



The MENTOR Initiative and End Fund
Programme Strategy Years 3 to 5

“Ending Priority Neglected Tropical Diseases (NTDs) in Angola
In Partnership with the END Fund

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1 EXECUTIVE SUMMARY

In 2012 The MENTOR Initiative, commenced a 5 year grant with END Fund to work with the Government of Angola to build the capacity and reach of their Neglected Tropical Diseases programme. Specifically the programme was to map three key NTDs in Uige, Zaire and Huambo provinces and work to reduce disease burden through biannual mass drug administrations through school and community networks, whilst building capacity of health workers through training and supervisions, coupled with a school-based programme to encourage hand-washing in children.

Working through MENTOR's existing structure and relationships at national level and in the 3 provinces the programme initiated mapping and an initial mass drug administration (MDA) of albendazole (ALB) to school aged children and subsequently a larger MDA with Praziquantel (PZQ) in year 2. The mapping had been planned to integrate soil transmitted helminths (STH), schistosomiasis (SCH) and lymphatic filariasis (LF) in the 3 provinces in the centre and north of Angola, however, mapping of LF mapping was not possible and was ultimately dropped from the protocol. Now, two years into the grant the mapping of the three provinces is complete and shows lower than expected endemicity of STH and SCH. This is therefore an opportunity to restructure the programme moving away from the initial plan for biannual MDAs and regular capacity building of health workers to a lighter touch programme reaching more beneficiaries in more provinces whilst maintaining and executing the school based WASH education programme in the original three provinces. 2015 is a critical year in NTD control as funding for disease mapping expires at the end of the year, therefore the remaining 15 provinces will be mapped for STH, SCH and LF this year with reporting expected at the end of the year.

This proposal outlines in detail the strategy for year 3, which is largely expected to be replicated in year 4 of the grant, building on lessons learnt to date. Through the new strategy MENTOR expects to exceed the 1.28million unique beneficiary per year target set by END Fund by expanding MDA to Bie, Kuando Kubango and Kwanza Sul provinces. These new provinces will be supported to implement and report on a single round of MDA with ALB and PZQ in Bie only using schools as a platform for reaching school aged children. All provinces will commence co-training teachers and health workers to facilitate reporting of MDAs through the health system. In the original provinces health workers will be co-trained with teachers as part of the WASHE programme to ensure messages and strategies are standardised across the health and education sectors whilst also maximising the budget available.

MENTOR is now identified as an NGO partner for the CDTI programme in Uige (5 municipalities) and Kuando Kubango (6 municipalities). Being partner in this programme will facilitate access to the target groups so far not reached in this grant, specifically these are pre-school children for ALB (and PZQ administration in Uige) and communities in LF affected municipalities. Funding for APOC funded community based activities in Kuando Kubango ended in 2014, therefore this proposal will be able to support and build on the continuation of the existing CDTI network in this province.

At national level MENTOR will continue to support the National NTD programme through daily support to Dr Pedro Van-Dúnem and his team facilitating them to ensure the supply of donated drugs and the implementation and reporting of MDAs in provinces without a MENTOR presence.

Working with a team of 9 technical national or expat staff and 20 full time support staff MENTOR plan to test the new light touch strategy in year 3, continuing to build capacity of the NTD programme in Angola with the aspiration of eventually reaching all provinces in Angola with effective and reported MDAs to target populations.



Map 1: Angola, showing provinces and provincial capitals

2 THE GLOBAL CHALLENGE OF NTDs

After 15 years of global health focus on HIV, malaria and tuberculosis, international health advocates are beginning to recognize the critical importance of a core group of 17 neglected tropical diseases (NTDs) that affect 1.5 billion people worldwide. These NTDs include major protozoal, bacterial and helminth infections. Examples include; soil transmitted helminths such as ascariasis (roundworm), hookworm, trichuriasis (whipworm); vector borne transmitted diseases: lymphatic filariasis (LF), schistosomiasis (bilharzia), onchocerciasis (river blindness), leishmaniasis, and human African trypanosomiasis (sleeping sickness); as well as dracunculiasis (guinea worm), trachoma, Buruli ulcer, Dengue, Chikungunya, rabies, yaws and leprosy.

NTDs are called ‘neglected diseases’ because they have been largely wiped out in the developed world but persist only in the poorest, most marginalized communities and conflict zones. They thrive in places with unsafe water, poor sanitation and limited access to basic health care. Rural Africa suffers the overwhelming majority of the world’s burden of NTDs, where at least 40 countries have five or more co-endemic NTDs. These diseases are transmitted either by vectors or through contact with contaminated water or soil, and consequently disproportionately affect rural, poor communities. As many of these NTDs are co-endemic, often people are simultaneously infected with multiple NTDs.

Some NTDs kill (trypanosomiasis, visceral leishmaniasis etc), but most cause chronic disease, and many cause disability and disfigurement (LF, onchocerciasis, leprosy, Buruli, cutaneous leishmaniasis) often resulting in social stigmatization and ostracisation. The impact of NTDs on poverty is also clear. For example, chronic hookworm and schistosomiasis produce longstanding anaemia, which retards physical growth and impairs memory and cognitive abilities. Helminth infection often leads to anaemia which, in pregnant women, results in low neonatal birth weight and increased maternal morbidity and mortality. Onchocerciasis and trachoma cause impaired vision or blindness. While LF, onchocerciasis, guinea worm infection, leishmaniasis, Buruli ulcer, and leprosy cause either loss of limb use or profound disfigurement that may prevent or impede affected individuals from working or caring for their families. The stigma of NTDs contributes to suffering, delays treatment seeking, promotes non-adherence to treatment, hurts families and communities, and ultimately lessens support for control efforts.

Despite the overall morbidity caused by NTDs being far greater than that of malaria, mortality is relatively low, and international partnerships, political commitment and funding for NTD control have only recently started to increase. With this, exciting new opportunities to control or even eliminate the most common NTDs could now be realized.

Large-scale administration of low cost/donated drugs, such as Albendazole or mebendazole for soil transmitted helminths infections, ivermectin or diethylcarbamazine for the filarial infections, Praziquantel for schistosomiasis and other fluke infections, and azithromycin for trachoma, offer a potential quick win to reduce NTD prevalence in countries where mass drug administration (MDA) can be successfully rolled out. When linked with education strategies which aim to reduce re-infection, while supporting health authorities to build capacity, these diseases can become sustainably controlled and lead the way to eventual elimination.

This proposal and strategy focuses on the control of these diseases that can be prevented and/ or treated by the mass administration of donated drugs. This is a proven strategy in place in several other African countries.

3. BACKGROUND- ANGOLA

Following three decades of civil war which saw the loss or impairment of critical health infrastructure, Angola, one of the fastest growing economies in Africa, has begun to invest heavily in social development, particularly healthcare. However, while the will and resources exist, the rate of investment and pace of development remains slow, with many areas, notably rural, suffering from a lack of health infrastructure, trained staff, and adequate supply of drugs and equipment.

The long term conflict and continued underinvestment in the health system in Angola have caused many neglected tropical diseases (NTDs) to proliferate and remain uncontrolled. During the conflict most health systems in rural areas were cut off and over 90% of the population was forced to flee rural areas and live in and around 9 provincial capitals for their own security. Following the end of the conflict, the last decade has seen the

gradual demining of rural areas and the return of many communities, but the process of rebuilding the country's destroyed rural villages and towns, establishing adequate water and sanitation services, and disease control efforts (other than malaria) has been much slower, especially in the more remote northern provinces where NTD transmission tends to be highest.

Angola's story, is now one of inequality with the urban elite enjoying a good quality of life while most notably the rural poor still struggle to access basic health care and clean water. This leads to Angola's health indicators remaining among the worst in sub-Saharan Africa, in 2013, 38% of the population lived below the poverty line and 28% were living in extreme poverty, surviving on less than 0.70 USD per day. The United Nations (UN) database in 2012 calculated life expectancy at birth to be 51 years. In 2013 the maternal mortality rates and under 5 mortality rate remained among of the highest in the world. 85% of health workers are in urban areas, meaning that only 40% of the population have access to publicly funded health care

Rural areas in all provinces suffer disproportionately from a lack of sanitation and healthcare infrastructure, exacerbated by stock outs of supplies, difficulty to attract quality staff and poor roads and access. Poorly trained health workers in remote locations are often the last to receive necessary medication, either due to lack of capacity in reporting, recording and requesting supplies or logistical constraints due to road and environmental conditions. This subsequently limits access to basic health care to the most impoverished communities who often suffer the highest burden of NTDs

4. NTDS AND MAPPING IN ANGOLA

At least 14 neglected diseases have been identified in 9 out of the 18 provinces of Angola, though prevalence data on these diseases and the mapping of disease transmission is still incomplete and at this time reliant on WHO mapping from 2005.

Soil Transmitted Helminths (STH)

Hookworm, ascariasis (roundworm) and trichuriasis (whipworm) are parasites that are ingested in contaminated food or water, or in the case of hookworm, exposure of the skin (often the feet) to larvae in contaminated soil. Infection can cause anaemia and malnutrition which can lead to stunting and educational underachievement in children, as well as other more serious and/or fatal problems. A national survey (divided and sampled by ecological zones) of soil transmitted helminth infections amongst school age children was conducted in 2005. Two out of 6 ecologies were classed as high risk, with a prevalence >50%. This included parts of, or all of, Cabinda, Zaire, Uige, Kwanza-norte, Bengo, Kwanza-sul, Malange and Lunda-Norte provinces. All other zones had a prevalence of 20-50%, including Huambo.

STH is treated using either Albendazole or Mebendazole which is donated to governments from GSK or Johnson & Johnson via WHO for school aged children (6-15), some strategies enable treatment of pre-school aged children. WHO recommend that populations identified as high burden should be treated twice per year, while low burden should receive treatment once per year.

Schistosomiasis (SCH)

Schistosomiasis is disease caused by a parasite (liver fluke) transmitted by freshwater snails when people visit and use infected rivers and lakes. It can cause high mortality and morbidity caused by lesions to internal organs which can result in chronic and life threatening disease. There are five species reported in Angola, but two main types: s.Mansoni, which causes intestinal illness, and s.Hematobium, which causes the urinary form of the disease which can also increase infected women's chances of contracting HIV¹. The most recent study, conducted in 2005, showed an overall prevalence of 28% nationally for the urinary form of the disease. This study identified Zaire, Uige, Bengo, Kwanza-Norte, Kwanza-sul, Cabinda, Malange, Bié, Huambo, Benguela,

¹ Secor WE, The effects of schistosomiasis on HIV/AIDS infection, progression and transmission, Curr Opin HIV AIDS, 2012 May;7(3):254-9

Huila, Namibe, Cunene and Kwando-Kubango as being provinces of highest risk. High risk zones had a disease prevalence >30%.

Praziquantel donated by MERCK can be distributed to school aged children and/or adults (over 15 years) in high-risk occupations, e.g. fishermen. It must be administered with a food to avoid adverse reactions especially in children with high worm burdens.

Lymphatic Filariasis (LF)

LF, is caused by a nematode worm (*Wuchereria Bancrofti*), transmitted by mosquitoes. In rural areas the same *Anopheles* mosquito that transmits malaria is commonly the main vector, whereas *Culex* mosquitoes are common vectors in urban and peri-urban environments. Of the 120 million LF infections worldwide, 40% are in Africa. In 2011, Angola reported LF cases in Huambo, Kwanza-norte, Bengo, Malange, Luanda and Cabinda provinces. However, the epidemiology of filariasis is poorly documented and only 4 provinces (Huambo, Kuando Kubango, Bié and Moxico) have had any mapping of the disease to date. Given the coverage of the vectors however, it is likely that LF shadows malaria epidemiology, with higher transmission occurring in the Northern provinces. Timely treatment can clear microfilariae from the bloodstream and prevent onward transmission by mosquitos. A single dose of either albendazole with ivermectin or albendazole and diethylcarbamazine citrate (DEC) to an entire at-risk population is recommended by WHO. Therefore a community based distribution strategy is appropriate in LF areas.

Onchocerciasis (ONCHO)

Onchocerciasis (and Loiasis) is an NTD with the nematode *Onchocerca volvulus*. It is the world's second-leading infectious cause of blindness, and is transmitted by the bite of the *Simulium* black fly. The fly inhabits places with fast moving water courses. The disease is controllable through MDA of Ivermectin to entire at-risk communities.

Mapping of onchocerciasis has been completed by the Ministry of Health in partnership with the African Programme for Onchocerciasis Control (APOC) through surveys in 2002 and 2008, some remapping or refined mapping in certain areas might still be pending. In 2008, also mapping of co-endemicity of ONCHO and Loiasis (LOA) has been completed.

Ivermectin is unsuitable for administration in areas where Loa Loa has been identified, in these specific areas two doses of albendazole is recommended by WHO.

Trachoma (TRA)

Trachoma is the leading infectious cause of blindnessⁱ affecting the poorest and most vulnerable communities worldwide. It is a bacterial eye infection transmitted between humans through touch, contaminated water and materials but also by domestic flies. After sustained exposure and reinfection with *Chlamydia trachomatis*, the eyelid becomes scarred and turns inward, damaging the eyeball and causing intense pain and potentially permanent visual loss and blindness called trichiasis.

Trachoma infections are most prevalent among young children and the adults that care for them, prevalence rates among pre-school children in endemic areas can be as high as 60-90%ⁱⁱ. Zithromax (Azithromycin) is available for donation from Pfizer to treat and prevent active infections, studies have shown that in low transmission areas a single round of mass antibiotic administration can be sufficient to control trachomaⁱⁱⁱ.

Mapping of trachoma in 2015 is currently being discussed. No mapping of trachoma has been done in the past, only records of trachoma diagnosis and treatments through the eye-care services of the Ophthalmologic Center Boa Vista in Benguela have been reported. A limited number of provinces and/or municipalities of Angola are eligible for mapping of trachoma; The MENTOR Initiative will investigate if the Ministry of Health is planning to implement the mapping, with support from WHO and the Global Mapping of Trachoma Project (GTMP). Once

more information is available, The MENTOR Initiative will keep END Fund informed with regard to the progress of the mapping and its outcomes.

Table 1: Summary of the WHO guidelines for MDA, including people at risk, recommended MDA medicine and frequency.

Disease	Treatment	Target population	Frequency of MDA
Soil-transmitted helminths (STH)	albendazole (400 mg) or mebendazole (500 mg)	People at risk are: <ul style="list-style-type: none"> - preschool children; - school-age children; - women of childbearing age (including pregnant women in the second and third trimesters and breastfeeding women); - adults in certain high-risk occupations, such as tea-pickers or miners. 	WHO recommends periodic drug treatment (deworming) without previous individual diagnosis to all at-risk people living in endemic areas. Treatment should be given once a year when the prevalence of soil-transmitted helminth infections in the community is over 20%, and twice a year when the prevalence of soil-transmitted helminth infections in the community is over 50%.
Schistosomiasis (Bilharzia)	Praziquantel	Groups targeted for treatment are: <ul style="list-style-type: none"> - school-aged children in endemic areas; - adults considered to be at risk in endemic areas (people with occupations involving contact with infested water – such as fishermen, farmers, irrigation workers – and women whose domestic tasks bring them into contact with infested water; - entire communities living in highly endemic areas. 	The frequency of treatment is determined by the prevalence of infection or haematuria (in the case of urogenital schistosomiasis) in school-age children. In high transmission areas, treatment may have to be repeated every year for a number of years.
Onchocerciasis (River blindness)	Ivermectin (or DEC) questions over which treatment to use - be guided by MoH?		at least once yearly for about 10 to 15 years.
Lymphatic Filariasis (LF)	Single doses of albendazole (400 mg) plus either diethylcarbamazine citrate (DEC) (6 mg/kg) or ivermectin (150-200 mcg/kg) in areas where onchocerciasis (river blindness) is also endemic	Community wide, any areas where disease present	Once annually, should be continued for 4-6 years to fully interrupt transmission of infection

2014 Mapping results Uige, Zaire and Huambo

In years 1 and 2 of the END Fund grant, disease mapping for soil transmitted helminths (STH) and Schistosomiasis was planned and conducted in Uige, Zaire and Huambo provinces. The mapping was led by

an external consultant, Dr. Jose Sousa-Figueiredo using an integrated schools based model. Lymphatic Filariasis mapping had been planned in the three provinces but was disallowed by the National NTD programme.

The detailed mapping results per municipality are available through the reports from Dr Jose C. Sousa-Figueiredo (LSTM), published in 2014. The table below summarises of the average disease distribution per province, comparing with WHO estimates from 2005.

Table 2: SCH and STH mapping results in Huambo, Uíge and Zaire comparing 2005 and 2014 data

	SCH		STH	
	2005	2014	2005	2014
Huambo	High risk, prevalence >30%	Disease distribution moderate and focalized, prevalence 23.4 %	>=20% - <50%	Hookworm 0.1 % Ascaris 11.5 % Trichuriasis 1.0 %.
Uíge	High risk, prevalence >30%	Disease distribution moderate and focalized, prevalence 14.1 %	> 50%	Hookworm 16.8 % Ascaris 49.2 % Trichuriasis 7.9 %.
Zaire	High risk, prevalence >30%	Disease distribution moderate and focalized, prevalence 17.6 %	<50%	Hookworm 4.8 % Ascaris 17.6 % Trichuriasis 3.3 %.

The methodology used in 2014 benefits from increased sampling density allowing for the identification of disease focal points at sub-municipality level. The high quality of the disease mapping, allows the government to better plan chemotherapy strategies at the provincial or municipality level, maximizing efficiency and minimizing drug wastage.

Mapping results show a lower disease burden than expected, compared to the mapping results from 2005. The lower endemicity means that Zaire and some municipalities of Huambo and Uíge fall below the threshold of two MDA rounds per year according to WHO recommendations. Being the most up to date mapping, we have used our 2014 results to inform the MDA strategy for this document. MDA plan for 2015: ALB one round in Zaire and 2 municipalities of Huambo, 2 rounds in Uíge, PZQ : 1 round in 1 municipality of Uíge (see MDA treatment schedule ALB and PZQ 2015 - 2017).

The variations between the 2005 and the 2014 mapping results for the provinces Huambo, Uíge and Zaire, lend weight to the argument for updated SCH/STH mapping in the other 15 provinces of Angola prior to the planning of intervention strategies. The MoH is planning the countrywide mapping of NTDs using the WHO protocol for coordinated mapping of SCH, STH, LF and ONCHO in some previously unmapped areas.

Different to the WHO suggested protocol for coordinated mapping of NTDs, mapping of lymphatic filariasis (LF) has not been included in the mapping survey 2014 in the provinces Huambo, Uíge and Zaire. Prevalence of LF requires development of intervention strategies that will influence the intervention strategies against STH.

2015 NTD Mapping

At the time of writing (20th March 2015) WHO-AFRO is supporting Government of Angola to complete country-wide coordinated NTD mapping (SCH/STH/LF) using the Coordinated Mapping Protocol. The mapping surveys will provide accurate and updated information of the NTD disease burden. The mapping is planned to cover the remaining 15 provinces commencing in June 2015, all mapping activities must be complete by the end of 2015. MENTOR is in discussions with the National NTD programme to understand if additional support for LF mapping in Uige, Zaire and Huambo is required to ensure that all provinces and all diseases can be mapped in the country.

Additionally MENTOR is in touch with the WHO trachoma mapping focal point so as to facilitate the completion of trachoma mapping by Government of Angola.

5. NTD PROGRAMME CAPACITY

NTD Control Programme of the Ministry of Health is currently underfunded and understaffed. In Luanda, the team comprises the National NTD Coordinator (a Medical Doctor) Dr Pedro Van-Dúnem, his deputy (another doctor), an M&E Officer and programme assistant. The National NTD Coordinator and deputy currently receive a “top up” of their salaries from END Fund/ MENTOR, paid on a quarterly basis. The M&E Officer and programme assistant also receive funds from MENTOR/ END Fund but as they are not co-funded by MoH, MENTOR are looking into options to legalise their status. It has become clear that the deputy coordinator currently receives no other salary from the Ministry of Health and is therefore in discussions with MENTOR with regards to becoming a full time member of the MENTOR NTD team.

Although the NTD programme office is well equipped with computers and Internet, the National team has no vehicle, nor logistics support. They are dependent on donors for financial support. While working with them, MENTOR has noticed a need for a budgeting and financial capacity building. A draft National Strategy for NTDs exists, and has a budget but is not validated. A timescale for the program implementation is also missing. There are currently no regular coordination meetings involving the NTD stakeholders, neither at national nor provincial level.

In principle all the provinces have a NTD focal point and all the municipal health departments have a staff member appointed as the NTD focal point.

Among the other efforts for NTD control in Angola, the WHO's African Programme of Onchocerciasis Control (APOC) has been supporting community based Ivermectin distribution in 9 provinces, including Uige, funding has just come to an end for this. MENTOR is the only NGO partner working with WHO/APOC and the Angolan Government to support the implementation of the National Onchocerciasis Control programme, currently the partnership is limited to Uige.

The CISA (Centro de Investigação em Saúde, Health Investigation Center) in Caxito is, targeting “schistosomiasis, trypanosomiasis, viral hemorrhagic fevers, filariasis, helminthiasis” and trying to “serve as a catalyst for biomedical research, involving researchers from Angola and from other countries, particularly Portugal”^[1].

The Ministry of Health appears to be increasingly committed to NTDs, with the Director Public Health, Dr Adelaide de Carvalho stating in a recent African NTD conference in Addis Ababa that NTD control and specifically completing NTD mapping in 2015 is a priority for the country. With support from MENTOR, the

[1] <http://www.cisacaxito.org/en/cisa/about/>

National Programme has been able to secure donations for some drugs in 2015 however, the donations remain below the amount required or requested due to Angola's reputation for not reporting drug distributions.

Current drug availability 2015

Praziquantel

3million MacLeod PZQ were obtained by GoA in 2014 plus 3million received from donations via WHO. We assume that no more than 1.35m were distributed to Zaire/ Uige / Huambo. There is a further 3million due to arrive very soon (15th March shipment date). Of which we assume that Bie will receive and distribute 538, 411. Huambo, Uige and Zaire plan to distribute left over PZQ from 2014 distributions, Uige to school enrolled children in the municipalities with co-endemicity with onchocerciasis, Huambo to school aged children across 6 municipalities and in Zaire to the communities with the highest SCH prevalence. Therefore we understand that there is sufficient PZQ in country to cover the planned distributions in this proposal, however Dr Pedro Van Duném makes the final decision as to where the drugs will be allocated.

Albendazole

It is unclear what ALB stock exists in Angola, there appears to be both donated treatments and MacLeods treatments in use. We assume that 1.5 million further donated treatments arrived in January 2015. There are 3.17m treatments due to be distributed in 2015. A Joint Request Form submitted in September 2014 requested a total of 8,223,450 treatments (6,557,231 to be distributed in April, 1,666,219 to be distributed in September). MENTOR is supporting the MoH with the correct and timely submission of Joint Request Forms by Ministry of Health and the Joint Reporting Forms and we have requested that MoH, international partners and WHO keep us abreast of donations and shipments. However, they are not obliged to share this information with implementing partners such as ourselves and in reality this information is rarely forthcoming. However, we understand that there is sufficient ALB in country to fulfil the planned MDAs in this proposal and that the proposed activities align with the priorities of the Government of Angola therefore we are confident that ALB can be allocated to these activities.

Table 3: Distribution plan for ALB and PZQ 2015 (Dr Pedro Van-Dúnem)

ALB	Province	Enrolled school children (=#tablets!)
	Zaire	177.037
	Uige	444.811
	Huambo	724.003
	Bie	538.411
	Cabinda	198.837
	Luanda	1.125.453
	Benguela	79.107
	Kuando Kub	217.146
	Malange	340.565
	Cuanza Sul	297.904
PZQ	Cuanza Norte	351,298
	Namibe	227,213
	Bengo	207,175
	Bie	1,287,453
	Cabinda	430,793

Ivermectin

4,322,000 Mectizan tablets are currently being processed for shipment for distribution in Angola in 2015. However, there are tax issues (a requirement for a waiver of import levy) related to the IVM donation in 2014, which is expected to delay their entry into Angola. The proposed distribution plan will see 351,936 treatments being allocated to Kuando Kubango with a further 186,929 allocated to Uige however, this part of the strategy is unconfirmed as we cannot guarantee that there is stock of IVM currently in country or that IVM will be arriving in country this year due to the unpaid tax issue.

Table 4: Revised Mectizan Approved for MDA for 2015 (23.03.2015)

Province	Oncho only		Oncho/ LF		LF only		Tablets required	Tablets to ship
	Treatments approved	# Tablets needed	Treatments approved	# Tablets needed	Treatments approved	# Tablets needed		
Bengo	24,917	69,768					69,768	70,000
Huila	180,000	504,000					504,000	504,000
Kuando Kubango	21,319	59,693	220,852	618,386	109,765	307,342	985,421	985,500
Kwanza Norte	56,750	158,900					158,900	159,000
Lunda Norte	212,025	593,670					593,670	594,000
Lunda Sul	199,441	558,435					558,435	558,500
Moxico	331,232	927,450					927,450	927,500
Uige	186,929	523,401					523,401	523,500
Total	1,212,613	3,395,317	220,852	618,386	109,765	307,342	4,321,045	4,322,000

MENTOR current and planned capacity

Having spent over a decade in Angola, MENTOR maintains a team of trained and experienced case management and operational personnel in country who work alongside approximately 75 national staff, some of whom have been with the organization for a decade. However, finding qualified and experienced Portuguese speaking high level staff who are willing to stay long term is a challenge, not helped by a complicated and drawn out visa process. Currently the MENTOR NTD programme is understaffed. An experienced Country Director and Finance and Admin manager are now in place with two provincial coordinators and WASHE coordinator. Contracts have recently been signed with one further Provincial Coordinator and the Luanda based Technical Advisor role. The M&E Coordinator role is under offer. In an effort to attract and maintain competent staff MENTOR is actively seeking to recruit Angolan staff and are otherwise maintaining a database of strong candidates should gaps arise in future.

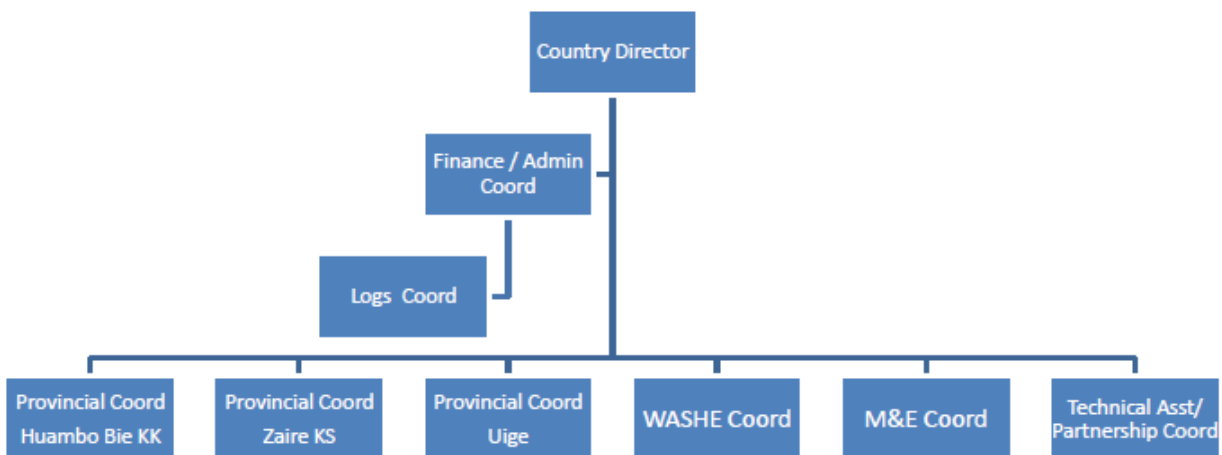
Once the new Provincial Coordinators are in place, one of them will be selected to be National NTD coordinator. The Provincial Coordinators will play a pivotal role in supporting DPSs to request drugs from central level, support planning, training, logistics, data collection and reporting from MDAs. As Uige has the biggest activity level, it will have a dedicated Provincial Coordinator. The Zaire Provincial Coordinator will also support the new programme in Kwanza Sul, while the Huambo Provincial Coordinator will support activities additionally in Bie and Kuando Kubango. Observations from the current LLIN campaign which is distributing province by province is showing that the organization in charge is having difficulty making and maintaining relationships in several Provinces at once as DPSs expect representatives to be present at all relevant meetings, this is in turn causing

coordination and implementation issues. In view of this MENTOR are keen to ensure that Provincial Coordinators are not trying to manage operations in too many Provinces at once.

The Luanda based Technical Assistant/ Partnership Coordinator will be responsible for representing MENTOR at the central level, maintaining relationships whilst also supporting Dr Pedro and his team in requesting and reporting drug allocations from donors. He will work to support information gathering on drug stocks and supplies whilst supporting MoH and Provinces currently not directly supported by MENTOR to distribute ALB and PZQ. Further the Liaison Coordinator will collaborate with the Health and Education authorities to ensure establishment of the national policies regarding the capacity building of health staff, the inclusion of teaching of hygiene in the school curriculum, the setting of the framework for the WASHED related interventions, The Liaison Coordinator will be responsible for the daily collaboration with WHO, UNICEF and all NTD stakeholders.

MENTOR will also seek to employ on a short term basis a Logistics Training Consultant to develop the current Angolan logistics staff, specifically the Senior Logistics Coordinator. This individual has been identified as having strong potential to fulfill the expat level Logistics Coordinator role however, lacks some key specific technical skills. Having researched options for him to be trained in Angola it seems that employing a consultant to directly support his training into his role would be the most expedient option.

Chart 1: Proposed MENTOR Angola NTD coordination team



Specifically, the NTD programme coordination staff will consist of:

- 50% of the salaries of the Country Director and Finance and admin Coordinator will also be paid under this programme (Expat staff)
- 3 Provincial Coordinators of which one will be appointed National NTD coordinator (still undecided) (2 expat, 1 National Staff)
- 1 Technical Assistant/ Partnership Coordinator to the National NTD programme (Expat staff)
- 1 WASHE Programme Coordinator (Expat staff)
- 1 Monitoring and Evaluation Coordinator (Expat staff)
- 1 Senior Logistics coordinator (National Staff)

6. PROGRAMME STRATEGY AND APPROACH

IMPLEMENTATION PLAN (April 2015 – March 2016)

Goal: To assist the MoH in achieving a significant reduction in the burden of neglected tropical disease infections in high burden areas of Angola

The aspiration of the END Fund NTD programme is to achieve an effective and competent operational model with MoH and other partners that is be scalable and expandable over the short and longer term.

Two rounds of school based MDA have been completed in the first two years of the grant, one in October/ November 2013 and another in November 2014 in Uige, Zaire and Huambo provinces as well as comprehensive disease mapping of STH and SCH. The first initial round of MDAs was on a smaller scale to start off with, but allowed both MENTOR and the ministries of Health and Education to gain experience in implementation of the campaigns, from the national level coordination and training of teachers, to administration of the drugs themselves. Subsequent MDA were delayed by a lack of available drugs in country and of official national strategy. The second round of MDA was able to reach 75%, 73% and 87% treatment coverage of school aged children in Huambo, Uige and Zaire provinces respectively.

Applying community based LF treatment strategies has been part of the initial END Fund proposal, and reaches out to treat non-enrolled school age children through community based structures, however the strategy has not been implemented so far.

In Uige the CDTI structure for onchocerciasis treatments exists and will serve to treat the non-enrolled children in those communities, the non-enrolled children will be treated with ALB co-distributed with IVM (as treatment against onchocerciasis). It is an opportunity for MENTOR to include the IVM treatments as the same intervention structures will serve to deliver the ALB treatments.

LF treatments will be delivered only in Kuando Kubango. LF mapping has been done in Huambo, Bie, Kuando Kubango in 2011, however Mectizan Donation Programme has only approved donation of IVM for Uige and Kuando Kubango, and not for Huambo and Bie because community based structures do not exist in those provinces.

MDAs will quickly reduce NTD prevalence in the human hosts of the diseases, but they all have life cycles involving the outside environment or vectors. Effectiveness of any disease control program can be increased by targeting the source or breaking the transmission cycles – adding prevention as well as a cure.

Basic water and sanitation hygiene education (WASHE) interventions have an effect on many of the different NTDs : Hand washing and clean water reduce infection with soil transmitted helminths and other bacterial and viral infections, and good sanitation and water hygiene practices can reduce the presence of vectors such as flies and mosquitoes, and waterborne diseases. Linking the mass drug administration with education and other WASHE related prevention strategies to reduce re-infection can contribute to these diseases becoming

controllable. To this end, MENTOR will implement a package of information and education on WASHE for schools to support the prevention of re-infection by encouraging regular and thorough hand washing.

In Year 3 support will focus the following interventions:

1. Reinforcement of the coordination of all NTD interventions in three provinces.
2. Expansion of MDA activities to a further three provinces
3. Mass-Drug Administration to school enrolled children in target provinces with ALB and PZQ
4. Mass Drug Administration to communities identified as at risk of LF and Oncho in Uige and Kuando Kubango
5. MDA of ALB to pre-school aged children during community drug distribution in Uige and Kuando Kubango
6. Training of teachers and health workers in WASHE and the requirement for hand washing in Uige , Huambo and Zaire
7. Supply of WASHE hardware to schools in three provinces
8. Health facility support visits to reinforce capacity to diagnose, treat and accurately record all NTDs presenting at clinics (including anti natal clinic) in Uige province.
9. Information, Education and Communication (IEC) in order to educate children and communities on the ways of identifying and preventing NTDs, and on the places where they can find a treatment

During the programme, MENTOR will aim to cover all communities and municipalities of the target provinces, reaching a minimum 75% of the eligible population with Mass Drug Administration (MDA) to ensure that the minimum WHO therapeutic guidelines targets are met, and carrying out hygiene education interventions in all schools.

Uige

In response to the mapping data, Uige will receive a more focused programme to reflect the higher disease burden in the province. Uige, uniquely will receive two rounds of ALB MDA (one round will distribute left over PZQ in 5 municipalities) as well as routine health facility visits. Health facility visits have been scaled back in other provinces to facilitate the expansion of the programme to other provinces. Additionally, Uige will support the CDTI network in five municipalities (Bungo, Puri, Negege, Quitexe, Songo) to distribute Oncho treatment to all ages and ALB to pre-school aged children. Provisionally this CDTI distribution is planned for August 2015.

Zaire

Zaire is a small province with only 6 municipalities with a comparatively well-functioning health and education administration. In year 3 it will carry out one round of ALB to all school enrolled children. Remaining PZQ from the November 2014 MDA will be concurrently distributed to higher burden areas, the number of treatments has been estimated to be 50,000.

Huambo

Huambo are planning to conduct ALB MDA in two municipalities (Huambo and Lononjo) and there are provisional plans in place to distribute the remaining PZQ from the November 2014 MDA in 6 municipalities.

Bie

Bie will be supported to conduct a single round of combined ALB and PZQ MDA to all school enrolled children. Bie Province is the Government of Angola's priority province for all health inputs because of its poor health indicators.

Kuando Kubango

Kuando Kubango is a priority province for the Government of Angola and MENTOR have been strongly recommended by MoH to conduct activities. A single round of ALB MDA to all school enrolled children is

expected to be conducted, community based MDA to all ages will be conducted in six municipalities as well as ALB administration to pre-school aged children. Provisionally this CDTI distribution of IVM upon which ALB will be added as treatment against LF and STH is planned for October 2015. The CDTI network in KK is relatively strong and well established, however the APOC funding for the IVM distribution was not approved for 2015, and thus the MoH is keen for MENTOR to work with and support the programme to assure the vital continuation of treatment campaigns and avoid interruption of the treatment cycle. Interruption of the IVM treatment cycle would mean that the efforts made during the past years would be lost and this would open the door for recrudescence of the diseases LF and ONCHO.

Kwanza Sul

Kwanza Sul province will be supported to conduct a single round of ALB MDA to school enrolled children. It is again a priority province for support but also, being more northern, can be expected to have a higher NTD burden than Huambo, whilst it also has a relatively high beneficiary population. Its logistical links to both Huambo and Luanda make it a sensible option for trialing the “lighter touch” implementation strategy in year 3.

In Year 4, the same number of beneficiaries are planned to be reached as in year 3. The programme will be maintained in Uige, Zaire and Huambo and currently we plan to continue to support activities in Bie, Kuando Kubango and Kwanza Sul but we will evaluate needs, the programme roll out in Year 3 and the National NTD programme priorities before confirming which provinces will receive direct MENTOR support in year 4.

Table 5: Planned beneficiaries to be reached in Yr3 by age-group

	<u>Pre-SAC</u>			<u>SAC</u>			<u>Adults</u>		
	Total	Target	Treatments	Total	Target	Treatments	Total	Target	Treatments
Bie				538,411	403,808	ALB+PZQ			
Huambo				524,477	445,805	ALB+PZQ			
Kuando Kubango	76,840	65,314	ALB	143,436	107,577	ALB	246,316	209,368	IVM+ALB
Kwanza Sul				297,904	223,428				
Uige	45779	38912	ALB	334,227	284,093		186,929	140,197	IVM+ALB
Zaire				100,563	85,479	ALB+PZQ			
Total Authorised Beneficiaries	122619	104226		1,939,018	1,550,190		433,245	349,565	

Table 6: Total confirmed target beneficiaries and treatments to be reached in Yr3

Target number of unique beneficiaries	2,003,981
Target number of unique school aged children	1,550,190
Target number of treatments	1,925,391
Target number of treatments to school aged children	1,833,427

Table 7: Budgeted but unconfirmed additional beneficiaries to be reached in Yr3 by age-group

	Pre-			SAC			Adults		
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	SAC								
	Total	Target	Treatments	Total	Target	Treatments	Total	Target	Treatments
Kuando Kubango							246,316	209,368	IVM+ALB
Uige							186,929	140,197	IVM+ALB
Total extra beneficiaries							433,245	349,565	

Programme activities:

**Objective 1: National MOH NTD Competency:
Ministry of Health has sustainable integrated NTD programme across 3 provinces and capacity to scale to national coverage**

Output #1: NTD programme activities coordinated and planned at both national and provincial levels

Activity 1: Provide planning, coordination and implementation support to NTD Program activities at the national and provincial levels

As mentioned above, the National NTD Control programme is under-funded and under staffed. The national strategy is now complete but is not validated and there are no regular coordination meetings and few NTD stakeholders, at national or provincial levels. In order to provide useful support to the national programme MENTOR has a role funded to provide daily technical support to the Coordinator and his team. This role had been in place in late 2014 and was much appreciated by the Coordinator and other stakeholders and is recognized as being essential to facilitating future drug donations and MDA coordination and implementation. A contract has been signed with a new Technical Advisor and we anticipate his arrival by June 2015.

Additionally MENTOR provides “top ups” for the salaries of the Coordinator and his deputy as well as providing salary support to the M&E assistant and administrative assistant. Without this financial support it is highly unlikely that the deputy, M&E assistant or administrative assistant would receive a salary.

MENTOR is supporting coordination at the provincial level, by instigating a regular monthly coordination meeting in every province as of January 2014 in Uige, Zaire and Huambo. Wherever possible the meetings will be chaired by provincial NTD programme staff, but MENTOR’s coordination and support for these meetings will continue until they become well established in each province. In Bie, Kuando Kubango and Kwanza Sul, MENTOR will encourage provincial and municipal level NTD focal points to meet regularly and when possible be present at these meetings.

Every year, MENTOR will support the DPS provincial teams to host a one day stake holder meeting. During these meetings, relevant ministry representatives (education, sanitation, municipal administrators etc) and UN representatives will be invited to join with DPS and MENTOR in local level planning of NTD activities and reflection of lessons learnt from previous activities. An NTD representative from central MoH in Luanda will be invited to attend to ensure good co-ordination, endorsement and support at all levels of the MoH. These stakeholder meetings will be the forum to agree and set detailed MDA targets for the coming year, and programme progress monitoring indicators that will then be used through the programme.

Output #2: Improved technical and logistical capacity of the provincial and national NTD teams of the Ministry of Health

Activity 2.1: Provide Technical Support for National and Provincial levels to deliver workplans and to support the implementation of the programme

MENTOR's Provincial Coordinators will work closely with their counterparts at DPS to deliver workplans and support their implementation during monthly meetings. In Uige, Huambo and Zaire, these will happen every month, in Kuando Kubango, Kwanza Sul and Bie these will occur during the 4 month period the respective Provincial Coordinator is based in the province.

Activity 2.2: Provide logistical support to provincial and national NTD teams.

MENTOR will work with DPSs to agree on the logistics support required and available to support them to carry out their coordination and supervision work. A lack of vehicles is universally recognized as a barrier to supervisors being able to do their work effectively, so MENTOR will attempt to ease this issue for the NTD activities. To do this MENTOR and DPS will develop a needs assessment on logistics for each Province and define a logistical support plan by quarter to ensure that vehicles can be allocated pragmatically.

Output #3: Ministry of Health has capacity for NTD mapping in Uige, Huambo, Zaire Provinces

Activity 3.1: To organize regular meetings to accurately analyse the NTD burden data

During the regular planning meetings, time will be made for data analysis to encourage decision making based on data. MENTOR will also support the introduction of new and or improved data collection and analysis tools as required.

Activity 3.2: Support NTD data collection logistically

Passive NTD case data collection had been planned initially however it is now clear that diagnosis and recording of cases at health facilities is not proficient enough for this information to be useful.

Experience from previous MDAs has shown that post campaign data collection can be a challenge and can lead to data loss and late reporting. MENTOR will work with DPSs to facilitate data collection and supervision from municipal health teams and set up regular days of the month when data can be collected so that it can be analysed in time for monthly meetings.

Output #4: Procurement & supply of NTDs drugs for schools, communities and health facilities is ensured

Activity 4.1: Organize specific meetings targeting NTD drug supply for MDA and health facilities

Regular meetings involving the NTD team and Ministry of Education officials will be established to ensure that there are sufficient drugs available to meet the needs both for MDAs and at health facilities. This will also ensure that any drugs stored in warehouses are distributed prior to their expiration date.

MENTOR will also provide logistical assistance, where needed, to MoH.

There will also be close monitoring of progress in procurement and supply of WHO donations for MDAs, as part of MENTOR's planning for the MDAs.

Objective 2: Provincial NTD Competency

Primary Health Care System (PHC) in provinces has competency and delivers systematic NTD control

Output#1: First line health workers are trained to effectively diagnose, prevent, manage and report NTD cases

Activity 1: Organize training sessions of health workers on the prevention, management of NTD and WASHE

Integrated health worker trainings will be developed and delivered to frontline health staff and teachers in Uige, Huambo and Zaire reaching two health workers from each facility where the WASHE programme is implemented. MENTOR already has a package of training materials covering transmission, prevention, diagnosis & treatment and recording & reporting of the main problem NTDs, which will be adapted to meet the needs of this broader spectrum of trainees. Dates for trainings have been planned with NTD focal points and will be shared at provincial and municipal levels well in advance. All health workers targeted will have received training in Zaire by the end of year 3. By the end of year 4 at least 2 health workers from each health facility will have received training in Uige and Huambo.

All official trainings have to be delivered by nationally recognized official trainers in Angola, MENTOR staff will have an organization and facilitation role and will write up training reports.

Output #2: Health workers in primary health care facilities have access to NTD case management technical guidelines

Activity 1: Produce NTD technical guidelines and disseminate to health facilities

MENTOR's team will be assisting the MoH in developing NTD guidelines and policies for all health authorities and health staff in Angola. MENTOR will support the MoH in the production and distribution of standardized health worker job aids for NTD diagnosis and case management. These materials will be laminated and two copies will be distributed to each health facility in Uige, Zaire and Huambo.

Output #3: The capacity of provincial NTD Programme services to accurately analyze NTD disease data is improved in Uige, Huambo and Zaire Provinces

Activity 1:

Perform joint technical supervisions with Provincial NTD coordinators to municipal health departments on NTD data collection and analysis

MENTOR has established a data management system to hold and facilitate the analysis of MDA data collected during the programme. Once in place, this will be further developed and managed by the M&E coordinator who will also be responsible for the training and technical line management of provincial data managers.

MENTOR will work with the National level NTD programme to develop guidelines for supervisions of municipal health teams, however supervisions will only be carried out in Uige Province. These will take place alongside DSPs supervisors on a monthly basis. NTD technical coaching visits to health facilities will be timetabled and linked directly to existing MoH/ MENTOR. The visits will allow consolidation of the material covered in the health worker trainings and coaching in applying the theory to practice.

In other provinces supervisions and technical coaching will only take place when a team are visiting a school for the WASHE programme or post MDA data collection.

Output #4 Health workers in all health facilities have access to IEC technical guidelines and education material

MENTOR will support the MoH in their development of NTD IEC messages, posters, and leaflets to be used in health facility waiting areas to raise the awareness of all people seeking healthcare services at programme supported facilities. These will focus on increasing peoples understanding about helminth and schistosomiasis transmission, prevention, disease symptoms and early / correct treatment seeking.

Output #5: MoH NTD case management and materials supply chain to in health facilities is reinforced

The WASHE programme will engage with schools and health facilities working to reach all schools in Uige, Huambo and Zaire with an education programme and hardware inputs to facilitate hand-washing in children. MENTOR will work with National level authorities to elaborate WASHE guidelines for education and supervision of hardware supplied to schools. MENTOR will work with the MoE and DPS to train representatives in the use of supervision guides and to plan supervision visits. Where possible combined supervision visits will occur with health facilities being visits at the same time as schools. Routine monthly health facility visits are planned for Uige only.

Objective 3: Curative effect - The intensity of infection of schistosomiasis, lymphatic filariasis and intestinal worms (and potentially Onchocerciasis) in children, women and men reduced significantly from baseline.

Output #1 Perform mapping studies for STH and Schistosomiasis in schools

Completed in years 1 and 2

Output #2 Perform mapping studies for lymphatic filariasis in communities

This was not included in the protocol when SCH and STH were mapped in years 1 /2. This is now not planned to be completed, as of March 15th 2015 we were informed that the rest of the 15 provinces are due to be mapped in 2015 which leaves LF mapping in Uige, Huambo and Zaire as a gap.

Output #3 Conduct MDA in schools (includes Outputs 3.1.3 & 3.2.1)

MENTOR has been working closely with the National level NTD programme and DPSs to establish a timetable for MDAs in the provinces. It is expected that school based MDAs will happen between May and September 2015, with community based campaigns planned for August.

Huambo plan to conduct ALB MDA in two municipalities and distribute PZQ left over from the previous MDA in November 2014 in 6 municipalities.

Zaire plan to conduct ALB MDA in all 6 municipalities

Uige plan 2 rounds of ALB in all municipalities, one combined with PZQ in 5 municipalities.

Bie, will be supported to implement one round of ALB + PZQ MDA to school enrolled children

Kuando Kubango and Kwanza Sul will be supported to implement one round of ALB MDA to school enrolled children. If PZQ is available it will be added to the MDA.

Obtaining accurate data on the number of schools and enrolled children in the new provinces is a challenge. MENTOR will work with the DPSs in all provinces to facilitate the drafting of distribution plans, timely data collection and MDA implementation.

Output #4 Conduct MDA in communities (includes Outputs 3.1.4-3.1.7 & 3.2.2-3.2.4 & 3.3.1-3.3.2)

MENTOR have been identified as the only NGO partner working in NTDs who can support the CDTI networks to deliver MDAs for LF and Oncho to all ages at community level in line with WHO recommendations.

Drugs for LF and Oncho control have been allocated to specific municipalities in Uige (5) and Kuando Kubango (6). MENTOR has already started working with the DPS in Uige to commence the planning for community MDA in Uige. In Kuando Kubango, MENTOR will work with the DPS to ensure the role out of activities in sufficient time to allow adequate planning, data will be collected with regard to the size of the target population and communities involved. A distribution plan will be drafted to support the dispersement of drugs and data collection tools to community drug distributors. MENTOR will then support the logistics and implementation of trainings and supervision of the MDA and ultimately support data collection, analysis and reporting.

Output #5 Provide basic NTD training to Provincial and municipal coordinators and education area coordinators

146 municipal coordinators and education area coordinators are planned to be trained (2 per municipality). MENTOR will plan with provincial DPS and MoE to identify and invite coordinators to centralized trainings that will be facilitated by DPS, MoE and MENTOR facilitators. MENTOR will support the logistics of the trainings by providing training materials and catering.

Output #6 Provide basic NTD training to teachers and school directors of MDA supported schools

Trainings of school directors will take place as part of the MDA implementation process. MENTOR will work with DPS and MoE provincial and municipal education area coordinators to identify and contact all school directors and ensure they attend training that will be delivered at municipal level. In Uige, Huambo and Zaire alone this training is planned to reach 6876 people. The number of people to be trained in Bie, Kuando Kubango and Kwanza Sul is yet to be confirmed.

Output #7 Provide basic NTD training to Community Drug Distributors

Community drug distributions are required for specific municipalities in Uige and Kuando Kubango provinces. MENTOR will work with the NTD focal points from the DPS in these municipalities to quantify the number of community distributors required to reach the target communities. In Uige the figure is 797. Each community distributor will be identified by their community, registered and will receive training in the administration of LF and Oncho drugs (ALB and/or IVM) and data collection.

Objective 4: WASHE integrated into school curriculum and hand washing with soap increased significantly from baseline

Table 6: Planned schools to be reached through the WASHE programme

Province	Total number schools	yr3 (1 teacher per school trained, IEC and hygiene kits supplied)	yr4 (1 teacher per school trained, IEC and hygiene kits supplied)
Huambo	1089	610	479
Uige	1083	489	594
Zaire	258	258	0
Total	2430	1357	1073

Outcome #1: Reduce the risk of infection and re-infection of soil-transmitted Helminths, Schistosomiasis and Lymphatic filariasis amongst school children in Huambo, Zaire & Uige.

Output 1: Understanding of existing hygiene and sanitation knowledge and practices amongst teachers and children acquired

Activity1: Conduct a KAP study on NTDs transmission and WASH practices

This activity has been completed in Yr 2. The report will be submitted on 30th April 2015.

Output 2: Assessment of a sample of 10 schools in each province for existing WASH facilities

Activity 2: Assess the condition and current provision of WASH facilities in schools in the operational area

This activity was completed in Yr2.

Output 3: Children in schools are sensitized to the main NTD transmission modes and the risks associated with poor hygiene and sanitation practices

Activity 3: Undertake hygiene information, education and communication interventions in schools targeting priority NTDs

Using data from the KAP survey, and UNICEF's "WASH in Schools" programme, a schools WASHE strategy will be developed and implemented with the aim of encouraging hand washing in children. As the inputs (IEC, Hygiene Kits, training) for the strategy have already been confirmed, the strategy document will focus on how the inputs can be distributed equitably so that schools receive the tools most necessary for them. This is not expected to affect the current workplan.

Training of teachers (combined with health workers operating in the same areas) will commence early in year 3 with the aim of reaching 1 teacher from 1,357 schools during the year. All schools and teachers in Zaire province (258) will be reached in year 3, with schools and teachers from 50% of municipalities reached in year 3 in Huambo and Uige provinces. 1,076 teachers and schools are planned to be reached in year 4 in the rest of the municipalities of Huambo and Uige.

IEC materials will be distributed to teachers during the trainings. This will include training booklets, posters for schools and health facilities (3 per location) and a set of animated drawings to be used as education material in schools.

Output 4: Schools are assisted to improve their hygiene environment with basic hygiene and sanitation 'kits'.

Activity 4: Distribute, hygiene 'kits' to all schools annually when IEC interventions are carried out

In order to support hand-washing in schools and to reinforce messaging, a "hygiene kit" will be supplied to each school. This will enable school staff and children to either rehabilitate or establish a handwashing station at the school using low cost hardware.

These kits will be procured, packed and distributed after trainings. 1,357 will be distributed in year 3, 1,073 will be distributed in year 4, distribution plans will be developed alongside DPS and MoE partners.

Table 7: Anticipated contents of hygiene kits per school

N°	Description	Quant.
1	rake	1

2	spade	1
3	hoe	1
4	20 l canister	1
5	50 l bucket	1
6	jugs	1
7	wheelbarrow	-
8	Soap pack	1

Output 5: The government's supervision, monitoring and follow up of integrated WASHE program is strengthened

Activity 5: Provide information from all WASHE assessment reports to provincial Ministry of Education officials

Supervision and assessment of the WASHE programme will be planned with DPS and MoE. Schools and health facilities supervision visits will be coordinated with the intention of observing the roll out of WASHE trainings and the use of the IEC and hygiene kits.

All results of the assessment, monitoring and follow-up will be shared with the Ministry of Education, the Basic Sanitation Department (Direção do Saneamento Básico) and the administrators of the Municipalities on a quarterly basis.

7. PERFORMANCE, MONITORING AND EVALUATION PLAN

Unfortunately existing data on NTDs is weak and unreliable. In addition to a large-scale randomized community level mapping surveillance exercise, MENTOR intends to roll out a passive surveillance program using data collected at health facility level.

In particular, MENTOR staff and MoH officers, when conducting field level supervisions to health facilities, will collect data from register books and drug supplies to calculate any changes in NTDs in the area. It is hoped that with the roll out of the preventive therapy program in the school system that there will be a noticeable decrease in patients presenting at the health facility.

In terms of tracking the school-based MDA campaign, MENTOR staff in conjunction with MoH and MoE officials will keep detailed records of drug administration in each school and community, allowing for firm details on target beneficiaries reached.

According to WHO, collecting and recording information about the numbers of people who received treatment during PC is the most important aspect of monitoring drug coverage. This information should be collected at the places where people receive treatment, i.e. the peripheral level (community hall, health centre, school, village or some other site designated by the programme or the community). For best practice and greatest accuracy, the information to be recorded should be collected on the day the treatment is given, and at a minimum should include the age-group and sex of each person (adult or child; male or female). The form on which this information is recorded should show the round of PC, the name of the drug(s) for the treatment, the place and date of treatment, and the identity of the person completing the form.²

For the MOH personnel training and capacity building, the central activity to MENTOR monitoring and evaluation systems are routine joint-supervision visits by MENTOR supervisors and municipal/provincial staff. This activity allows for a checklist of information to be gathered, an assessment to be performed, data to be gathered, and improvements made.. Specific indicators which will be revealed through supervision visits

² WHO: Monitoring drug coverage for preventive chemotherapy, 2010

include: skills retention, supply management data, and health professional knowledge retention- via questionnaires.

The MENTOR Initiative will also continue to develop its close support to the Provincial and District Health Departments and work with their teams on the planning and management of innovative monitoring and evaluation activities for various NTD control activities, such as the commodities supply chain. In particular, as MENTOR currently maintains a supply chain supervisor for the public sector malaria program, MENTOR will ensure that NTD drugs are also included in reinforcing supply chain planning and delivery, cross checking drug requests and supply disbursement lists.

8. INSTITUTIONAL CAPACITY

The MENTOR Initiative was established in 2002 and is a not-for-profit, charitable, designed to strengthen the capacity of Roll Back Malaria (RBM) country partnerships, MoH and national malaria control teams, international NGOs, UN and FBOs. Together with partners MENTOR implements more effective and coordinated action to reduce malaria-related morbidity and mortality.

The MENTOR Initiative works in collaboration with the RBM secretariat in Geneva, UN, INGOs, and IFRC, as well as a network of academic and private partners. The MENTOR team includes international and national specialists for malaria, and vector borne and neglected tropical disease control in more challenging operational settings and contexts including humanitarian crises and post-conflict/recovery settings. The range of expertise provided by the MENTOR team includes epidemiology, emergency field assessment and planning, disease, surveillance, large scale indoor residual spraying, Larviciding, fly control and use of treated materials (LLINs, ITPS and DL) for disease prevention, diagnosis and investigation, case management, community mobilization and applied operational research and evaluation. This team has developed a strong, action-based, and clearly measurable strategy to build technical and operational capacity of partners in order to scale up effective disease control among vulnerable populations.

The MENTOR Initiative has significant experience in the surveillance, prevention and case management of malaria, dengue fever, lymphatic filariasis and other neglected tropical diseases. Through the delivery of its ongoing 5-day international training courses on malaria control in humanitarian crises, and its new 5 day course on Vector borne disease control in humanitarian crisis, The MENTOR Initiative has trained well over 1100 international field team managers/senior team members from more than 100 INGOs, FBOs, UN agencies and MoH Teams (including MoH teams from Angola, Liberia, Sierra Leone, Central African Republic, Cameroon, Chad, Kenya, Somalia, Sudan, South Sudan, Tanzania, Malawi, Egypt, UAE, South Africa, Thailand, Burma, Philippines, Afghanistan, Indonesia and Yemen). Capacity building has focused on how to design appropriate malaria and VBD control activities and improve existing health systems in order to provide best practice case management and control in settings with limited infrastructure.

The MENTOR Initiative works with national MoH and National Malaria Control Programmes (NMCPs) in order to assist in the design of National Malaria Control Strategies and National VBD Control Strategies, and to reinforce the implementation of these strategies. These integrated programmes include coordination of control activities in specified geographic regions, support of logistic supply chain of case management commodities from the national to the health facility level, health worker case management and laboratory technician diagnostic training, supportive supervisions with integrated on-the-job coaching of health workers and laboratory technicians, reinforcement of pharmaceutical management and data reporting, community mobilization and education regarding disease control and improved health seeking behavior, Additionally, MENTOR incorporates

routine monitoring and evaluation into all programming to ensure good quality standards are followed in all operations.

The MENTOR Initiative is a well-respected implementing partner of PMI, USAID GB, USAID OFDA and USDA BPRM, UN Foundation, UNICEF, WHO, UNHCR, UN OCHA, EU ECHO, Global Geneva, other donors. In 2006 the emergency malaria and dengue fever control work of The MENTOR Initiative in the tsunami was recognized and honored by Her Majesty the Queen of England, at a reception in Buckingham Palace.

The MENTOR Initiative has the financial capacity and accounting systems that are fully compliant with USAID requirements and are capable of managing the resources and financial requirements of this project as a sub contractor.

The MENTOR Initiative has since 2005 been strategically and steadily expanding its mandate and organizational capacity to meet a wide range of neglected tropical and vector borne diseases which until now have often existed in the shadow of malaria. With funding for Phase 1 from the END Fund, MENTOR will work directly with the Angolan Ministry of Health (MoH) to roll out mass drug administration and community based campaigns targeting NTDs. Utilizing existing MoH stocks of NTD drugs, combined with the full existing, and slightly expanded MENTOR teams and logistic supplies in both Uige and Zaire provinces, MENTOR is poised to ensure that Phase 1 of the NTD campaign achieves significant progress for little cost, and that it builds and proves a safe, effective and scalable capacity and approach that can be rolled out where needed in subsequent phases of the End Fund.

Risk Analysis (no more than 250 words)

Angola has been calm in the last years. After the 2012 election that kept the President in power for 5 more years, political tensions calmed down. However, there are still some sporadic confrontations between the governmental party and UNITA supporters.

The question of the succession of the President is a potential source of insecurity. He is 79 year-old, and has no clearly identified successor.

Roads in Angola are an important risk to personnel. The government and WHO were reporting 3112 Reported road traffic fatalities in 2010³, but deaths are systematically under-reported. Angola is ranked 16th worst country in the world, with an alleged death rate of 36.2 deaths for 100 000 inhabitants⁴. An article by the Guardian estimates that the real toll is of 6425 deaths (2011).

As of operational risks, the main risk that the programme can face is a gap in drug supply. In order to prevent it, MENTOR is working with the National Programme and WHO Angola on the order of NTD medicines for 2015, and will continue to do so every year.

Coordination and adherence issues may arise from the MOH and MOE partners, and also from the communities. In order to limit or avoid these issues, MENTOR will work collaboratively with authorities and community leaders.

Budget justification (no more than 2000 words)

Please see budget narrative document

Mentor Organisation Security Precautions (no more than 500 words)

MENTOR mission in Angola has a security plan updated. Plan shall be discussed and edited regularly (at least every 6 months and anytime if necessity is felt) to add chapters or correct any element not fitting with actual conditions.

³ http://www.who.int/violence_injury_prevention/road_safety_status/2013/country_profiles/angola.pdf

⁴ <http://www.worldlifeexpectancy.com/cause-of-death/road-traffic-accidents/by-country/>

The tables hereunder are summarizing the rule that are applied in the mission:

Table 1: Security issues, responsibilities and limitations.

Subject	Issue	Responsibility	Limitation
Cars	Must be in proper conditions	Driver, head driver, logistic	Availability of funds, Trip preparation time
Travels	Must be prepared according to a precise plan	Head of movement	Availability of cars and funds
Car incident	Must be reported by written	Driver, head driver, logistic	
Car accident	Must be reported immediately	Driver, head driver, logistic, CD	
Office	Must be kept clean and in acceptable living conditions	Cleaner, Office clerk, administration	Availability of funds
Office security	Premises shall always be secured and exterior persons movements reported	Guards, Head of guards, administration	
Security water	Must be stored and regularly changed	Guards, head of guards, administration	
Security food	Must be stored and regularly changed	Expatriates, administration	Availability of funds
Emergency Kits	Must be stored and regularly checked	Logistic, administration	Availability of funds
Cars security kits	Must be kept in cars and regularly checked	Driver, head driver, logistic	Availability of funds
Communication credit (Whether normal network, whether satellite or CODAN)	In permanence team shall have sufficient credit to be able to communicate	Personal, logistic, admin	Availability of funds

Table 2: reminder of normal comporment to be ensured on every mission

SITUATION	BEHAVIOR
Weapons	We don't accept
Armed escorts, police/army transportation	We don't use
Curfews, movements declaration	We respect
Operations/driving at night	We avoid
Checkpoints/Police stops	We stop
Mines/devices	We don't touch and We report
Shooting/Shelling	We take cover
Hold ups	We obey orders
Threats	We take seriously
Kidnapping	We try to survive
Criminality	We try to avoid
Driving	We use local drivers
Residences	We choose secure
Prevention	We use common sense

To protect the assets and goods against abuse, MENTOR has a logistics and finance manual establishing checks and balances. Every purchase above 500 USD must be documented and justified by a comparative bid analysis process. All expenses and purchases above the 1000 USD threshold must be co-authorized by the Country Director and the Finance coordinator and/or Programme Coordinator. Parameter Schedules are in place to document signing authority for different staff. The Schedules are regularly updated. .

ⁱ CDC, Water Related Hygiene, Hygiene Related Diseases Trachoma, 28 December 2009. Accessed 7th June 2013
<http://www.cdc.gov/healthywater/hygiene/disease/trachoma.html>

ⁱⁱ WHO, Prevention of blindness and visual impairment, Priority Eye diseases, Tracoma. Accessed 7th June 2013
<http://www.who.int/blindness/causes/priority/en/index2.html>

ⁱⁱⁱ Burton M, Holland M et al Profound and Sustained Reduction in *Chlamydia trachomatis* in The Gambia: A Five-Year Longitudinal Study of Trachoma Endemic Communities PLoS Negl Trop Dis. 2010 October; 4(10): e835. <http://www.ncbi.nlm.nih.gov/pubmed/20957147>