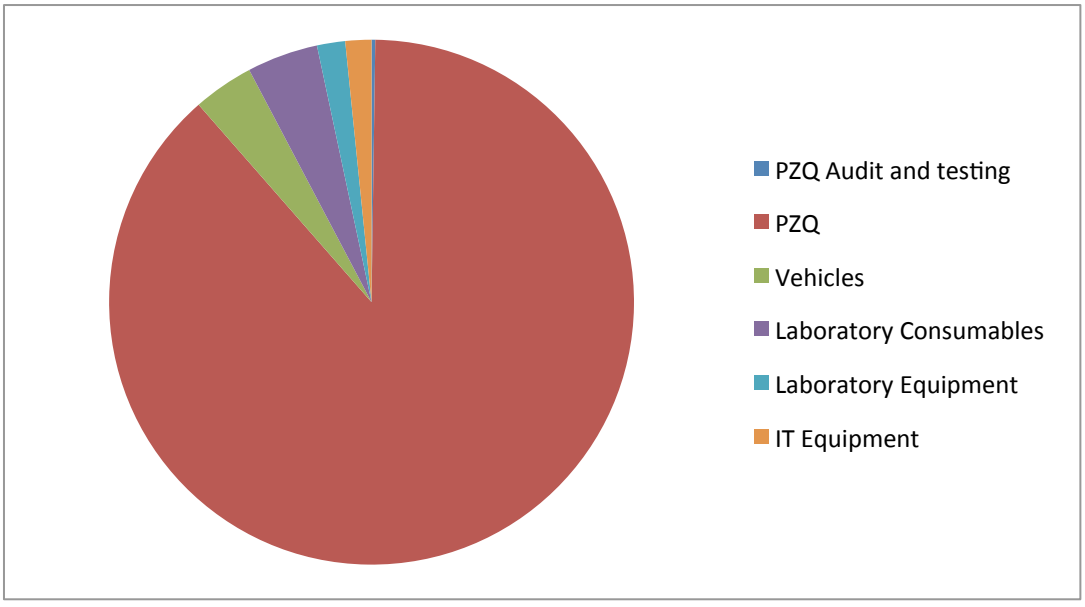


Figure 3: Proportional allocation of actual expenditure on all commodities since project inception until end March 2014



Annex 1: Progress on addressing the recommendations of the ICOSA Mid-Term Review

A. RECOMMENDATIONS ADDRESSED WITH THE SUPPORT OF ACCENTURE DEVELOPMENT PARTNERSHIP

As reported in previous documents ICOSA has engaged Accenture Development Partnership to assist with the implementation of a number of the key recommendations highlighted in the midterm review. A series of work packages have been developed to address management system recommendations and a number of recommendations related to support for countries.

Work Package 1 : Organisational Strengthening

To address:

Management systems Recommendations

a. Tighter allocation of responsibility - Managers needs to be responsible for achieving outcomes and objectives within supportive management structures.

f. Financial management: This needs to be closely aligned to other reporting, so that budget and work plan form an integrated whole, detailing resource required to do a job, and hence what budget is required. This needs to improve at both the central level for ICOSA employees as well as at country level for MDA implementation

Support to countries

a. ICOSA should help identify and respond to needs for greater technical as well as managerial support where this is required, including work plans and budgets, mapping, MDA, M&E and interruption of transmission.

Key Activities	Complete by
Develop role description for a new Finance and Operations Director - including documenting role & responsibilities of all the proposed finance team including post not funded 100% by ICOSA to ensure high quality financial and managerial support to countries	30 April
Develop role description for the existing Finance Manager to be part of an optimised finance team	30 April
Develop role description for new Value for Money Officer	30 April
Optimise organogram and matrix structure (including organisational hierarchies) to increase transparency around responsibility for specific objectives and be able to offer high quality managerial support to countries as needed	14 May
Send role descriptions to DFID and Imperial for approval and advertising	2 May

Work Package 2: Enhanced Financial Reporting and processes / Standardised Project management Templates / Value for money

To address

Management recommendations

b. Improved Reporting: Internal reporting as well as reporting to DFID needs to be tightened in terms of clarity and timeliness. Reports should clearly state the objective expected by a certain date, what was actually achieved by the date, and with a quantification of the shortfall, where it is "on-going" rather than achieved.

c. Better planning: Successful delivery of MDA requires the management of complex and interdependent tasks; ICOSA's planning does not reflect the full scope and interdependency of plans. Plans currently focus only on Outputs, not on the key critical activities required to deliver them, such as agreement on regions, signature of contracts, release of budgets. Plans do not reflect the many tasks that have to be undertaken before implementation can take place. There may need to be milestones for these stages, such as engagement with stakeholders, formation of a task team, a memorandum of understanding, coordination of mapping or sentinel sites with other agencies, an outline multi-year plan and budget and contract signature.

d. Systems need to be put into place to track central level costs by country, expenditure categories, project outputs. Central budget and staff time should be justified bottom up based on the work plan, not proposed top down as percentage of ICOSA staff time. Senior staff should be used economically, bolstered by more junior or less specialised staff. There are notable gaps in management and finance.

e. Financial management: This needs to be closely aligned to other reporting, so that budget and work plan form an integrated whole, detailing resource required to do a job, and hence what budget is required. This needs to improve at both the central level for ICOSA employees as well as at country level for MDA implementation.

Support to countries

a. ICOSA should help identify and respond to needs for greater technical as well as managerial support where this is required, including work plans and budgets, mapping, MDA, M&E and interruption of transmission.

Key Activities	Completed by
Work package 2a Enhanced Financial Reporting /Processes	
Create a template to track ICOSA funding and actual to budget expenditures by activity /country (to be reviewed with Project Managers on a regular basis) that can also be used as the basis to create an Annual Report	27 June
Draft guidance on expense checking (audit of receipts on a periodic basis)	
Investigate availability of additional fields within Imperials current system Oracle that could improve financial reporting	
Develop a financial milestone tracking template to ensure proactive renewal of contracts / fund transfers along with roll out across SCI	
Develop a template to quantify, monitor and track risk by country along with an associated mitigation plan. Additionally a process/ownership of how to mitigate the risks across SCI.	
Develop process to roll out new templates and train team on use	
Work with stakeholders across Imperial to understand opportunities to improve finance processes including getting approvals to transfer funds to countries ahead of time, setting up and updating contracts and transferring money through the Imperial process	
Work package 2 b Value for Money	
Establish value for money data outputs against Logframe	27 June
Develop templates to track Value for Money, e.g. comparisons of costs across countries and districts	
Coordinate value for money workshops with SCI team to understand additional needs	
Work package 2c Standardising Project management Templates/ Processes	
Standardise country inputs to budget creation (containing some guidance on standard project activities and costs of equipment)	30 May
Standardise budget and work plan templates for all projects (ensure templates are aligned to TIPAC / WHO tools)	30 May
Develop standardised project plan to be used for each project	30 May
Create cross - project milestone tracking template	7 June
Develop project status report template (periodic high level review of milestones, upcoming activities, finances, issues/risk tracking, mitigating actions, etc.)	7 June
Create an Issue and Risk tracking log (could be included in project status reporting)	7 June
Develop process to roll out new templates and train team on use	14 June

B.RECOMMENDATIONS ADDRESSED BY ICOSA TEAM

Country Support

a. ICOSA needs stronger in-country presence in some countries to advocate the ICOSA programme, to negotiate and to build partnerships with both statutory and other partners in NTD control, and to plan interventions.

> **ACTION**: High level advocacy to assist specific countries in negotiation and strengthening partnerships is provided primarily by Prof. Alan Fenwick as ICOSAs director but going forward additional support will be provided by Dr. Lorenzo Savioli outgoing Director of the NTD department at the WHO. Dr. Savioli is considered likely to join the staff of the Liverpool School of Tropical Medicine and as such through the collaboration with CNTD would be engaged on a short term basis to advocate on behalf of the ICOSA programme as needed. Within WHO AFRO, Dr. Amadou Garba, former NTD Programme Manager for Niger, has also engaged with Francophone countries on behalf of the ICOSA project. Dr. Narcis Kaberteriene former head of the Vector Control Division of the Ugandan MoH also fulfils an advocacy function alongside his main role of capacity development. ICOSA is also continuing to build strong relationships with other implementing organisations that have in country offices to further leverage all available resources.

b. ICOSA should provide an agreed multi-year framework for planning ICOSA's engagement, reliable information on future availability of funds, including budget ceilings and parameters, prompt contracting and release of funds. Many countries felt that these practical contributions were more important than technical contributions to SCH control, which in many ICOSA countries is largely provided by in-country expertise and WHO guidance.

> **ACTION**: Due to contractual constraints at Imperial, ICOSA is unable to negotiate binding budget ceilings for a 5 year period. However, working within that constraint, ICOSA has developed a multi-year framework that outlines the likely funding that will be available to support programmes until Dec 2018. This forecast however is subject to change.
>
> See Table below

YEAR		Cote D'Ivoire	Liberia	Malawi	Mozambique	Niger
Number of individuals requiring treatment WHO estimates 2012 *		*3,710,835*	*979,731*	*6,382,717*	*12,843,508*	*5,317,065*
2014	**Total number of treatments (millions)**	*2.0*	*1.0*	*5.6*	*8*	*0.5*
	In country cost per treatment*	*0.15*	*0.18*	*0.10*	*0.06*	*0.15*
	Estimated total in country cost (excluding drug costs)	**£300,000**	**£176,220**	**£560,000**	**£480,000**	**£73,500**
	Drugs required millions of tablets	*5.0*	*2.4*	*14.0*	*20.0*	*1.2*
	Donation millions of tablets	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
	Drugs needing to be purchased by SCI	*5*	*2.4*	*14*	*20*	*1.225*
2015	**Total number of treatments**	*1.0*	*1.0*	*0.0*	*8*	*0.5*
	Cost per treatment	*0.15*	*0.10*	*0.00*	*0.06*	*0.15*
	Estimated total cost (excluding drug costs)	**£150,000**	**£97,900**	**£0**	**£480,000**	**£73,500**
	Drugs required	*2.5*	*2.4*	*0.0*	*20.0*	*1.2*
	WHO donation	*2.5*	*0.0*	*6.5*	*6.5*	*0.0*
	Drugs needing to be purchased	*0.0*	*2.4*	*-6.5*	*13.5*	*1.2*
2016	**Total number of treatments**	*2.0*	*1.0*	*5.6*	*8*	*0.5*
	Cost per treatment	*0.12*	*0.10*	*0.10*	*0.06*	*0.15*
	Estimated total cost (excluding drug costs)	**£240,000**	**£97,900**	**£560,000**	**£480,000**	**£73,500**
	Drugs required	*5.0*	*2.4*	*14.0*	*20.0*	*1.2*
	WHO donation	*0.0*	*0.0*	*0.0*	*6.5*	*0.0*
	Drugs needing to be purchased	*5.0*	*2.4*	*14.0*	*13.5*	*1.2*
2017	**Total number of treatments**	*1.0*	*1.0*	*0.0*	*8*	*0.5*
	Cost per treatment	*0.15*	*0.10*	*0.00*	*0.06*	*0.15*
	Estimated total cost (excluding drug costs)	***£150,000***	***£97,900***	***£0***	***£480,000***	***£73,500***
	Drugs required	*2.5*	*2.4*	*0.0*	*20.0*	*1.2*
	WHO donation	*0.0*	*0.0*	*0.0*	*6.5*	*0.0*
	Drug needing to be purchased	*2.5*	*2.4*	*0.0*	*13.5*	*1.2*
2018	**Total number of treatments**	*2.0*	*1.0*	*5.6*	*8*	*0.5*
	Cost per treatment	*0.12*	*0.10*	*0.10*	*0.12*	*0.15*
	Estimated total cost (excluding drug costs)	**£240,000**	**£97,900**	**£560,000**	**£480,000**	**£73,500**
	Drugs required	*5.0*	*2.4*	*14.0*	*20.0*	*1.2*
	WHO donation	*0.0*	*0.0*	*0.0*	*6.5*	*0.0*
	Drugs needing to be purchased	*5.0*	*2.4*	*14.0*	*13.5*	*1.2*

YEAR		Tanzania	Zambia	DRC	Ethiopia	Uganda	Zanzibar
*Number of individuals requiring treatment WHO estimates 2012**		*8,529,480*	*4,374,480*	*17,080,905*	*21,106,522*	*8,079,707*	*1,000,000*
2014	**Total number of treatments (millions)**	*2.0*	*1.3*	*1.0*	*3.0*	*0.0*	*2.0*
	In country cost per treatment*	*0.12*	*0.18*	*0.20*	*0.15*	*0.00*	*0.08*
	Estimated total in country cost (excluding drug costs)	**£240,000**	**£234,000**	**£200,000**	**£450,000**	**£0**	**£160,000**
	Drugs required millions of tablets	*5.0*	*3.3*	*2.5*	*7.5*	*0.0*	*6.0*
	Donation millions of tablets	*0.0*	*0.0*	*3.0*	*5.9*	*11.5*	*6.6*
	Drugs needing to be purchased by SCI	*5*	*3.25*	*-0.5*	*1.6*	*-11.5*	*-0.6*
2015	**Total number of treatments**	*2.0*	*1.3*	*2.0*	*7.0*	*1.13*	*2.0*
	Cost per treatment	*0.08*	*0.10*	*0.18*	*0.12*	*0.15*	*0.08*
	Estimated total cost (excluding drug costs)	**£160,000**	**£130,000**	**£360,000**	**£840,000**	**£169,500**	**£160,000**
	Drugs required	*5.0*	*3.3*	*5.0*	*17.5*	*2.8*	*6.0*
	WHO donation	*4.5*	*0.0*	*3.5*	*8.0*	*0.0*	*4.5*
	Drugs needing to be purchased	*0.5*	*3.3*	*1.5*	*9.5*	*2.8*	*1.5*
2016	**Total number of treatments**	*2.0*	*1.3*	*5.0*	*10.0*	*0.0*	*2.0*
	Cost per treatment	*0.08*	*0.10*	*0.15*	*0.12*	*0.00*	*0.08*
	Estimated total cost (excluding drug costs)	**£160,000**	**£130,000**	**£750,000**	**£1,200,000**	**£0**	**£160,000**
	Drugs required	*5.0*	*3.3*	*12.5*	*25.0*	*0.0*	*6.0*
	WHO donation	*0.0*	*0.0*	*12.5*	*15.0*	*0.0*	*6.0*
	Drugs needing to be purchased	*5.0*	*3.3*	*0.0*	*10.0*	*0.0*	*0.0*
2017	**Total number of treatments**	*3.0*	*1.3*	*5.0*	*15.0*	*1.13*	*2.0*
	Cost per treatment	*0.08*	*0.10*	*0.08*	*0.08*	*0.15*	*0.08*
	Estimated total cost (excluding drug costs)	***£240,000***	***£130,000***	***£400,000***	***£1,200,000***	***£169,500***	***£160,000***
	Drugs required	*7.5*	*3.3*	*12.5*	*37.5*	*2.8*	*6.0*
	WHO donation	*0.0*	*0.0*	*12.5*	*50.0*	*0.0*	*6.0*
	Drug needing to be purchased	*7.5*	*3.3*	*0.0*	*-12.5*	*2.8*	*0.0*
2018	**Total number of treatments**	*3.0*	*1.3*	*5.0*	*15.0*	*0.0*	*2.0*
	Cost per treatment	*0.08*	*0.10*	*0.08*	*0.08*	*0.00*	*0.08*
	Estimated total cost (excluding drug costs)	**£240,000**	**£130,000**	**£400,000**	**£1,200,000**	**£0**	**£160,000**
	Drugs required	*7.5*	*3.3*	*12.5*	*37.5*	*0.0*	*6.0*
	WHO donation	*0.0*	*0.0*	*12.5*	*50.0*	*0.0*	*6.0*
	Drugs needing to be purchased	*7.5*	*3.3*	*0.0*	*-12.5*	*0.0*	*0.0*

c. Reaching non-enrolled children is key to stronger health impact. Countries have practical concerns and challenges on this issues and ICOSA staff should coach them through the issues and help problem solve.

> **ACTION:** The impact of treatment and the optimal strategies for reaching non-enrolled children has been a topic of much debate in the SCH and NTD community. Currently, it is identified as a key knowledge gap for programme implementers. The outputs from the DFID Integrated Implementation call that is currently out to bid will inform these strategies. Since both SCI and CNTD are part of bids in response to this call ICOSA is well placed to be able to implement the research findings. In addition both SCI and CNTD work in collaboration with a number of other research partners who may provide important information on this issue ahead of a well-designed multi-country study that is required to give a definite answer on the most effective approach. In the shorter term, through the non-financial support request form, countries will be able to request specific support for reaching non-enrolled children. ICOSA will be able to provide advice on the current best practices in similar endemic settings based on the knowledge accumulated and engagement with SCH programme staff, for the previous 12 years.

Contribution to evidence base

a. As part of 1.c. it should be clear what contribution (through paying for staff time or other) ICOSA funding is making towards improvement in the evidence base.

> **ACTION:** Building on SCIs existing Operational framework the ICOSA team will identify areas where ICOSA supported activities have contributed to the evidence base. Going forward ICOSA will ensure that these contributions are documented and included in fuller annual review narratives. In addition ICOSAs contribution to outputs form the DFID Integrated Implementation call will also be included. ICOSA will support ICOSA staff and country programme managers to attend all relevant meetings to present any new findings as a result of ICOSA- supported activities.

b. SCI needs to manage the balance between academic publications versus making available what data SCI has already, more speedily for the benefit of public health policy and programmatic improvement.

> **ACTION:** WHO National Database Template: In light of the development of the WHO endorsed National Database Template that is designed to strengthen the capacity of national NTD programs to store, manage, analyse, and report their data, ICOSA have engaged in

working with WHO and RTI and other stakeholders to roll out this Integrated database. A training workshop to which ICOSA, Sight savers the Malaria Consortium will be invited has been arranged for the 9- 12 June 2014.

c. SCI's differences with WHO with regard to methodology for site selection for health impact monitoring need to be resolved so that countries have clear guidance.

ACTION: ICOSA has conducted a series of meeting with partners to reach a consolidated view with regard to site selection for health impact monitoring and mapping strategies. A further meeting has taken place with Prof. Simon Brooker and his team in April 2014 to develop a paper for peer review outlining the scientific rationale use for site selection for mapping and the cost implications of different mapping strategies.
In December 2013, the Bill and Melinda Gates Foundation awarded a grant to complete mapping of NTDs in the African Region through a coordinated approach. ICOSA engaged with Dr. Kisito Ogoussan, the programme manager, in January 2014 to discuss mapping strategies in light of the support this grant brings for SCH and STH mapping. In addition Pat Lammie has also been engaged.

Integration

Further to the "detailed planning will need to be done by countries to facilitate integration with other NTDs, with the health system and with other sectors where this is appropriate", ICOSA should also seek to influence integration objectives through more of a change management paradigm - looking to support individual, organisational and systems changes towards integration objectives. This should form part of the "design specific country objectives" highlighted in point 2 above from the previous annual review.

ACTION: DFID Coordinated Action on NTDs Imperial is hosted a meeting of all partners in receipt of DFID NTD investments in response to a request from DFID. A proposal for the most appropriate strategies to facilitate integration with other NTDs, health system and sectors has been prepared and will be discussed with the DFID team on the 7 May 2014. See below.

Annex 2: DFID Coordinated Action on NTDs

Section 1: Executive Summary

DFID has committed £245million to supporting the control of Neglected Tropical Diseases (NTDs) over the period 2011-17. This commitment includes support for seven major programmes -

- Integrated Control of Schistosomiasis and Intestinal Helminths in Sub-Saharan Africa (ICOSA) programme led by the Schistosomiasis Control Initiative (SCI) at Imperial College, London
- Lymphatic Filariasis (LF) Elimination Programme led by the Centre for Neglected Tropical Diseases (CNTD) at the Liverpool School of Tropical Medicine
- The Global Trachoma Mapping Project (GTMP), led by Sightsavers
- Trachoma SAFE implementation, led by Sightsavers on behalf of the International Coalition for Trachoma Control (contract discussions on-going)
- Integrated NTD Control Programme in Nigeria, led by Sightsavers
- Integrated NTD Control Programme in South Sudan led by Malaria Consortium (contract discussions on-going)
- Onchocerciasis and lymphatic filariasis elimination programmes in Africa led by APOC and from 2016 by PENDA

There is already collaboration and joint working between the partners and integration of activities that are key to implementation at the country level. **See Annex 1 for case studies**. To this end, discussions about project activities take place between the partners that allow for collaboration between programmes and facilitate deployment and sharing of staff as well as providing the opportunity for identifying other possible areas of support. There are common elements to the technical implementation of each programme and cross cutting themes at each programmatic level (mapping, social mobilization, training, implementation and monitoring and evaluation) that are greatly enhanced by joint planning but also an acknowledgement that each organisation offers particular areas of specialism that are mutually complimentary. In addition, there are well established fora for stakeholder involvement such as APOC's Joint Action Forum, GAELF etc.

Section 2: Programme co-ordination

The following sets out the areas where the implementing partners already collaborate and co-ordinate their activities across the NTD portfolio.

Programme	Countries	Co-ordination
Elimination of Onchocerciasis in Africa - African Programme for Onchocerciasis Control (APOC)	Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of Congo, Côte d'Ivoire, Ethiopia, Equatorial Guinea, Gabon, Guinea, Guinea Bissau, Kenya, Liberia, Malawi, Mali, Mozambique,	• Through the existing structures APOC co-ordinates and implements onchocerciasis elimination programmes throughout Africa and will add to its current mandate coordination of lymphatic filariasis starting from 2016 following its transformation into a new entity-PENDA • APOC works closely with Ministries of Health through a well-established system of National Onchocerciasis Task Forces that cascade to the community level • APOC implements other health interventions and delivery of health commodities through the creation of

	Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Sudan, Sudan, Tanzania, Togo and Uganda (30 African countries)	community level networks of volunteers (CDDs) • Supports comprehensive Integrated PCT- NTD programmes in Tanzania and DRC (in collaboration with CNTDs) • **For more detail please see ANNEX 2**
ICOSA – SCI	Cote d'Ivoire, Liberia, Malawi, Mozambique, Niger, Tanzania, Uganda, Zambia, Zanzibar	Implementation is in conjunction with national Ministries of Health – SCI do not have any offices in country. **Co-ordination with CNTD:** **Liberia, Mozambique & Zambia** - Technical programme management integrated with the LF programme and provided by CNTD. **Malawi, Tanzania & Zanzibar –** Joint annual work planning with CNTD. Joint stakeholder meetings and programme manager training workshops.
LF Elimination - CNTD	Bangladesh, Burkina Faso, DRC, Ethiopia, Ghana, Guinea, Liberia, Malawi, Mozambique, Nepal, Tanzania, Zambia	Implementation is in conjunction with national Ministries of Health – CNTD do not have any offices in country. **In addition to the above:** **Zambia** – in-country technical support based in Sightsavers. **Mozambique** – discussions underway for providing in-country technical support via Sightsavers.
Global Trachoma Mapping Project Sightsavers	32 countries (Africa and Asia)	Implementation through coordinating NGOs that are members of the International Coalition for Trachoma Control (ICTC)
SAFE Trachoma* Sightsavers/ICTC*	CAR Chad Ethiopia South Sudan Tanzania Zambia	Sightsavers as grant manager on behalf of ICTC. Implementation will be through coordinating NGOs that are members of the International Coalition for Trachoma Control (ICTC) *Under contractual negotiation
Integrated programmes	**LF, Onchocerciasis, Schistosomiasis, STH, Trachoma**	
Nigeria - Sightsavers/UNITED	The outcome of UK support will be to reduce the prevalence of NTDs in Nigeria, and to establish sustainable integrated NTD programmes in targeted areas of the country. The outputs of the programme will be: • 111.3 million treatments distributed over 4 years. • 13.8 million people will be reached with mass drug administration. **The UNITED Consortium is led by Sightsavers in partnership with: NGOs:** CBM, Helen Keller International, MITOSATH, The Carter Center **Academic research partners:** Liverpool School of Tropical Medicine - Centre for Neglected Tropical Diseases, London Centre for NTD Research **Private Sector Partners:** Health Partners International **Private Sector Suppliers:** Accenture Development Partnerships and Crown Agents.	

South Sudan *– Malaria Consortium*	The outcome of UK support will be to reduce the prevalence of NTDs in South Sudan, and to establish integrated NTD programmes in targeted areas of the country The outputs of the programme will be: • 20.9million treatments distributed over 4 years • 1.3million people will be reached with mass drug administration **Led by Malaria Consortium with local NGO partners:** Caritas, Theso, and Merlin and **Private Sector Partners:** Montrose and Tropical Health LLP
Onchocerciasis and Lymphatic filariasis Elimination Programme- PENDA	Starting from 2016 the programme will be transformed into a new entity (Programme for the Elimination of Neglected Diseases in Africa-PENDA) responsible for the coordination of the elimination of onchocerciasis and lymphatic filariasis in Africa. PENDA will support the 34 Onchocerciasis and Lymphatic filariasis endemic countries in Africa. It will have a broader partnership including all partners contributing towards the elimination of the two diseases.

Section 3: proposal for further co-ordinated action

In areas where current joint working and collaboration between the partners involves responsibilities for specific activities and deliverables, these arrangements are already governed by formal sub-contracts and agreements that will remain in place. However, we have identified further areas where we believe a joint 'consortium' based approach will bring programmatic benefits, increase impact across the programmes and reduce the potential risk of duplication and overlap in implementation.

We propose therefore to form a more formalised cost effective consortium of implementing partners with the goal of achieving integration across the DFID NTD programmes.

Key principles for the operation of the consortium will be:

- Agreement on consortium wide standards and guidelines and consortium 'leads' for technical implementation activities such as mapping, MDA and M & E;
- Agreement on standardised programme management, implementation and reporting approaches;
- Establishment of standardised co-ordination mechanisms across the programmes;
- Establishment of open access and sharing of information and opportunities for programme learning;
- Maximising opportunities for multilateral efforts in advocacy;

Wherever different disease specific programmes are being delivered in the same geographic locations, partners will work together to co-ordinate programme resources and harmonise data management practices.

This will not involve another layer of management but minimal secretariat responsibilities and chairmanship which will rotate on an annual basis between the partners. This model has been used effectively by a number of groups including the NGDO coordination Group for Onchocerciasis Elimination and NGDO NTD network.

3.1 Programme Integration

A series of high level objectives have been developed by the partners. Following discussion with DFID and formalising of working groups a work plan will be developed around each of these objectives with more detailed milestones and timelines.

3.1.1 Joint approach to work planning & budget setting

Goal: *Single joint work planning and budget setting activity aligned across all programmes*
Anticipated outcome*: Coordination of activities to improve efficiency and economies of scale without disturbing the pace of the programmes*
Timeline: Q1 2015 - Q1 2017
Impact level: Global and country

To achieve this goal the following steps will be taken:

- There will be a requirement to adjust the existing DFID planning cycle to align with endemic countries to allow joint planning and budgeting activity across each of the disease focused programmes
- Partners will hold a meeting to review, compare and align country plans and budgets to identify areas of cost saving across the programmes before final budgets are submitted
- A review of current procurement activities will be carried out to identify areas of potential economies of scale in purchasing as a consortium rather than as individual partners
- Standardised work planning templates will be developed where appropriate to reduce the workload on endemic country ministries of health and facilitate integration across a broader group of stakeholders. Global, regional and country approaches will be examined.

3.1.2 Standardisation of working practices

Goal: *To create a set of standardised tools and procedures used by all partners*
Anticipated outcome: *To increase comparability between programmes, improve efficiency of implementation and reporting*
Timeline: Q2 2014 **–** Q4 2015
Impact level: Global and country

To achieve this goal the partners would convene 4 working groups to examine and report the following areas:

- Mapping, M&E and data management and reporting
- Implementation (scaling up and scaling down of MDA)
- Value for money
- Due diligence and risk management

Each working group will

- Include the appropriate representatives from each organisation with expertise in each area
- Initially complete a landscaping exercise and collate all existing protocols, policies and operating procedures in use by partners and other key stakeholders
- Agree on standardised approaches and documentation where appropriate and document rationale

- Develop a plan for the roll out of standardised approaches outlining the resource required from each organisation
- Oversee the roll out of the standardised approaches which will be further monitored by the joint progress monitoring working group

3.1.3 Joint delivery of activities

Goal: Where disease specific programmes are in the same geographic locations, activities will be implemented jointly
Anticipated outcome: To demonstrate cost efficiency gains
Time lines: Q2 2014 - Q1 2017
Impact level: Global and country

This objective will be achieved by taking the following steps:

- A framework outlining the in country presence of each organisation and specific disease epidemiology and coverage will be developed
- A detailed assessment of the critical path for implementing MDA programmes will identify, at the global and country level, activities that can be jointly implemented or delivered in a complementary manner
- For global level joint activities a plan of resource sharing to support shared activities will be developed and mechanism for responsibility for implementation agreed
- Joint activities identified to be implemented at the country level will be fed into the country specific working groups (see 3.3) who will discuss resource allocation and responsibility for implementation. The most effective mechanism for coordinating country level activities will also be discussed - this may be through a regional or country approach.

3.1.4 Joint progress monitoring

Goal: A single entity that monitors the on-going activities of all DFID NTD investments and develops effective mitigation strategies
Expected outcomes: More effective implementation and monitoring of programmes
Timeline: Q4 2014 - Q1 2015
Impact level: Global

This goal will be achieved by taking the following steps:

- Partners will convene biannual meetings of the joint progress monitoring group comprising of programme directors of each disease focused programme
- The chair of the group will rotate between the organisations
- The group will review progress against each of the disease focused log frames and identify challenges to achievement of objectives
- Mitigation strategies will be developed where possible and resources to support these strategies can be allocated from all partners
- The group will also be able to identify on-going opportunities for sharing of resources, support and technical assistance

- The group will also oversee the implementation a peer review process of programmes and of jointly funded independent external programme reviews (outside of those requested by DFID) to identify areas for further development and document progress against log frames

3.2 Reporting

Goal: A single integrated report on a standardised template from all partners and external review across the 7 DFID NTD programmes, timed for mid-term (2015) and 2017/8
Expected outcome: Cost savings on external review and reduce requirement for DFID oversight from individual points of contact and a more effective mechanism for demonstrating programme impact.
Timeline: Q4 2016
Impact level: Global

To achieve this goal the following steps will be taken:

- There would be a requirement for DFID to adjust their reporting schedule for all disease focused programmes so that they all aligned to a common timeline
- A single standardised reporting template will be developed capturing disease specific objectives and integrated activities
- The joint progress monitoring group will be responsible for collating, reviewing and approving the report prior to submission to DFID.

The partners will have a single external review from DFID that would cover all disease focused programmes in a single review visit.

3.3 Evidence sharing and Intelligence gathering

Goal: Create country specific platforms for effective information sharing
Expected outcome: More effective implementation based on robust evidence
Timeline: Q4 2014
Impact level: Country

To achieve this goal the following steps will be taken:

- Convene country focused working groups for each country in which DFID supports two or more disease focused programmes to ensure there is a platform for learning across projects
- The country specific programme managers from each organisation will arrange meetings utilising existing mechanisms where they exist and virtual meeting to share evidence and intelligence at a frequency appropriate for each country. Regional platforms will also be explored
- They will also have opportunities to identify resource sharing, for example sharing of technical expertise in specific areas such as mapping, health systems, monitoring

and evaluation, data management etc. Integration opportunities in the country context will also be identified and areas of cross country collaboration

- The country focused working groups will also engage with DFID to request information on other DFID investments in country in sectors such as water and sanitation and nutrition, school health etc. and identify opportunity to work with these sectors
- The country focus working groups will also request assistance from the DFID NTD team to develop meaningful collaboration with other DFID Departments that make investment in areas that will impact NTD control for e.g. WASH, nutrition, maternal and child health and disability morbidity control and management. This will ensure appropriate coordination of DFID investments in these sectors.
- The country focus working groups will also engage with DFID country offices to ensure they are aware of the NTD programme activities although it is understood that there may not be resources available for in country DFID staff to attend NTD meetings.

3.4 Challenges to programme integration

The following are identified challenges that may be inherent in achieving integrated implementation across the DFID NTD programmes:

- Requirement for DFID to adjust their reporting schedule for all disease focused programmes so that they all align to a common timeline
- Need for standardised DFID approach to programme management including possibly a single point of contact for the consortium
- Need for standardisation of reporting mechanisms to DFID and standard approach to reviewing reports
- Requirement for DFID assistance in joint approaches to the MoH on issues such as standardisation/confirmation of in-country per-diems etc.
- Requirement for DFID to facilitate collaboration with the other DFID departments that have investments in sectors that have an impact on NTD control e.g. WASH etc. and facilitation of access to partners supported by DFID to implement programmes in other sectors in countries of mutual interest
- Requirement for review of existing procurement procedures to accommodate any economies of scale in purchasing as a consortium rather than as individual partners
- Ensure technical implementation and treatment delivery of disease programmes are not delayed by using an integrated approach

Section 4. Budgetary implementations

The below tables are illustrative of the additional activities and expected efficiency gains from the coordinated approach outlined above. Following discussion with DFID the partners would develop a more detailed framework for the expected costs and benefits engaging the assistance of a health economist.

Additional activity	Frequency	Estimated costs
Annual work planning meeting	Annual on-going	Minimal
Standardisation working groups - 3 groups	4- 6 meetings until Q4 2015	Medium for initial period
Joint progress monitoring group meeting	Biannual on-going	Medium on going
Country specific working groups - mainly at existing forum and virtual	At least quarterly on-going	Minimal on going
Additional Independent External Evaluation	Timing to be agreed with DFID	High on going

Anticipated efficiencies	Frequency	Estimated savings
Individual mid-term reviews – no longer required	Annual	High
Economies of scale	On-going	Medium on-going
Programmatic efficiency gains	On-going	High on-going

Section 5: Expected outcomes: Strengthened system for effective NTD control

- Greater impact of overall DFID programme results – learning from other partners' experiences, sharing the burden and risk.
- Facilitation of links into other NTD programmes – e.g. link into trachoma project.
- Greater understanding of implementing partners - co-ordination with government and other partners, especially important in bigger-country contexts where USAID and DFID are making joint investments

- Stronger negotiating power with other donor agencies and implementing partners such as
- RTI, FHI360 and USAID.
- Mechanism for productive intelligence gathering and sharing.
- Clearer understanding of costs and contributions made by other partners and national governments.
- Improved data quality and national advocacy strategy.
- Standard annual plans and budgets for NTD control prepared and submitted.
- Collaboration to consider possibilities of integrating Human African Trypanosomiasis control; vector control activities for LF and Onchocerciasis reduction and / or treatments for other NTDs as pilot activities in counties most affected using the health care system structures and MDA as platform for incorporating other control measures.

ANNEX 1: Case Studies of Integration

APOC Partnership: Onchocerciasis elimination in Africa

Partnership is the driving force of APOC's existence and substantial achievements. The former OCP and APOC are a remarkable success story for Africa largely because of its exceptional, unique and successful partnership with a wide range of stakeholders, but particularly with the communities that have been empowered to take ownership of the control activities. APOC is a wide-ranging partnership of national governments, donors, international and local NGDOs, a pharmaceutical company (Merck) and communities. WHO (HQ) is its executing agent and the World Bank the fiscal agent. The APOC secretariat in Ouagadougou coordinates country programme implementation. DFID has supported the Programme since 1997. The partnership has been serving as a forum for coordination of programme activities including scaling up treatment in countries, harmonization and synergy, avoiding duplication of efforts among partners and giving direction. NGDO Partners includes: Sightsavers, CBM, HKI, the Carter Center, Nigerian NGO MITOSATH, etc. who work closely with APOC in onchocerciasis elimination and control/elimination of other PC-NTDs.

APOC is working very closely with CNTD and other partners in NTDs e.g. on coordinated mapping in Gabon and scaling up of treatment in DRC. Sightsavers and APOC are collaborating to scale up onchocerciasis treatment in Côte d'Ivoire and a discussion is in progress to work more closely to scale up treatment of Schistosomiasis and Soil transmitted helminths (STH) in collaboration with SCI in DRC. APOC also hosted a technical advisor position of Sightsavers in its headquarters in Ouagadougou, Burkina Faso. Further discussion is on-going to support Epidemiological and Entomological Evaluations in the ex-Onchocerciasis Control Programme countries in West Africa together with Sightsavers to verify elimination of onchocerciasis transmission.

- Coordinated Mapping: APOC has undertaken coordinated mapping of most PC-NTDs in Chad, Congo, and Equatorial Guinea, and joint Loa loa and REMO mapping in 11 loasis endemic countries.
- Planning Forum: The national coordinators of onchocerciasis and lymphatic filariasis meet at least once a year to review progress and plan annual activities and provides a forum to harmonize activities between partners and countries.
- Operational research: collaborate with a number of partners, research institutions, and academia which includes WHO/TDR, CDC/Atlanta, Liverpool School of Tropical Medicine, Lancaster University, Erasmus University Nederland, Imperial College London, University of South Florida etc.
- Coordination of cross boarder collaboration: the programme supports a number of cross border collaborations among countries such as Uganda - DRC, Nigeria-Benin, DR Congo and Burundi, Cameroun – CAR – Chad, Republic of Congo and DR of Congo, Benin, Burkina Faso, Ghana, Cote d'Ivoire and Togo.
- Monitoring and Evaluation: monitoring of programme health impact assessment of onchocerciasis and lymphatic filariasis is being implemented in a coordinated manner with a number of partners such as the Carter Center, FHI360, OPC, RTI, and Sightsavers.

Starting from 2016 the programme will be transformed into a new entity (Programme for the Elimination of Neglected Diseases in Africa-PENDA) responsible for the coordination of the elimination of onchocerciasis and lymphatic filariasis in Africa to achieve elimination in Africa to the WHO roadmap.

UNITED Consortium Programme: Nigeria

The UNITED Consortium implementing the DFID integrated NTDs project in Nigeria, is led by Sightsavers, and is formed of leading international and Nigerian NGOs, academic institutions, health systems and financial accountability organisations and logistics experts.

Partners include: International NGOs **Sightsavers, CBM, HKI, and The Carter Center (TCC);** Nigerian NGO **MITOSATH**; academic partners: **LSTM-CNTD, the London Centre for NTD Research (LCNTDR)**; and health systems experts **HPI.** Financial accountability and risk services are being supplied by **Accenture Development Partnerships** and logistics expertise is being supplied by **Crown Agents.**

Monitoring and Evaluation (M&E) of the Nigerian Federal Ministry of Health's (FMOH) Initiatives is the responsibility of the Department of Planning, Research & Statistics. This body oversees the National Health Management Information System (NHMIS) which was established in 1999 and underwent a major review in 2004. Working closely with RTI, Sightsavers is working to harmonise the DFID Integrated NTD programme monitoring, evaluation and learning approach with the NHMIS from the onset. This approach is in line with the London Declaration on NTDs' commitment to provide technical support, tools and resources to support NTD-endemic countries.

Consortium partners, i.e. the LSTM-CNTD, and LCNTDR will support the monitoring and evaluation of the programme. This group brings world-class design of frameworks for monitoring and evaluation of integrated NTD control programmes to demonstrate quantifiable impacts in terms of process, health, cost and social indicators. A meeting held last month in London between the UNITED partners involved with the monitoring and evaluation resulted in a working monitoring and evaluation plan.

Annex 2: Detailed explanation of APOC coordination activities

Programme	Countries	Co-ordination
Elimination of Onchocerciasis in Africa - African Programme for Onchocerciasis Control (APOC)	Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of Congo, Côte d'Ivoire, Ethiopia, Equatorial Guinea, Gabon, Guinea, Guinea Bissau, Kenya, Liberia, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Sudan, Sudan, Tanzania, Togo and Uganda	• Through the existing structure, APOC co-ordinates and implements onchocerciasis elimination programmes throughout Africa and will add to its current mandate coordination of lymphatic filariasis starting from 2016 following its transformation into a new entity-PENDA • APOC works closely with Ministries of Health through a well-established system of National Onchocerciasis Task Forces, comprised of MoH as the secretariat and partner NGDOs, which oversee the implementation of CDTI projects. A similar structure cascades down to the community level with partners having clearly defined roles and responsibilities according to the local context. APOC still covers substantial costs of programme implementation. • Implementation in conjunction with national ministry of health for the treatment of onchocerciasis, co-implementation of other health interventions and delivery of health commodities including PCT NTD. In addition, through creation of community level network of volunteers (CDDs) APOC strengthens and narrows the existing gap of the formal health system • Actively implementing onchocerciasis elimination programs in 27 out of the 31 endemic countries • Physical presence in all post conflict onchocerciasis endemic countries providing direct technical, administrative, financial and managerial

	(31 African countries)	support • Support comprehensive Integrated PCT- NTD programme in Tanzania and DRC (in collaboration with CNTDs) • Coordinates cross border collaboration in Africa and conducts multi-country operational research