

END OF YEAR REPORT

for

Fondation Eagle



Ref:
FF 0640

world medical fund for children

Registered charity number 1063756 in England & Wales and SC046207 in Scotland

The Project:

- a) The donor is Fondation Eagle.
- b) The project's title is "Support for the WMF Children's Mobile Clinic and fighting malnutrition in the young".
- c) Fondation Eagle reference number is FF 0640 number.
- d) Date of grant accepted was 27th September 2022.
- e) The amount was £47,480.
- f) The number of beneficiaries for the Children's Mobile Clinic medicines is 26,765 the number of beneficiaries for Ready to Use Therapeutic Food is 1,000.
- g) The location is Nkhotakota district and its environs:
- h) Period of Project is from 1st October 2022 to 30th September 2023.
- i) The conversion rate from September 2022 to September 2023 has varied from £1 = 1,099Mk to £1 = 1,367Mk. Taking into account the timescale of when currency transfer we made we are calculating our costs at £1 = 1,150Mk.
- j) Detailed budgets and actual expenditure comparison:

Budget request:

<u>Item</u>	<u>Cost</u>	<u>No. off</u>	<u>total</u>
Mobile Clinic			
Medicine	1.04	25,000	26,000
RUTF	13.5	1,000	13,500
Salary costs	6,680	1	6,680
PPE air freight for 30,000 masks	1,300	1	1,300
		Total	47,480

Actual expenditure:

<u>Mobile Clinic</u>	<u>Cost</u>	<u>in £UK</u>	<u>Balance</u>
Medicine in Mk	29,810,000	25,922	78
RUTF in Mk	14,948,216	12,998	(51)
Transport cost for RUTF in Mk	635,000	552	
Salary costs in Mk	7,680,000	6,678	2
PPE air freight for 30,000 masks in CHF	1,496	1,312	(12)
	Total in £UK	47,463	17

On target with a £51 overspend on RUTF and £12 on air freight, an underspend of £78 on Meds, £2 on salary leaving a balance of £17.

Summary:

The projects ran successfully with all objectives are being achieved. Our Children's Mobile Clinic at Nkhotakota remains the only realistic access to medical care for the village children in the region. One major plus was to have junior hospital doctor Dan Dry with us for 4 months as a volunteer.

Weighing all factors, Malnutrition:

We are always busy treating the wide range of tropical diseases that strike down the young in sub-Saharan Africa, with respiratory tract infections, diarrhoea and malaria being the greatest killers. Although there has been a reduction in child mortality since we began our work in Malawi when one child in five would not live to see their fifth birthday, today the figure for Malawi in general is one child in 23¹ which is still far too high and certainly far worse in the outreach areas where there is little or no access to medical care.

With our mission to reduce child mortality we are now taking a wider view on how we can maximise our effectiveness on the limited funds we have available. In the desperately poor nations, where we work, all of the published data shows that Malnutrition plays a key role in multiplying the death toll wrought on children by the common African killer diseases and it is a challenge we must take on.

To quote *Bhutta et al 2013*

“In the year 2011, 6.9 million children under the age of 5 years died worldwide, one third of them related to increased susceptibility to illnesses due to undernutrition.

The solution we are employing is dispensing RUTF (Ready to Use Therapeutic Food) to the malnourished. It is a cost-effective and simple solution, a micronutrient ready to eat paste made that is energy dense and made with peanuts, sugar, milk powder, vitamins and minerals.

It has helped treat millions of children threatened by severe wasting – the most dangerous form of malnutrition. Globally, 1 in 5 deaths among children under age 5 is attributed to severe wasting, making it one of the top threats to child survival.

RUTF comes in a one-dose foil sachet, that has a shelf life of two years and doesn't require refrigeration, even after opening. It doesn't require preparation and doesn't need to be mixed with water, reducing the risk of children consuming contaminated water. It is safe and easy to use and designed to be eaten straight from the sachet. RUTF has revolutionized the treatment of uncomplicated forms of severe wasting among children by allowing treatment to take place at home rather than in hospitals. And best of all, children like it!”²

Malnutrition in a nation with a high percentage of the population surviving as subsistence farmers, prone to frequent famines through reliance on unpredictable climatic conditions is a constant challenge in the rural areas.

Stunting in under five-year old children is 39% in rural Malawi compared with 25% in urban areas³.

¹ <https://data.unicef.org/country/mwi/>

² <https://www.unicef.org/nutrition/RUTF>

³ <https://www.unicef.org/malawi/media/596/file/Nutrition%20Narrative%20Factsheet%202018.pdf>

The arrival of the RUTF, enough to treat over 1,000 children:



And the children in need...



The decision on whether RUTF should be a permanent element in our fight to reduce child mortality has to depend on assessing its effectiveness. We need to compare it to spending the same amount purely on medicines.

At this early stage we will seek the feedback from our clinicians working in the field as they will have a good feel for the morbidity levels. The opinions of the Traditional Authorities should also be sought as they will be aware of the reaction from the local communities.

Volunteer doctors:

We were delighted to have Dr Dry join us in Malawi; we are looking forward to another hospital doctor, a paediatric Senior Registrar joining us for a six-month stint in early 2024. The U.K. doctors and our Malawi clinicians really enjoy working together and learning from each other.

From Dr Dry

This week marks my final week with WMF and my final week in Malawi, with me due to fly back to the UK on Saturday. The last four months have been my first experience of Africa and my first time practising tropical medicine and I am so pleased I came to work with the WMF, I cannot thank everyone enough for this experience. I shall be truly sad to leave this beautiful country and everyone at WMF has provided me with so much support.

WMF do truly incredible work and provide vital care to a huge number of children who otherwise would likely go completely without. It's hard to put estimates on the number of prevented hospital admissions and lives saved, but I can recall multiple occasions in just these four months when a child was taken to hospital for treatment who would likely have died or suffered significant long-term morbidity and disability if the mobile clinic hadn't attended. In addition to this, when you consider the hundreds of malaria cases, chest infections and GI (Gastrointestinal) infections that are caught and treated early, alongside the health education, the morbidity and mortality prevented is huge.



The organisation provides crucial HIV care to a large number of children in the area, running these clinics has been my first experience of HIV care and I've thoroughly enjoyed them. Not only have I learnt so much, but it's heart-warming to see so many children living with HIV who are happy, healthy and thriving. I've been fortunate to meet two of these children in their own homes and it's clear that without the support from WMF, there would be serious challenges to accessing HIV care, challenges that I doubt they would have the resources to overcome. One of these children expressed wishes to become a doctor in the future, and I hope he is able to follow in

the footsteps of multiple others who have already gone on to success in further education, receiving sponsorship from the charity in their medical and nursing training. Supporting these students is absolutely vital in creating sustainable and long-lasting benefits for the community. This is a truly fantastic organisation making a wide range of positive impacts in the community it supports, it's been a real pleasure to work here. Thank you to everyone who supports this charity.

Dan.

Arrival at the Mobile Clinic:



On arrival at the clinic our team check the weight and MUAC (Mid Upper Arm Circumference) of each child for accurate assessment of whether they are malnourished and for prescribing dosage.

The MUAC is an accurate indicator because it only changes by 1cm for boys and 1.5cm for girls between the age of 12 and 60 months.



Frontline Reports - WMF Malawi

An example of how we now operate on a day-to-day basis; after every clinic our frontline reports carry all the basic data on the clinic and act as an aide-memoire for our clinicians, to make comments and suggestions.

Kucherachera Mobile Clinic 14/11/22:

Malaria tests: 109
Malaria positive tests: 55 (50%)
Hospital admissions/referrals: 1

Top 10 other diagnoses:

Upper Respiratory Tract Infections - 24
Acute Respiratory Infection - 17
Musculoskeletal pain- 10
Worms- 8
Gastroenteritis- 4
Sepsis- 2
Otitis Media- 1
Scabies- 1
Schistosomiasis - 1
Tinea Capitis - 1

Top 10 prescriptions:

1. Co-trimoxazole- 27
2. Albendazole- 24
3. Amoxicillin- 8
4. Chlorphenamine- 6
5. Zinc- 3
6. ORS- 3
7. Dexamethasone eye drops- 3
8. Praziquantel- 2
9. Griseofulvin- 2
10. Erythromycin- 2



Debrief:

Busy but well conducted clinic. Malaria +ve rate significantly lower than the last occasion we visited on 12/10/22. On that occasion 68% malaria +ves. It will be interesting to see if this trend continues. Anecdotally in recent weeks the children seem vastly very well too with the majority presenting with self-limiting viral URTIs (Upper Respiratory Tract Infections). Also seem to be fewer and less severe cases of Tinea and Scabies.

These changes may be due to natural fluctuations and further monitoring is required to see the trend, however it's also likely that our regular clinic visits, catching cases early and interrupting transmission is a factor. Malaria treatment with artesunate kills those parasites at the gametocyte life cycle stage, it's these gametocytes that are taken up by mosquitoes during a blood meal, which mature in the salivary glands of the mosquito and enable subsequent

transmission to another person. This again proves how important regular clinics, testing and treatment is instrumental in controlling malaria transmission for the whole population. IRS (Indoor Residual Spraying against mosquitos) has also commenced in recent weeks, with the local area covered at the start of this month, this may have an impact although it's probably too early to judge at this stage.

One interesting patient with a widespread skin rash and skin peeling (pictured). On examination she had urticarial lesions on her chest and significant skin peeling on her extremities with areas on her hands and feet that looked typical of scabies lesions. She was treated as infected scabies with antibiotics, BB (Benzyl benzoate) paint and chlorphenamine for her urticaria. MRDT (Malaria Rapid Diagnostic Test) was -ve and she has also been treated empirically for worms and schistosomiasis. One other boy was advised to attend the DHO (District Health Officer) for a routine inguinal hernia repair. One patient was advised to attend WMF Thandizo clinic on Thursday for a more detailed assessment, FBC (Full Blood Count) and HIV testing. This is an 8-year-old boy who has been seen at subsequent clinics with splenomegaly, with some evidence of weight loss. Malaria tests are persistently +ve, this will be analysed further with a blood film at his clinic visit.

Thandizo Clinic (*For children living with AIDS*)

The patient from Kucherachera clinic attended with his mother. A more detailed history revealed that the mother had noticed this swelling in his abdomen three months previously, although she thinks this had improved following treatment with praziquantel at an WMF mobile clinic 2 months ago. Systemically he is well and denies any symptoms other than occasional abdominal pains. No TB contacts and he was HIV -ve in 2016, although had received a blood transfusion since then. On examination he was generally well, although weight today was 17.5Kg, seemingly reduced from 2 months ago (19Kg). Examination is unremarkable other than a non-tender, hard and fibrotic feeling spleen. Repeat HIV testing was -ve and FBC, urinalysis and imaging at the DHO revealed no acute concerns. BF was -ve, ruling out treatment resistant malaria. Diagnosis was splenic fibrosis due to chronic Schistosomiasis infection, this seems to be improving with the first dose of praziquantel. The patient was supplied with a second dose to be taken 5 weeks' time, 3 months after the initial dose. This treats the remaining schistosomes that were immature (schistosomules) at the time of the first dose and not killed. After 3 months these have matured and can be killed with praziquantel. Hopefully the spleen will continue to reduce in size following treatment, although a degree of fibrosis may persist.

The Thandizo clinic; the remaining patients attending for routine HIV care were all well with no major complications. One 2-month-old child newly attending for PMTCT (Prevention of Mother to Child Transmission) care is thriving and feeding well on Nevirapine prophylaxis, mother has an undetectable viral load and there is an excellent chance of the baby remaining HIV -ve.

Reported by: Dr Dry.

The Children's Mobile Clinic :



Our pharmacy carries a wide range of medicines, to deal with the many different tropical diseases we see at every clinic.



As a medical facility fully licenced for the care of out-patients, we are registered with the Malawi Medical Council, Poisons boards and ART (Anti-retroviral) programme.

We have signed a Memorandum of Understanding with the Malawi Ministry of Health and Population.

We are closely monitored by the regulatory authorities and ensure we keep accurate records for every facet of our work.

The Children's Mobile Clinic 2 :



Most often, healthcare under the shade of a tree.



Waiting patiently to be seen; parents travel for up to two days to ensure their children receive medical care. As one mother said to our team "You always turn up, you always have the medical team and you always have the medicines we need".

Advances in technology:

When we began our Mobile Clinics over twenty years ago, our clinicians were armed with just a stethoscope, ophthalmoscope and otoscope and their skills in diagnosis.

Today our Mobile Clinic carries a portable Diagnostic Imaging Ultrasound Device and an ElectroCardioGraph with printer and a range of other smaller diagnostic devices.

For more detailed analysis when required at our premises we now have a fully qualified Laboratory Technician as an intern and a Full Blood Count machine and a microscope for malarial blood smear test.



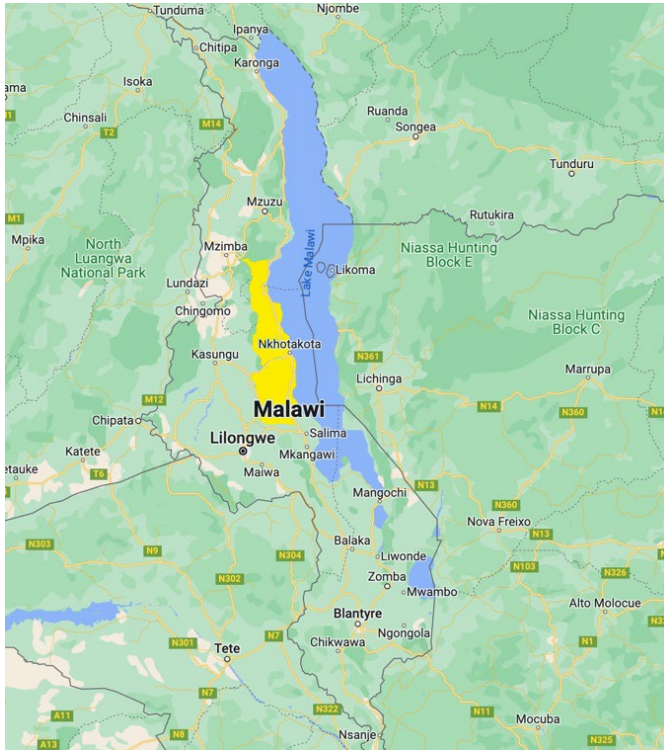
The blood smear test for malaria is the “gold standard” performed when we believe that we are getting a false negative from the malaria RDT (Rapid Diagnostic finger-prick Test)⁴.

⁴ The cause is the Malaria rapid test we use is histidine-rich protein 2 and 3 (*hrp* 2/3). It is known that this test is associated with false negative results because of *P. falciparum* *hrp* 2/3 deletions (5).

Cases treated 01/10/22 - 30/09/23	
Abscess	29
Anaemia	425
Arthritis	59
Asthma	328
Bilharzia	980
Burns	18
Dental Carries	52
Diarrhoea – bloody (Dysentry)	712
Diarrhoea - non bloody	680
Ear Infection	529
Ear wax	44
Epilepsy	92
Eye Condition - Allergy	389
Eye Condition – Bacterial	1,804
Gastroenteritis	2,160
Heart Abnormalities	6
Infected Sores/ Ulcers	84
Larve migrans	139
Malaria	9,106
Malnutrition	987
Mascular Skeletal pain	185
Mumps	49
Nephrotic Syndrome	19
Oral Candidiasis	185
Oral Sores	92
Respiratory Tract Infections	3,712
Rheumatic Heart Disease	25
Sepsis	314
Skin Condition - Viral	189
Skin condition - Allergy	601
Skin Condition –with Bacterial Infection	421
Skin Condition –with Fungal Infection	804
TB Suspects	206
Tonsillitis	49
Urinary Tract Infection	415
Worms	876
TOTAL	26,765

Why the need for Children's Mobile Clinics in Malawi?

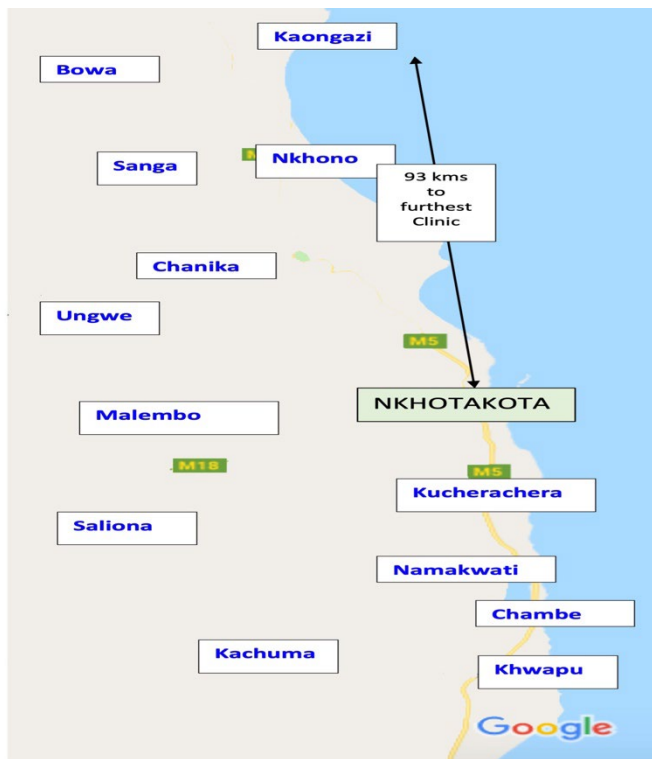
When a child is taken ill in the rural areas, the parents face an immense challenge in gaining access to medical care for their sick or dying child.



Health infrastructure and transport systems are non-existent, there are no GP clinics or Clinical Health centres, no bus or train services. The only option had been to get the child to the nearest hospital; that will typically involve a 8km trek on foot to the nearest tarmac road (probably carrying the sick child) and then a further 30km by road to cover whilst trying to hitch a lift.

If they make the journey they will often be faced with shortages of clinical staff and no medicines.

These are the realities of life faced by the rural communities in resource poor environments.



This is why parents and guardians will travel for up to two days to come to our Children's Mobile Clinics because "You always turn up, you always have skilled clinicians and you always have the stocks of medicine".

The clinics operate with a simple Modus Operandi in which our experienced nurses perform triage on the waiting queue to ensure any seriously ill child is seen straight away. This is essential because there will often be children in a comatose state from malaria needing emergency care.

The clinics operate on a four-weekly schedule, published a year in advance so everyone knows

where it will be on any given day.

We will soon pass another milestone with our Children's Mobile Clinics - when we will pass the 500,000 mark in the numbers of sick children we have treated

The situation in Malawi:

There have certainly been challenges; over half a million people forced to leave their homes with 1,250 injured and 500 killed following Tropical Cyclone Freddy that struck Malawi leaving a trail of devastation in March.

At Nkhotakota we were spared the worst of the storm's damage with severe flooding but with little structural damage, unlike 2019 when hurricane Idai wrecked our premises.

We also faced the deadliest outbreak of cholera in Malawi's history; the official figures were 36,943 cases and 1,210 deaths. We played a key role in the vaccination programme of children throughout the district.

The other major challenge we have faced is the desperate shortage of FOREX in Malawi. This has had a multitude of dire consequences from delaying our purchase of RUTF to no aviation fuel being available at the airports and cancellation of flights.

A significant event that took place just after this project ended has been the 44% devaluation of the Malawi kwacha, the ramifications of which are immense but happened too late to adversely affect this project.

Conclusion:

Mobile clinics are the key to saving young lives and easing suffering for sick children in the rural areas.

The communities we serve in Nkhotakota district have asked us
to pass on their heartfelt gratitude
to Fondation Eagle
for supporting this programme.