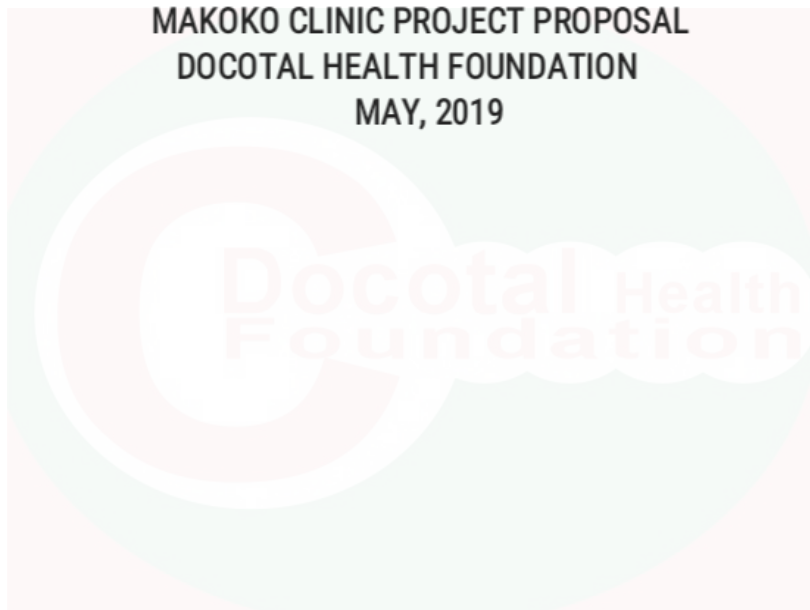




# THE DOCOTAL HEALTH FOUNDATION

OUR VISION IS A PRIORITIZED HEALTHCARE  
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MAKOKO CLINIC PROJECT PROPOSAL  
DOCOTAL HEALTH FOUNDATION  
MAY, 2019



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**MAKOKO CLINIC PROJECT PROPOSAL**

**DOCOTAL HEALTH FOUNDATION**

**MAY, 2019**

## Executive Summary

Makoko is a slum neighbourhood across the 3rd Mainland Bridge located on the coast of mainland Lagos in Yaba Local Government Area of Lagos state. The community, which initially was founded as a fishing village, eventually developed into a slum as a result of population explosion. Founded in 19th Century is known as the world's largest "floating slum" built on stilts. It is home to more than 150,000 migrants from West African countries. The Ricketty shanty houses stand on stilts in the polluted water.

One third of the community is built on stilts along the lagoon and the rest is on the land. The waterfront part of the community is largely harboured by the Egun people who migrated from Badagary and Republic of Benin and whose main occupation is fishing. In July 2012, the Lagos State government ordered that some of the stilts beyond the power-lines be brought down without proper notice. This led to the destruction of several stilts on the Iwaya/Makoko waterfront and many families were rendered homeless.

The community lacks access to health care facility, safe water, modern infrastructure and good education. These factors are indicators of good standard of living, including maternal mortality rates and prevalence of disease are significantly worse in this slum.

Makoko is an underserved suburban slum in Lagos commercial centre. Residents here must travel a busy traffic congested road of over 5 to 8 km for even the most basic medical care. For the 150,000 residents in Makoko community, the closest public health facility is Randle General Hospital Sabo Surulere among other expensive private hospitals which is about 5.7 km away, As such, people in this region suffer daily, and in some cases, die needlessly because they do not have access to routine, preventive health care or emergency medical attention.

A lot of complications from childbirth related conditions have been reported likewise high incidence of maternal mortality and infant mortality rate due to lack of Antenatal services and emergency responder system. The Doctors without Borders had at a time in Dec 2010 carried out free

health care services in order to curtail this nightmare. The first-hand information discovered by these international doctors was nothing compared to a rural area without health facilities. The majority of the cases were Malaria, respiratory infections, diarrhoea and malnutrition. These conditions are due to low coverage of vaccination, poor sanitary environment, absence of antenatal services and lack of safe hygienic facilities to give birth and availability of portable water.

The Docotal Health Foundation (DHF) successfully conducted an organised medical outreach on May 18, 2019 in response to the dire situation faced by the residents of Makoko community. DHF has a strong track record of co-funding programmes to cater for deprived community that lacks access to healthcare and education. In addition, DHF has conducted medical outreach in several community and carried out talk as an organization dedicated to the same vision and goals.

In the spirit of selfless services to humanity, the DHF has undertaken a project to construct a Medical Clinic, a non-profit, non-sectarian healthcare facility in Makoko community which represents the first level of interface between the formal health sector and the community. It will be staffed by medical professionals to provide affordable, basic health care delivery to treat and triage the sick and injured.

The clinic will comprise of a main building with five diagnosis/treatment beds, a diagnostic laboratory, a storage room, nursing station, dressing/injection room, two consulting rooms, four units of toilets, a bathroom and a waiting area. A second building will contain a floating clinic at the waterfront which houses a consulting room, OPD unit, a dressing room and waiting section. This is to serve as a first responder unit for those living in one third waterfront on stilt houses in Makoko vilage.

The clinic will be staffed by a full time clinic manager, two full time comprehensive nurses, a part-time physician or medical officer, and additional support staff, augmented by visiting Docotal health care professionals from Spain and USA.

Within three months of opening, we expect to see and serve 100-150

patients per day from Makoko community. During visits from healthcare professionals who are able to perform specialized services, we expect to serve 150 - 200 patients per day from this suburban.

The budget to build and equip the clinic is approximately \$157,750. The budget to operate the clinic for the first three months is approximately \$73,500. These funds will be comprised of cash contributions and in-kind donations of equipment and infrastructure by charity organizations. DHF has already established partnerships with other local and international organizations such as Docotal and philanthropists.

We expect to open the clinic by March 1, 2020. DHF will fund the clinic's operation for the first three months, after which our goal is for it to become financially self-sustaining with the support of the Lagos state Government.

### **Statement of Need**

The approximately 150,000 residents of Makoko community in Lagos live 5 to 8 km from the nearest hospital, Randle General Hospital along a busy traffic gridlock roads. This facility is government-run, and as such, provides medical treatment at a less affordable charges to the populace. However, because it is the primary medical facility for several communities around that axis, it is chronically over-crowded, under-staffed coupled with low density physician-patient ratio.

There are several government-run and private medical clinics in Yaba Local government area and the surrounding Lagos island however, they are extremely expensive for the common man to patronize.

The Lagos state Ministry of Health (MOH) has set forth goals related to reducing maternal and child mortality, fertility, malnutrition, the burden of HIV/AIDS, tuberculosis, malaria and the disparities in healthcare within the state, these efforts do not seem to have reached the most needy - namely residents of suburban slums in the state for instance Makoko village. These Residents routinely suffer from communicable diseases such as malaria, tuberculosis and HIV/AIDS, go without vaccinations, give birth without medical care, and lack education concerning hygiene, sanitation and family planning.

The vast majority of disease burden in suburban slums in Lagos is considered to be preventable as it is primarily caused by poor personal and domestic hygiene and inadequate sanitation practices (failure to break the faecal-oral disease transmission routes). This vicious cycle that affects most the residents can be reversed, as has already been proven in several other developed localities, through a well-integrated and coordinated deployment of existing resources.

Additionally, this deployment of resources and modern infrastructure seem to lack in these slums area. According to online publications, 89% of Makoko residents face severe sanitation problems which lead to major diseases. Hence, there is a need to focus on prevention and education as well as provide treatment. "Prevention is better than cure".

The Makoko Clinic if completed, will go a long way to revitalize the current healthcare delivery system in Makoko village by providing access to basic, affordable healthcare to a currently deprived area. Additionally this will reduce the burden of facing the traffic gridlock around Lagos island area thereby reducing the time lost in emergency cases and likewise mortality rate from complicated cases. Suffice to say that the clinic will improve the timely intervention needed to transfuse a patient in case of traumatic bleeding. This is what Makoko Clinic intends to fulfil.

## **Project Description**

The Makoko Clinic, will be a non-profit, non-sectarian healthcare facility in the village of Makoko community, Yaba Local Government Area, Lagos. The clinic will be designated as a Health Centre Type A facility as defined by the Federal Ministry of Health of Nigeria, representing the first level of interface between the formal health sector and the community. The clinic will provide primary medical care including triage and appropriate treatment, disease testing, inoculation, medication dispensing and education.

Docotal Health Foundation will finance and manage the clinic's creation, and will employ local staff to do as much of the on-site work as possible, including construction and administration. At completion, it will be staffed

by local medical personnel, augmented by visiting medical professionals from Spain and US and managed by an on-site Clinic Manager who will report to the DHF Board. Initially, its operations will be funded by a combination of DHF payments and nominal patient payments, with the goal of self-sufficiency within three months of handing over to Lagos state government.

## **Makoko Clinic(MC) Objectives**

1. The first objective is to build, furnish, and staff a fully-functional medical clinic in the village of Makoko, Yaba LGA by March 1, 2020.
2. The second objective is to treat, triage or refer every patient who comes to the clinic, and to keep appropriate records of each patient visit. By the end of the first year of operation, we will have a record of every patient that attended the clinic, with the following information: patient name, age, village, symptoms, diagnosis, treatment, payment and recommended follow-up.
3. The third objective is to have the clinic operate self-sufficiently by the end of its third months of operation. At this point in time, MC will operate independently of DHF funding and oversight; it will be managed by lagos state local government and supported financially through a combination of nominal patient payments and a related income-generating project as a standalone matrix profitability.

## **Methods**

### **Clinic Description**

The Makoko Clinic will be modeled after a Engeye Clinic located west of Masaka, Uganda opened in 2007. This being that the model is ready available at the time of conception of this project and fits the ideal primary health centre conceived to serve Makoko residents. It will comprise of a main clinic building which will include:

- Three exam/treatment rooms.
- a larger room which can be sub-divided into three additional exam/treatment areas
- a diagnostic laboratory room
- a locked supply storage room
- a covered veranda serving as a waiting area.

- two observation/admission rooms.
- a nursing station.

The floating clinic built of stilts located in the waterfront to serve one third of the Makoko residents living there will contain a consulting room, dressing room, nursing station and a waiting area. A second building will contain four separate living quarters with private living area, bedroom, kitchen, and shower for the three permanent medical staff and for traveling volunteers. Separate pit latrines will serve the clinic and living quarters.

The clinic will have a bore-hole well to be drilled on the premises to serve as main sources of water supply. Solar panels will be installed to provide electricity sufficient to power a generator, lights, medical equipment and a refrigerator to store medications and a high-temperature incinerator will be installed on the premises to dispose of medical waste. Please see Appendix for Clinic Site Plan and Drawings.

The clinic will be equipped with basic medical supplies including:

#### **HOSPITAL EQUIPMENT FOR MAKOKO CLINIC LAGOS**

<b>Serial</b>	<b>Descriptions</b>	<b>Quantity</b>	<b>Remarks</b>
<b>DRESSING/INJECTION ROOM</b>			
1.	Operating Theatre Lamp (Mobile Mounted)	1	For minor surgery
2.	Dressing/Stitch Set	20	
3.	Diagnostic Set	10	
4.	Peritoneal Diagnostic Set (Large size)	50	
5.	Autoclave (Bucket and Medium Size)	2 each	
6.	Suction Machines	5	
7.	Urinals	10	
8.	Oxygen Concentrator	5	
9.	Oxygen Giving Set	10	
10.	Crash cart	1	
11.	Resuscitation Equipment	1	
12.	Ambu Bag	2	
13.	Sphygmomanometer (Accoson)	2	
14.	Stethoscope	30	

15.	Angle Poised Lamp with Magnifying Glass	5	
16.	laryngoscope	5	
17.	Gallipots	10	
18.	Artery Forceps	10	
19.	Dissecting Forceps (Toothed)	10	
20.	Dressing Forceps (Plain)	10	
21.	Surgical Scissors	10	
22.	Stitch Removing Scissors	10	
23.	Vaginal Speculums:	5	
24.	Sims	10	
25.	Cusco	10	
26.	Auvard	5	
27.	Mouth Gag	200	
28.	Disposable Tongue Depressor	1000	
29.	Non-disposable Tongue Depressor	20	
30.	Vomit Bowls	10	
31.	Sputum Mug	10	
32.	wheel chair	4	
33.	patient trolley	4	
34.	automated electrical defibrillator (AED)	4	
35.	Oxygen cylinder/carrier	5	
36.	Air ways	5	
37.	Angle poise lamp	4	
38.	Ambu bag ( adult/paediatrics)	4	
39.	Nebulizer	4	
40.	Theatre table	1	
41.	mackintosh	3	
42.	screen	2	
43.	<b>ACCIDENT AND EMERGENCY</b>		
44.	Patient trolley	4	
45.	Multi parameters monitor machine	2	
46.	BP Apparatus	5	
47.	Suctioning machine	2	
48.	Ambu bag	4	
49.	Defibrillators	2	
50.	AED	1	
51.	Stethoscope	4	

52.	Emergency Tray	2	
53.	ECG Machine	1	
54.	Oxygen concentrator	1	
55.	Suturing sets	2	
56.	Laryngoscope sets	2	
57.	Autoclave machine	2	
58.	<b>Haematology and Blood Transfusion Services:</b>		
59.	Binocular Microscopes (Olympus) LED	2	
60.	Differential Tally Counter	5	
61.	Water Bath	1	
62.	Micro-Haematocrit Centrifuge + with Reader	2	
63.	Water distiller	2	
64.	PH meter	4	
65.	Top Loading Balance	4	
66.	Incubator	1	
67.	Hot Air Oven	1	
68.	Electrophoresis Apparatus	2	
69.	Blood Bank Refrigerator	2	
70.	Blood Donation Couch	2	
71.	Specimen Refrigerator	2	
72.	Timers with Alarm	5	
73.	Fixed Volume Micropipettes different volumes	10 pkts	
74.	Plastic Aspirator with tap	10	
75.	Bench Centrifuge	3	
76.	ESR Stand & Pipettes	5	
77.	Grouping Tiles	10 pkts	
78.	Glass Slides & Cover Slips	20 pkts	
79.	Centrifuge Tubes (Graduated)	10 pkts	
80.	Universal Bottles	10 pkts	
81.	Pipette Filter filler	10 pieces	
82.	Volumetric Flasks (100ml, 250ml, 500ml, 1L,2L)	5 each	
83.	Conical Flasks	10	
84.	Bunsen Burner	2	
85.	Wooden Racks for Precipitin Tubes	5	

86.	Stainless Metal Test Tube Racks	5	
87.	Scissors and Forceps	10 each	
88.	Wash Bottles	10	
89.	Coulter Counter	2	
90.	Full automated haematology analyzer (5 parameter)	2	
91.	Blood bag tube sealer	1	
92.	Power Pack	2	
93.	Deep Freezers	1	
94.	Refrigerator	1	
95.	Automatic Pipettes different sizes	5	
96.	Fixed Volume Micropipettes (5ul,10ul,20ul,25ul,50ul,100ul,200ul,250ul,500ul,1000ul.	2 each	
97.	Beakers and Conical Flasks	10 each	
98.	Test Tubes (Pyrex)	10 pkts	
99.	Pipettes Filter	10	
100.	Glass Universal Bottles	10 pkts	
101.	Blood Gas Analyzer	2	
102.	Automatic Dispenser	2	
103.	Full automated chem. Analyzer	2	
<b>Medical Microbiology Department</b>			
104.	Sterilization UV Lamp	1	
105.	Anaerobic Jars	2 each	
106.	CO2 Incubators	1	
107.	Homogenizer	2	
108.	Antibiotic Disc Dispensers	1	
109.	Stainless Steel Container 50	1	
110.	Laminar Flow Hood (class 11)	1	
111.	Urine analyzer	1	
112.	Automated blood culture analyzer	1	
113.	Semen analyzer	1	

The clinic will initially be open Monday through Friday from 9 am to 5 pm

and skeletal work on weekend to handle emergency cases. The following staff will manage its daily operations:

- **Medical Director** will be responsible for medical oversight, finalizing diagnostic and treatment protocols, licensing, treating higher-acuity patients and nursing supervision. This physician or clinical officer will be involved in setting up the clinic operations, and will work part-time in the clinic once it is open.
- **Enrolled Comprehensive Nurse** will be responsible for patient diagnosis, triage, treatment and record-keeping. The nurse will work at the clinic full-time and will be provided living quarters on-site. We are assessing the ability to hire a back up nurse position for emergency situations.
- **Clinic Manager** will be responsible for site management, financial management, ordering of supplies and materials, supervision of caretaker and regular reporting to the DHF board. The clinic manager will work at the clinic full-time and will be provided living quarters on-site.
- **HIV / AIDs Counselor** will be responsible for administering HIV/AIDs tests, counseling and referring patients for treatment, and providing general education concerning HIV/AIDs.
- **Pharmacist** will be responsible for tracking and preparing medications and vaccines, as well as patient record-keeping.
- **Caretaker** will be responsible for cleaning the clinic and dormitory, laundry and cooking for the medical staff and visiting volunteers.
- **Volunteer medical staff** will be hosted every other month for a duration of 2 days. We plan to establish partnerships with 2-3 NGOs that allow their doctors, nurses to assist in Makoko clinic.

Note: DHF board members have met with medical officials in Lagos state Ministry of Health and have been assured that if paid an appropriate salary and provided housing (see above) that filling these positions is readily achievable; there are medical professionals without work in the country today.

## Clinic Services

The clinic will be a fully-functional as classified by Federal Ministry of Health Type A facility providing basic triage, diagnostic and treatment services for the most common health issues facing Makoko community. Data from Lagos state Ministry of Health indicate that similar

demographic show that the following diagnoses are the most common: Malaria, Respiratory Tract Infection, GERD / Dyspepsia / Peptic Ulcer Disease, Hypertension, Gastroenteritis / Diarrhea, Urinary Tract Infection, Sexually Transmitted Infections / Pelvic Inflammatory Disease, Allergy, Type II Diabetes, injury / trauma and maternity. Makoko Clinic staff will be trained and prepared to treat these and similar conditions

Medicines, purchased monthly at the Joint Medical Store in Surulere, will include the following as an initial inventory (based on National Health Insurance Scheme (NHIS) essential drugs list recommendation)

## LIST OF DRUGS REQUIRED FOR MAKOKO CLINIC

S/no	Items	Quantity	Remark
1.	Augmetin (625mg)	30 packs	
2.	Cefuroxime	30 packs	
3.	Ciprofloxacin	20 packs	
4.	Cotrimoxazole	30 packs	
5.	Ampicillin+Cloxacillin	50 packs	
6.	Metronidazole	40 packs	
7.	Doxycycline	20 packs	
8.	Arthemeter+Lumefantrine	20 packs	
9.	Arthemeter+Mefloquine	40 packs	
10.	Pyrimethamine+Sulphadoxine	50 packs	
11.	Valsartan 160mg+HCT	12 packs	
12.	Valsartan 80mg	5 packs	
13.	Amlodipine (Norvasc)-10mg	2 pack	
14.	Amlodipine (Norvasc)-5mg	4 packs	
15.	Nifedipine 20mg	20 packs	
16.	Lisinopril 10mg	20 packs	
17.	Lisinopril 5mg	16 packs	
18.	Atenolol 50mg	20 packs	
19.	Metformin 500mg	4 packs	
20.	Glibenclamide 5mg	4 packs	
21.	Loperamide	8 packs	
22.	Hyoscine	2 packs	
23.	Polycrol gel	16 packs	
24.	Omeprazole	6 packs	
25.	Ranitidine	4 packs	
26.	Salbutamol	2 packs	
27.	Loratadine	6 packs	
28.	Levamisole	10 packs	
29.	Pyrantel	10 packs	
30.	Strepsil	5 packs	
31.	Actifed	2 packs	
32.	Bromazepam 3mg	10 packs	

33.	Bromazepam 1.5mg	8 packs	
34.	Diazepam (unival)	8 packs	
35.	Fluconazole	4 packs	
36.	Ketoconazole	4 packs	
37.	Ibuprofen	4 packs	
38.	Diclofenac	4 packs	
39.	Diclofenac+Misoprostol	4 packs	
40.	Paracetamol (Emzor)	5 packs	
41.	Panadol	pack	
42.	Tramadol	4 packs	
43.	Orphenadrine (Norflax)	3 packs	
44.	Bisacodyl	1 pack	
45.	Cough Expectorant	40 bottles	
46.	Mucolytic Cough syrup	40 bottles	
47.	Non-drowsy Cough Exp	40 bottles	
48.	Mist Mag	40 bottles	
49.	Paracetamol	40 bottles	
50.	Amoxicillin	40 bottles	
51.	Chlorpheniramine	20 bottles	
52.	Cotrimoxazole	15 bottles	
53.	Metronidazole	30 bottles	
54.	Vitamin C	30 bottles	
55.	Vitamin B complex	30 bottles	
56.	Multivite	30 bottles	
57.	Hyoscine	30 amp	
58.	Diclofenac	30 amp	
59.	Paracetamol	30 amp	
60.	Aminophylline	30 amp	
61.	Hydracortisone	30 vials	
62.	Metoclopramide	30 amp	
63.	Injection Paluther	4 packs	
64.	Ranitidine	2 packs	
65.	Chloramphenicol drops	20 bottles	
66.	Genticin drops	10 bottles	
67.	Spersallerg drops	3 bottles	
68.	Visine drops	10 bottles	
69.	Chlorhexidine	2 litres	

70.	Eusol	2 litres	
71.	Hydrogen Peroxide	2 litres	
72.	Sodium Hypochlorite	2 litres	
73.	savlon	8 bottles	
74.	Spirit	5liters	
75.	Iodine	5liters	
76.	Cotrimazole Cream	10 tubes	
77.	Hydrocortisone	5 tubes	
78.	Cotrimazole Vaginal Cream	10 tubes	
79.	Diclofenac	10 tubes	
80.	Cotrimazole Pessary	10 packs	
81.	Anusol suppository + HC	4 packs	
82.	Astyfer Caps	10 packs	
83.	Daravit Caps	5 packs	
84.	Hotamin ginseng Caps	2 packs	
85.	ORS	20pacs	
86.	Salbutamol Inhaler	3 cans	
87.	Deep heat spray	3 cans	
88.	Aspirin 75mg tabs	6 packs	
89.	Ferrous sulphate tabs	4 pack	
90.	Vitamin C tabs	3 packs	
91.	Folic acid tabs	1 pack	
92.	Vitamin B complex tabs	1 pack	
93.	Cofta tabs	10 packs	
94.	Doloneurobium	2 pack	
95.	Deep relief cream	10 tubes	
96.	Examination gloves	2pack	
97.	Surgical gloves	9	
98.	5mls Syringe	1 pack	
99.	2mls Syringe	2 pack	
100.	Gauze bandage	12inch	
101.	Supratule	1 pack	
102.	Cotton wool	1 big roll	
103.	Plaster	2 pack	
104.	IVF N/S 0.9% x 500mls	2 cartons	

105.	IVF D/S 5% x 500mls	2 cartons	
106.	IVF D/w 5% x 500mls	2 cartons	
107.	IVF D/w 10% x 500mls	2 cartons	
108.	ivf darrow solution ½ strenght	2 cartons	
109.	ivf darrow solution full strenght	2 cartons	
110.	Ivf Ringer lactate	2 cartons	

The following table represents the recommended immunization schedule for children in Nigeria according to the Federal Ministry of Health.

Vaccine		Schedule
BCG	Bacille Calmette-Guérin vaccine	birth
DTwPHibHep	Diphtheria and tetanus toxoid with whole cell pertussis, Hib and HepB vaccine	6, 10, 14 weeks
HPV	Human Papillomavirus vaccine	10-12 years; +4 weeks; +5 months; Part of country
Measles	Measles vaccine	9 months
OPV	Oral polio vaccine	birth; 6, 10, 14 weeks
TT	Tetanus toxoid	15-49 years; +4, +6 weeks; +1, +1 year
VitaminA	Vitamin supplementation	A6 months; 1, 1.5, 2, 2.5, 3 years

## HIV / AIDS

Makoko Clinic intends to partner with Aids Healthcare Foundation via its

lagos state branch to provide HIV testing, counseling and referral for treatment. USAID is one of the largest providers of AIDS treatment and its program has been identified by the World Health Organization and UNAIDS as a best practice model for antiretroviral therapy (ART).

Based on Primary health care standard of management of HIV/AIDS with support from Federal Ministry of Health Nigeria , Makoko Clinic would receive free, unlimited HIV diagnostic kits (finger-stick test) from Lagos state MOH . In order to qualify, Makoko clinic must employ a registered counselor and have a higher-level healthcare facility to refer to for treatment. The intent is to partner with the Randle General Hospital which is the closest to Makoko Clinic.

### **Maternity, Obstetric & Newborn Care**

During phase I of Makoko Clinic's operation, pre-natal care, delivery, post-natal and newborn care will be referred to Randle General Hospital. We intend to add pre-natal care, delivery, post-natal and newborn care in a second phase, with a time frame to be determined.

### **Chronic Disease Management**

During phase I of Makoko Clinic's operation, chronic disease management will be treated by established protocols and medications, if appropriate, or referred to Randle General Hospital Surulere.

### **Project Timeline**

#### **Aug 2019: Purchase land**

An 100 meter by 60 meter of three plots of land to be purchased was discussed with the Local Monarch "Baale Jeje Ayinde " of Makoko community to build a medical clinic. The plots of land is located centrally within the Makoko community, and within walking distance of other community infrastructure including the trading centre, church and school.

#### **Sep 2019: Hire in-country Project Manager**

An in-country project manager would be hired, based in Lagos state. The project manager is responsible for the overall clinic construction co-

ordination, oversight of construction personnel and materials and regular communication to the DHF board. Fund dispersal will be managed by Engr Julius Sylvester, reporting to the DHF board of directors. Engr Julius Sylvester has previously successfully managed the construction of a home in Nigeria.

**Sep. - Oct. 2019: Design buildings and site layout**

The clinic design and construction is based upon the Engeye Clinic which is readily available and suits the desired design of the DHF Board for the healthcare delivery of Makoko community, using their original blue prints updated to the planned site by our Lagos-based architect. Design would be complete, including site plans and architectural drawings.

**Oct. - Nov 2019: Obtain permitting**

With final building and site design completed, necessary permits including NGO registration, Clinic bank account, MOH approval will be obtained.

**Oct. - Nov 2019: Construct bore hole well and latrine**

A bore-hole well and two latrines will be built on the clinic site. The well and latrine will provide water and toilet facilities during construction for the work staff. Once completed, the well and latrines will be used by patients and staff.

**Nov. - Dec. 2019: Construct buildings and utilities**

Construction of main clinic building and dormitory, water collection and storage system will take place. Clinic construction will use plans developed for Engeye Clinic and augmented as necessary by a Lagos-based architect. We will use local and community-based non-skilled and skilled labor for construction, and will use local materials, such as bricks and lumber, whenever possible.

**Jan. 2020 - Feb. 2020: Purchase and install furnishings**

We will procure clinic furnishings including beds, tables, storage cabinets, benches, chairs, curtains and linens locally or from Surulere and Yaba.

### **Jan. 2020 - Feb. 2020: Acquire medical equipment and supplies**

We will obtain medical equipment and supplies by donation or acquisition through partnerships. We will purchase medications from the Pharmaceutical Stores based in Surulere, or also obtain them through donations.

### **Jan. 2020 - Feb. 2020: Install solar power and incinerator**

Solar power will be designed and installed by Mike solar Energy and incinerator will be sourced from Lagos-based Technology.

### **Jan. 2020 - Feb. 2020: Hire staff**

With the assistance of Lagos State Ministry of Health and Makoko village leaders, DHF board members will interview and hire a full-time nurse, part-time doctor or clinical officer, clinic administrator and caretaker, and create contracts for each.

### **Feb. 2020: Establish diagnostic and treatment protocols**

Based upon the established Primary Health Centre model in lagos, we will implement medical diagnostic and treatment protocols and a patient reporting plan (recording information about patients for follow up, metrics, and quality control).

### **Mar 1, 2020 Open clinic**

### **Apr. - May. 2020: Set up volunteer / visiting personnel protocols**

### **Project Administration Staff**

The following represents the staff that will administer the development of Makoko Clinic and provide oversight during its daily operations:

- **Construction Project Manager** will be responsible for the overall clinic construction co-ordination, oversight of construction personnel and materials and regular communication to the DHF board.
- **Docotal Health Foundation Board of Directors** will be responsible for fundraising, financial governance, stateside coordination & communication with local Construction Project Manager, hiring of

clinical and administrative staff and implementing their contracts, organizing volunteer involvement and protocols, establishing partnerships with other NGOs and governmental organizations, and working with medical staff to establish diagnosis and treatment protocols. Once the clinic is running, DHF Board will provide general oversight, and will be responsible for reporting and project outcomes.

## **Evaluation**

Docotal Health Foundation Board of Directors is responsible for evaluating whether the objectives of the Makoko Clinic project have been met, and evaluating the impact the project is having on the people it is meant to serve.

### **Objective 1: Clinic Construction**

The DHF Board will evaluate the progress of the project against the Project Timeline stated above on a quarterly basis starting at the end of Q2 2019.

Project status will be reported to funding agencies and to private donors and supporters.

### **Objective 2: Treatment and Record-Keeping**

During the first year of operation, DHF Board will collect and examine the patient diagnosis and treatment records to ensure that appropriate record-keeping is being conducted. This review will be conducted on a quarterly basis. Our plan is to add a medical professional to the DHF board with experience in medical administration and oversight.

After each year of operation, DHF Board will collect and examine the patient records generated during that year. An annual report will be generated which details the number of patients seen by geographic area, age, gender, diagnosis and treatment. Recommendations will be made regarding changes to treatment, additional development projects, etc, based on the community's needs and our ability to meet those needs. The Annual Report will be disseminated to funding agencies, private donor and supporters as well as partner agencies.

### **Objective 3: Self-Sufficiency**

At the end of the third Month of operation, an audit will be performed by the

DHF Board to determine if Makoko Clinic is meeting its objective of operating independently of DHF funding and oversight. The Board will assess if any requests for additional funding or for administrative intervention are being made to DHF. The Board will perform an audit of the Clinic's financials, including expenses, patient payments. A report on this audit will be disseminated to funding agency, private donors and supporters.

**Sustainability**

Each patient will be charged a nominal charge per visit consistent with the charges established at government owned primary Health centre in Lagos. This nominal fee will be requested primarily to ensure that the patient values the service being provided, and increases the likelihood of the patient following the recommended treatment course. However, these fees will also be useful in defraying a portion of the clinic's operating expenses. As stated below in the Budget section, it is estimated that it will require approximately \$3,500 per month to keep the Clinic operating. While this payment will initially be made by DHF through private donations and grant funding, our goal is that it will, within three Months, be financed through patient charges and financial support from the state government the moment is being handed over to them.

**BUDGET BREAKDOWN**

<b>Construction and Start up Expenses</b>		
<b>Item</b>	<b>Estimate</b>	<b>Remarks</b>
Land purchase	\$5500	A 3-plot of land in makoko village to be acquired for \$5,500.

Construction of clinic, living quarters and latrines	\$90250	Detailed cost roll up completed March 1, 2020
Solar power for clinic and dormitory	\$8000	
High temperature incinerator	\$4000	
Bore hole well	\$5000	
Clinic and dorm furnishings	\$3000	Beds, cabinets, tables, chairs, linens
Diagnostic Laboratory Equipment	\$25000	
Medical equipment and disposables	\$3000	
Medications	\$5000	Initial inventory of medicines and vaccines
Misc. Travel, lodging, vehicle rental to complete construction	\$10000	
Clinic Construction Manager Salary	\$4000	To be employed full-time at \$500/month through the planning and construction phase, estimated at 8 months.
<b>Total Construction/Startup Expenses</b>	<b>\$157750</b>	

<b>Montly Personnel Expenses</b>			
<b>Position</b>	<b>Hire Date</b>	<b>Hours</b>	<b>Monthly Salary</b>
Clinic Operations Manager	Site 2 months prior to clinic opening	Full time	\$500
Physician Clinical Officer	6 weeks prior to clinic opening; consultation prior	Part time	\$1000

Enrolled Comprehensive Nurse	1 month prior to clinic opening	Full time	\$700
Caretaker and cook	1 week prior to clinic opening	Full time	\$500
HIV / AIDS Counselor	1 week prior to clinic opening	Part time	\$600
Pharmacist	1 week prior to clinic opening	Part time	\$700
Total Monthly Personnel Expenses			\$4000

Monthly operating expenses		
Item	Notes	Estimate
Medications / Vaccines	Cost of medications and supplies to be partially offset by patient payment of \$3000 SH (around \$3.00) per visit	\$350
Supplies		\$150
Total Monthly Operational Expenses		\$500

Total Cost Estimate for First Three Months	
Monthly Personnel Expenses for 3 months	\$12000
Monthly Operating Expenses for 3 months	\$1500
Makoko Clinic estimated Funds Balance as of April, 2020	\$45000
Estimated In-kind Donations	\$25000
Remaining Funds to be Raised for Clinic Completion and 3 Months Operation	\$73,500

## Organization Information

Docotal Health Foundation (DHF) was inaugurated in 2017 in Nigeria and officially registered with Corporate Affairs Commission of Nigeria in 2018. The Board of Directors in response to the dire situation faced by the residents of Makoko Village has decided to campaign for a construction of medical clinic to cater for the immediate health need of the Makoko residents. DHF has a strong track record of health campaign, medical outreach, and free online medical consultation in conjunction with Docotal.

The vision of the Docotal Health Foundation is to improve lives of people living in deprived areas and promote community development health programs through constant professionalism. This includes high volume innovative and useful delivery methods.

Docotal Health Foundation is currently comprised of a four-member volunteer Board of Directors (see below), and a small group of dedicated volunteers. We are working to increase volunteer participation through active outreach, social media exposure and direct talking to professionals.

- **Dr Okechukwu Okemezie (Founder)** was born in Lagos, a lover and a passionate football writer. He graduated from Latin American School of Medicine Havana, Cuba.
- **Dr Basaru Lateef (CEO & Co-Founder)** was born in Ondo state, He graduated from Latin American School of Medicine Havana, Cuba. A prolific medical freelance writer. He is passionate about the Health care situation of Nigeria and has written several articles on this to draw the attention of the government to this Nightmare. He works as a General Physician at Ministry of Defence, Nigeria.
- **Dr. Nnamdi Elenwoke (Director)** was born in Imo State. He is a Consultant Neurosurgeon at Teknon Medical Centre Barcelona, Spain. A graduate of Latin American School of Medicine Havana, Cuba.
- **Dr Laminu Kaumi (Director)** was born in Borno state, He graduated from Latin American School of Medicine Havana, Cuba. He is currently working in Ireland as a family physician specialist.

- **Dr Hajarat Oloru (Member)** was born in Kwara state, She graduated from Latin American School of Medicine Havana, Cuba. She is currently working in Saudi Arabia as a Consultant Radiologist.
- **Dr. Odunze Uche (Member)** was born in Imo State. He graduated from Latin American School of Medicine Havana, Cuba. He is currently working at UT Southwestern medical Centre Dallas.

Docotal Health Foundation has demonstrated the capability to effectively complete the Makoko Clinic project. Our personal connection to the area and its residents, most especially the local Monarch "Baale Jeje Ayinde" and our intention to use local labor and materials affords us a significant level of local support. The DHF Board of Directors brings substantial experience in the medical device industry, strong project management, and healthcare professionals to provide both financial support and medical expertise.

## **Conclusion**

In conclusion, the members of Docotal Health Foundation are dedicated to its mission to improve quality of life in deprived community of Nigeria through access to health care and education, improvements to infrastructure and means of self-sufficiency. We understand the people of Makoko village are severely under-developed with regard to medical care with the closest medical facility of any kind several miles away. As such, every day, people in this region suffer, and in some cases, die needlessly because they do not have access to routine, preventative health care or emergency medical attention. We are committed and determined to build the Makoko Clinic to provide primary medical care including triage and appropriate treatment, disease testing, inoculation, medication dispensing and education with a staff that will be comprised of Nigerian medical professionals. We are confident and have demonstrated expertise to raise the necessary funds to complete the project and the relationships to staff and maintain the clinic. With the hard work and efforts of our Team and the support of individuals and corporations we will be successful.

## Appendix: Clinic Site Plan and Drawings

### Makoko Clinic Compound



**Main**

**Clinic**

**Building**



**Living**

**Quarters**



**Latrine**



# Clinic Site Plan

