





1

JICA Technical Cooperation Project For Strengthening Pro-Poor Community Health Services in Lagos State

### Half-Year Progress Report 2017

3<sup>rd</sup> and 4<sup>th</sup> Quarters: Jun – Dec 2017

## 1

### **Contents of the Progress Report**

				Page
1.	Intro	duction		3
	1.1.	Background	•••••	4
	1.2.	Project Design	•••••	5
	1.3.	Pro-Poor Community Health Model	•••••	6
2.	Prog	ress, Achievements, Issues and Plan Ahead by Interventions	•••••	7
	2.1.	Strategic Outreach by Health Workers		8
	2.2.	Community Health Education Talk Session by CORPs		9
	2.3.	Community Engagement through WHCs		11
	2.4.	Appointment Reminder and Defaulter Tracing SMS Delivery		12
	2.5.	Automatic Voice-call Health Message Delivery		16
	2.6.	Coordination for TBA Referral and Reporting		19
	2.7.	Quality Improvement and Research		21
	2.8.	Stakeholder Collaboration and Advocacy		22
3.	Prog	ress in line with Project Design Matrix		23





# Introduction

#### 1.1. Background

- An official document (Record of Discussions) was signed between Lagos State Ministry of Health (LSMOH) and Japan International Cooperation Agency (JICA) in February 2014 for a 4-year technical cooperation project, namely "Project for Strengthening Pro-poor Community Health Services in Lagos State."
- In line with the above document, JICA in close collaboration with Lagos State Ministry of Health (LSMOH) and Lagos State Primary Health Care Board (LSPHCB) has been implementing since May 2014.
- The project aims at establishing an evidence-based model of community health services for the indigent population in urban slums in Lagos State.
- The project started with Eti-Osa Local Government Area (LGA) and expanded its project area to Lagos Mainland LGA and Yaba Local Council Development Area (LCDA) in January 2017.
- With this expansion, the project period was also extended up to December 2018.











#### **1.2. Project Design**

- The project was designed to improve equitability, affordability and accessibility of maternal and child health services for indigent population in urban slum communities. A Project Design Matrix (PDM) was developed as an annex to the document, which lays out the project design by summarizing the project elements in a logical way: Project Goal, Purpose, Outputs and Activities with verifiable indicators and means of verification. The Project Goal and Purpose stated in the PDM is as follows:
- Project Goal equitable, affordable and accessible maternal and child health services for indigent population in urban slum communities are improved.
- Project purpose: Pro-poor health service systems are established and strengthened for sustenance using standardized model
- The following five outputs were set in order to achieve the above project purpose:
  - Output 1: Pro-poor community health package and its operation guide are developed and submitted for official approval by Lagos State Ministry of Health.
  - Output 2: Capacities of Lagos State Primary Health Care Board (LSPHCB), Local Government Health Authorities (LGHA) and Ward Health Committees (WHCs) are strengthened to support target communities.
  - Output 3: Outreach visits conducted by primary healthcare centers (PHCs) are strengthened to capture target populations in hard-to-reach communities in the urban slums.
  - Output 4: Populations in the model sites improve health seeking behaviors through health promotion activities at community level.
  - Output 5: Strategic options for nationwide and/or state-wide scaling-up propoor community health service systems are developed based on evidence generated by operation research.
- Activities were planned to achieve each of the above outputs. Figure 1 on the next page depicts the project design.

# y and accessibility of urban slum communities. Figure 1: Project Design the document, which nts in a logical way: Project Proje

Output 1: Pro-poor community health package and its operation guide are developed and submitted for afficial approval by Lagon State Ministry of Health.	Output 2: Capacities of PHC Board, LGA Health Teams, and Ward Health Committees (WHCs) are strengthened to support target communities	Output 3: Outrooch visits conducted by primary bealthcare centers (PirCs) are strengthened to capture target populations in hard- to-reach communities in the urban shams.	Dutput 4 Populations in the model sites improve health seeking behaviors through health promotion activities at community level	Output 5: Strateges options for nationwide and/or state-wide scaling-up pro-poor community health service systems are developed based on evidence generated by operation research.
Activities	Activities	Activities	Activities	Activities 51-54





### **1.3. Pro-Poor Community Health Model**

Based on the results from a needs assessment conducted in Eti-Osa LGA at the initial stage of the project, a conceptual framework namely "Pro-poor Community Health Model" was developed. The model is for making health services accessible to the indignant population in urban slum communities in Lagos State. It is comprised of three pillars:

1) Accessibility Improvement, 2) Quality Improvement, and 3) Creation of Conducive Environment. Most of the project interventions fall under the pillar #1 that sets the target population into four categories as follows:

- a. People who have easy access to a health facility and willingness to utilize the health services at the facility;
- b. People who have easy access to a health facility but no willingness to utilize the services at the facility;
- c. People who have difficult access to a health facility but willingness to utilize the health services at the facility; and
- d. People who have difficult access to health facility and no willingness to utilize the services at the facility.

Six key interventions are employed for the model:

- 1) Strategic Outreach by health care providers
- 2) Community Health Education by CORPs
- 3) Community Engagement through WHC
- 4) Automatic Appointment Reminder and Defaulter Tracing SMS Delivery
- 5) Automatic Voice-call Message Delivery
- 6) Coordination for strengthening TBA Referral & Reporting

These six interventions are combined to fit for each target category as depicted in Figure 2 and 3. Under the pillar #2 (Quality Improvement), provision or installation of equipment at health facilities, support for quality assessment of health facilities will fall. Other activities regarding stakeholder coordination and collaboration including campaign support fall under the pillar #3. Figure 2. Pro-poor Community Health Model (Conceptual Framework)

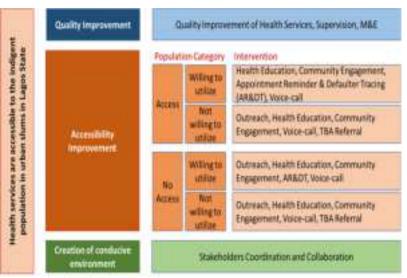


Figure 3. Pro-poor Community Health Model Key Interventions (Pictorial)



6

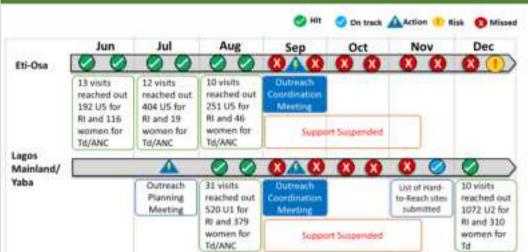
# Progress, Achievements, Issues and Looking Ahead by Key Interventions



#### 2.1. Strategic Outreach by Health Workers



8



#### 2.1.1. Activities Undertaken

#### 2.1.3. Looking ahead

	Jan	Feb	Mar	Apr	May	Jun
Eti-Osa/ Eti-Osa East		Monthly Ou	treach Visit	to ? Hard-t	o-Reach Site	ы
Outreach Data Review Meeting with LID	* 🔺					
Outreach Review Me	eting				-	
Lagos Mainland/ Yaba	9	Monthly Out	treach Visit (	to 10 Hard-	to-Reach Sit	es
Outreach Data Review Meeting with LIO	*					
Outreach Review Me	eting					

#### 2.1.2. Progress and Challenges

.

- The project had supported two outreach visits per health facility (Primary Healthcare Centre or Health Post) per month in Eti-Osa LGA (Eti-Osa West) since Jun 2015. The services provided by health workers through the outreach visits included child immunization, tetanus injections for pregnant and non-pregnant women, administering deworming tablets and part of antenatal and postnatal care. With the expansion of the project area to Lagos Mainland in Jan 2017, the same type of outreach started in August 2017 in Lagos Mainland and 4 visits per ward per month were supported in the month.
- At the end of Aug 2017, however, LSPHCB pointed out that the outreach supported by the Project was taking an approach that is not in line with the state standard and urged that the project should abide by the standard. Therefore, the support was suspended immediately in both Eti-Osa and Lagos Mainland.
- An Outreach Stakeholders Coordination Meeting was held in September 2017 to build a common understanding on outreach among LSPHCB, Eti-Osa, Lagos Mainland and Yaba Local Governments. The LSPHCB's claim was twofold: 1) The commodities at PHCs are for the clients coming to the facilities. JICA is not supposed to ask health workers to take the commodities out of the health facilities except vaccines and cold boxes since no commodity support and human resources required for Integrated Outreach Services were provided by JICA; 2) Outreach sites were not fixed. The sites should be scientifically determined with evidence and monthly visits should be conducted in a rigid manner to avoid creating children partially immunized. The sites should not haphazardly changed. It is the mobilizers that move around and mobilize the mothers to make sure that their children are fully immunized.
- The meeting concluded that each LGA team shall prepare a list of hard-to-reach and riverine settlements that are not included in the four routine outreach sites and require special transport arrangements and submit it to the Project through LSPHCB for the support.
- The Project has made a decision to extend its support to Eti-Osa East LCDA for hard-toreach outreach visits for routine immunization.
- The Project has resumed the support to Lagos Mainland LGA and Yaba LCDA since Dec 2017 upon receipt of the approved list. Eti-Osa is yet to submit the list approved by LSPHCB.

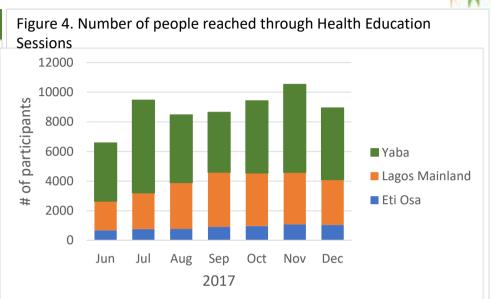
#### 2.2. Community Health Education Talk Sessions by Community Resource Persons (CORPs)

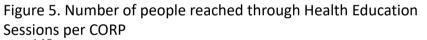


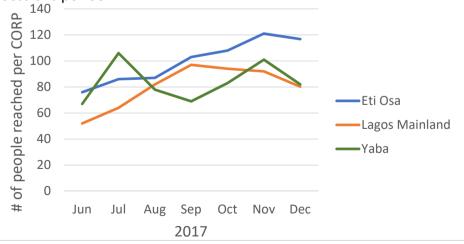
Reporting Rate in the above figure means "Verifiable Reporting Rate" that can be defined by the following formula: Reporting Rate = # reports verified / # of reports submitted

#### 2.1.2. Progress and Achievements

Eti-Osa has maintained 9 Community Resource Persons (CORPs) conducting community health education talk sessions since 2015. With the expansion of the project area, Lagos Mainland and Yaba started the implementation of the CORPs activity following the training conducted in June 2017. The numbers of CORPs in Lagos Mainland and Yaba are 38 and 59 respectively, which outnumber Eti-Osa due to the wider coverage of wards. The above schema depicts the number of talk sessions conducted, people reached out through the sessions and verifiable reporting rates by CORPs. Each individual CORP is encouraged to reach out 10 persons per session and conduct 10 sessions in a month. Figure 4 indicates positive inclination in the number of people reached since Jun 2017. In November 2017, the aggregated number of people exceeded 10,000. The inclination of Eti-Osa doesn't look discernible since the number of CORPs is small; however, Figure 5 indicates that the individual performance of CORPs in Eti-Osa is improving in view of the quantity. Constant supervision by the LGA team (mainly Health educator) has contributed to the improvement of the CORPs performance. Verifiable reporting rate fluctuated although some improvement can be observed. Monthly Performance Review Meetings have been regularly implemented as planned by all the local governments.







#### 2.2. Community Health Education Talk Sessions by Community Resource Persons (CORPs)



#### 2.2.3. Good Practice

### 1) Severely Malnourished Children Identification by a CORP

A health education talk session was conducted in Abule Oja Ward, Yaba on 23rd November 2017 under the supervision of the Health Educator. A severe malnourished female child was identified by the CORP through MUAC measurement. The mother was advised on nutritional supplements for her child on the spot by the Health Educator. The girl was immediately referred to Alhaji Kola-Osho PHC and further referred to Mercy Children Hospital for proper treatment.



#### 2) Chickenpox suspect identification by CORP

During a health education talk session conducted at Junior Quarters in Iponri/Olaleye Ward, Lagos Mainland on 19 Dec 2017, the CORP found two children aged 6 and 8 years with chickenpox-like symptoms. The CORP immediately referred the children with the mother to Simpson PHC. The CORP made follow-up on the referral by two phone calls to the mother to make sure the children were treated. The CORP confirmed that the children had been healed before the end of the year.

#### 2.2.4. Challenges

- Some CORPs are active and enthusiastic while others are not.
- CORPs' verifiable reporting rates of Lagos Mainland and Yaba have improved through series of performance review meetings although they still make common mistakes.
- CORPs are paid for transportation to conduct health education talk sessions based on their performance (number of verifiable reports submitted for the previous month). The support motivates them to deliver education sessions to the community; however, transportation support poses a big challenge for the LGAs to maintain. In addition, to check and verify the CORP daily registers and calculate the transportation fee based on the performance is a tedious work, which is difficult for the LGA teams to sustain.

#### 2.2.5. Looking Ahead



#### **2.3. Community Engagement through WHCs**

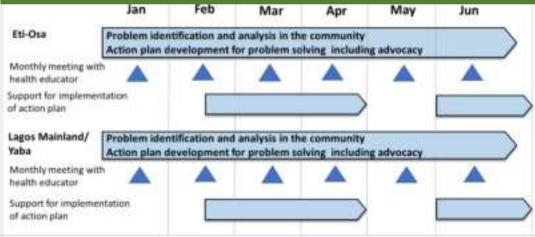


11

				🚫 Hit	On track	Action 🕕 R	tisk 🔞 Miss
	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Eti Osa		8		0		$\Delta O$	00
	WHC Meeting with Health Educator	WHC Meeting with Health Educator	WHC Meeting with Health Educator	WHC Meeting with Health Educator	WHC Meeting with Health Educator	WHC Meeting with Health Educator	WHC Refrester training
	Community Dialogue: 100 participants		Community Dialogue: 100 participants		Meeting with PHCB and LGA Teams on WHC Roles	Meeting With PHCB and LGA Teams on WHC Roles	WHC Meeting with Health Educator
agos		0	00	00			00
Mainland/ Yaba		WHC Meeting with Health Educator	WHC Meeting with Health Educator	WHC Meeting with Health Educator	WHC Meeting with Health Educator	Meeting with PHCB and LGA Teams on WHC Roles	WHC Refresher Training
			Yaba Community	LM Community	Meeting with PHCB and	WHC Meeting with	WHC Meeting with

#### 2.3.1. Activities Undertaken

#### 2.1.3. Looking ahead

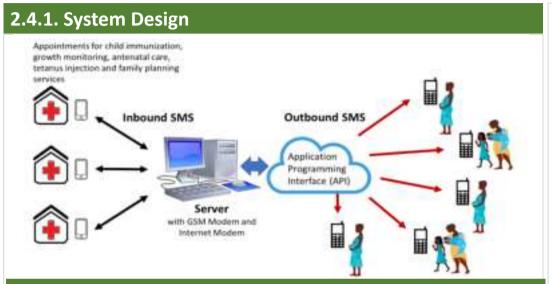


#### 2.3.2. Progress and Challenges

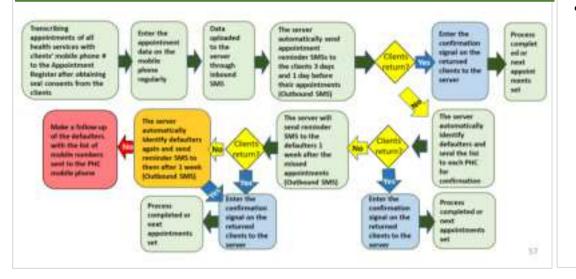
- Monthly WHC Chairmen Meetings with the Health Educator have been regularly conducted in Lagos Mainland. To the contrary, the meetings in Eti-Osa were not regular.
- Community dialogue meetings have not been implemented in an appropriate manner. The meetings served as an extension of health education sessions instead of a means of identification of community health challenges and needs. WHC members appeared to have forgotten their roles and responsibilities.
- The problem was reported to LSPHCB Directorate of Health Education and MOHs of LGAs/LCDA. A stakeholders meeting was convened by LSPHCB in Oct 2017 inviting key stakeholders including three WHC Chairmen to discuss the issue. The meeting concluded that WHC refresher training should be organized to reactivate WHCs. A coordination committee was formed to prepare the training. One-day refresher training was prepared to remind WHC members of their roles and responsibilities and equip them with knowledge and skills to develop action plans for solving problems.
- The refresher training was conducted from 27 Nov to 5 Dec 2017 in Lagos Mainland and from 6 to 7 Dec 2017 in Eti-Osa targeting all 15 WHC members for each ward including supporting members. Some inactive WHC members have been replaced with active community members.
- WHCs are expected to be more active for community engagement in improvement of health services and accessibility.
- The Project is planning to provide support to the WHCs for developing an action plan (small-scale project) and implementing it.



12



#### 2.4.2. Operations Procedure

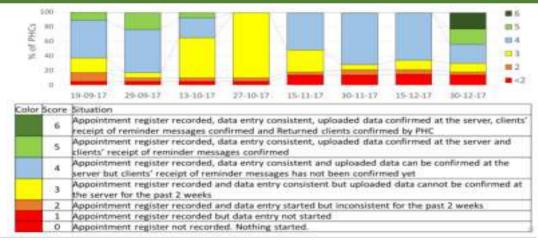


- Experience in Eti-Osa LGA revealed that defaulter tracing by phone calls is an effective intervention to have defaulters back for health services. The defaulters' return rate in the intervention group who received phonecalls from the health facility was 25 % higher than the control group.
- Based on this experience, the project further developed a mobile application to send SMS messages for reminding appointments to clients and tracing defaulters for pilot testing in Lagos State.
- One hundred PHCs in the state were selected for the pilot phase. All sort of appointments are daily made at PHCs. The key health services targeted for the intervention includes child immunization, growth monitoring, tetanus vaccination, antenatal and postnatal care and family planning.
- At the PHCs, the trained staff transcribes the appointment information from the respective service registers to the appointment register. The information is inputted and transmitted to the server through the mobile application (Inbound coded SMS).
- Based on the information the server randomly allocates the clients into intervention groups and control group and send the reminder SMS messages to the clients 3 days and 1 day before the appointment day accordingly through a cloud application (Outbound SMS).
- When a client comes back to the health facility, the staff confirms the client's fulfilment of the appointment through the mobile application with a coded SMS. If confirmation is not done, the server recognizes the client as a defaulter and send one reminder after one week and another reminder after two weeks. The server send a list of the defaulters who never come back even after second reminder to the health facility for their further follow up.



				🕑 Hit 😗 On	track Action	🕕 Risk 👩 Mis
Jun	Jul	Aug	Sep	Oct	Nov	Dec
00	$\bigcirc \bigcirc $	0	OOA(	<b>OOA</b>	ACO	
Mobile application	Meeting with LSMOH for	Follow-up supervision	Phone call mentoring	SMS network disruption	A Focal Person at PHCB	Phone call mentoring
final test and modification	relocation of the server	visits to all 100 PHCs	Reporting to PHCB	remained and caused the	appointed SMS	Reporting to PHCB
TOT Training for LSMOH &	TOT Training for LSMOH &	Intermittent power supply	Relocation of the Server	whole system malfunctional	Network recovered pp 4 Nov	Regular weekly meeting
РНСВ	PHCB Training of	to the Server disturbing	and installation of	Reporting to PHCB	Phone call mentoring	With PHCB Preparation
	record officers of 100 PHCs,	appointment data upload	a Solar Power System to the	Negotiation with 4	Reporting to PHCB	of Reorientation Training
	members to the Server SMS Network compa	to the Server SMS Netw	or SMS Network companies	companies	Regular weekly meeting	
	100 mobile phones and IEC materials		disruption	for SMS	with PHCB	
	distribution to PHCs		started on 19 Sep	package	Agreement wi documented	

#### 2.4.4. Progress and Challenges



- Facilitators training (TOT) on the system operation was conducted in Jun and July 2017. Two staff (mainly record officers) from each of the selected 100 PHCs were trained on the operation of the mobile application in July 2017. One smart phone with the application, operation manual, telephone directory of 289 PHCs and poster and appointment registers have been distributed during the training.
- The operation has started immediately after the training. In August 2017, a follow-up supervision visit was conducted to all 100 PHCs for their smooth initiation. Monitoring the PHCs' performance also started on the server interface. Biweekly monitoring reports have been issued and shared with LSPHCB and key stakeholders.
- The bar chart on the left summarizes biweekly monitoring results. PHCs are scored 0 to 6 based on their performance and color-coded as per definition.
- The data of October and November 2017 clearly indicates that there were some issues. Two major logistic challenges have emerged during the first three months: irregular power supply to the server and discontinuation of 'unlimited' SMS service due to policy change of Nigeria Communication Commission. Solar power system dedicated to the server has been installed to ensure uninterrupted 24/7 power supply. SMS network issue was also solved through series of negotiations with telecom companies. These challenges seriously affected stable system operation until 4<sup>th</sup> November 2017.
- With the restoration of the SMS network at the beginning of November 2017, most of the PHCs resumed the operation and the data flow has revived as indicated on the bar chart. However, issues at some PHCs remained or rather aggravated by the network disconnection. The key issues can be summarized four-fold as follows:



14

#### 2.4.4. Progress and Challenges

- 1) No or partially transcribing information from service registers to the appointment register, which results in the decrease of the beneficiaries from the intervention;
- 2) Inactiveness in inputting appointment data into the mobile application, results in ill-timed SMS delivery or appointment data loss;
- 3) Negligence in confirmation of the clients' return on the mobile phone, which results in increase of false defaulters;
- 4) Technical incompetency in mobile app operation when they encounter error message, which causes data loss.
- These issues have been exacerbated at some PHCs by the disengagement of health volunteers who have been involved in the operation in September 2017.
- A focal person has been appointed at LSPHCB in November 2017 to collaborate in monitoring the progress and solving some of the issues. Weekly meetings have been conducted since then.
- However, monitoring and supervision mechanism has not been structured state-wide. JICA Project Office has still been directly providing supervision to PHCs through telephone calls and physical visits. The existing primary health care monitoring and supervision structure shall be utilized for the intervention.
- Most of PHC staff perceive the operation as the extra workload and demand incentives.
- The accumulated data at the server isn't amenable enough to scientific analysis on the effectiveness of the intervention.
- Communication cost is extremely high. Costing has been done and described in the next page.

#### 2.4.5. Looking Ahead

	Jan	Feb	Mar	Apr	May	Jun
Phase 1: 100 PHCs	upervision	through physi	cal visits and r	emote mento	ring through t	telephone
Refresher Training		A Training				
Expansion to 192 PHCs		TOT Train		vision and Me	intoring to 19	2 PHCs
Weekly meeting with PHCB Focal Person						1
Biweekly monitoring Reporting to PHCB						
RIWG Meeting						
Negotiation with Telecom Companies		4				-

- Refresher training is planned in January 2018 to rectify the challenges at the PHC level.
- Expansion to 192 PHCs is planned in February 2018 after operational improvement in 100 pilot PHCs is observed.
- Weekly meeting with the focal person of LSPHCB and the biweekly monitoring and reporting shall continue
- Negotiation with telecom companies shall start to solicit their support as part of their corporate social responsibilities (CSR).

#### 2.4.6. Costing

- Costing for 100 PHCs has been done as depicted in the tables on the right. Number of annual total number of appointments for ANC, child immunization, growth monitoring and family planning services at all PHCs was estimated based on the state-level data from DHIS2 for 2017. The estimated number of appointments to be made by PHCs in a month is 235,000. Considering the volume of clients, the estimated number of appointments at a comprehensive PHC in a month could be 1,570 and 520 at an ordinal PHC. One inbound SMS can carry maximum 13 coded appointments. The estimated number of appointments that one SMS carries at a high volume PHC could be 5 and 4 for a low volume PHC. These assumptions are used for costing.
- The table at the bottom elaborates costing. The columns in blue denote inbound communication and in green outbound communication. Other assumptions on costing were: 1) 50% of clients will return after the appointment reminder; 2) 50% of defaulters will return after the first defaulter reminder; 3) All health facility staff will work on the intervention diligently by uploading appointments and confirming returned clients; 4) The exchange rate to USD remains unchanged; 5) No communication network breakdown or price destruction in SMS communication will occur.
- The monthly inbound communication may cost NGN101,000 while the outbound could be estimated NGN1,620,942, which extravagantly elevates the communication cost to NGN1.72M per month.
- Currently, the outbound SMS delivery ought to rely on a cloud-base software called Twilio that can transmit SMS to any telecom carriers. It costs 0.023 USD per SMS equivalent to NGN8.28. The service provider is based in the US. Unfortunately, such service is not locally available.
- The cost will expand to NGN3.7M per month with the expansion of the PHC coverage to 292.

Rough Estimates of Appointments at Public PHCs by Key Services based on ANC, Immunization, FP Data from DHIS2 for the year 2017.

# of monthly appointments at PHCs	235,000
Total annual appointments expected at PHCs	2,817,200
# of Growth Monitoring Appointments	680,400
# of FP Appointments	294,200
# of Child Immunization appointments (Annual)	1,814,400
# of ANC appointments (Annual)	28,200

Estimated Number of Appointments at Public PHCs

	# of	Estimated Volume Ratio	appointm ents to be made by PHCs per month adjusted	Estimated # of appointm ents per PHC per month adjusted	# of
Comprehensive PHC (24/7)	79	3	123,800	1,570	393
Ordinal PHC (8/5)	213	1	111,200	520	130
Total	292		235,000	U	

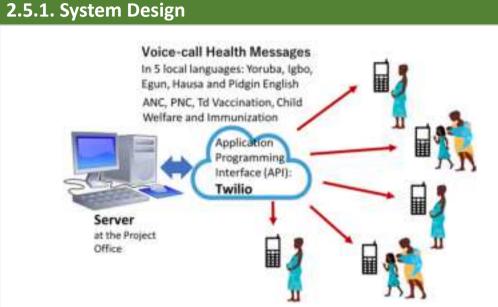
#### **Estimated Communication Cost for 100 PHCs**





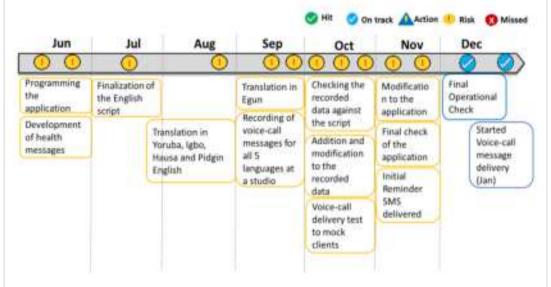
#### 2.5. Automatic Voice-call Health Message Delivery





- A dire need for correct information on maternal and child health was identified through various project activities especially among women who don't speak English and live in urban slums or riverine settlements.
- This intervention is designed to directly deliver health messages to antenatal, postnatal and newborn care women in their preferred language. Twenty-three messages are sequenced and programmed in accordance with stages of pregnancy and age of newborn baby: five messages for antenatal period and eighteen for post delivery period. One message is delivered every other week until nine months after delivery.
- The messages are translated into 5 local languages: Yoruba, Igbo, Hausa, Egun and Pidgin English. Target audience is 1,500 women who were interviewed in the Baseline Survey (then-pregnant) conducted in February – March 2017 and were interested in receiving the voice-call messages.

#### 2.5.2. Progress and Challenges



- The intervention delayed due to inappropriate planning at the initial stage. The original English script was finalized at the end of June 2017. Translation into 5 local languages was completed in the middle of September 2017 and voice recording at the end of September 2017.
- Pre-test of the application was done in Oct 2017 and modification of audio data and application program was made in November 2017 to reflect feedback from the pre-test. It was also discovered that randomization for intervention and control groups was not programmed in the system.
- The delay has already affected the intervention since the most of the pregnant women participated in the baseline survey in Feb 2017 must have already delivered their babies by Oct 2017 and missed the opportunities to listening to health messages tailored for antenatal and postnatal period.

## 1

17

#### 2.5. Automatic Voice-call Health Message Delivery

#### 2.5.2. Progress and Challenges (cont.)

- An SMS had to be sent to all 1500 mothers at the end of November 2017 to remind the mothers of the voice-call message delivery since the dormant interval was too long for them to recall agreeing to receive such messages. This exercise revealed that 17 mobile numbers registered for this intervention were no longer existing.
- There were also some glitches identified in the program that needed to be fixed.
- The first Voice-call message was sent on 4th and 5th January 2018. Most of the mothers either rejected to receive it or just hung up the phone. The reminder SMS sent in November 2017 made very little impact on them. The Project staff had to manually call all 1500 mothers one by one and convince them to accept the voice-call messages.
- The program developer has been taking too much time to develop the server interface. Their promise to complete the interface by the end of 2017 was not fulfilled.
- The intervention period is too short to demonstrate its effectiveness. The number of women that the intervention could capture will be very limited due to the delayed initiation.
- The program is designed for research purpose, targeting only those women interviewed for baseline survey conducted in Lagos Mainland in February 2017. Moreover, random categorization of the women into intervention and control groups is programmed. This means that not every women who expressed their willingness to receive the messages will actually receive them. Therefore, the software program needs to be redesigned for general use.

#### 2.5.3. Looking Ahead



- The development of server interface needs to be completed urgently.
- Message delivery shall go on while the server interface is being completed.
- The message delivery shall be monitored with the interface.
- Regular meeting shall be held with LSPHCB.
- Redesign of the software program in conjunction with the appointment reminder shall begin in March 2018.
- Negotiation with telecom companies shall be initiated in order for them to take up the intervention as part of their corporate social responsibility (CSR)

#### 2.5. Automatic Voice-call Health Message Delivery



#### 2.5.4. Costing

- Currently, the Voice-call Message delivery ought to rely on a cloud-base Application Programming Interface (API) called Twilio that can transmit voice-call messages to any carriers. The payment is done in USD since the service provider is based in the US. Unfortunately, such service is not locally available. It costs 0.12 USD per minute to send a message to a client, which is equivalent to NGN 43.2 with the current exchange rate of 360.
- According to DHIS2, 28229 antenatal 1st visits at Public Facility Primary Health Centres (PHCs) were reported in 2017. Therefore, this figure was used as proxy of ANC appointments to be made annually at PHCs. There are slight variations in the total length of the messages among the languages, which cause different costs by languages.
- The current total cost incurred for the intervention is not much due to the limited number of target population, which is the 1500 women who participated in the baseline survey and accepted to receive voice-call messages. The targeted mothers are further randomly categorized into two groups: Intervention and Control. The maximum estimated cost could be therefore, 3.2M NGN for one year. However, if the intervention is to cover all ANC1 registered mothers at public PHCs, the cost will inflate to 120M with an assumption that all mothers will accept to receive voice-call messages and listen to all 23 messages fully. The incurred cost will change depending on the coverage.
- The intervention coverage could be strategically determined. For instance, if the intervention is applied to only Egun and Hausa speaking women (estimated number: 4,230), the cost will be reduced to NGN17.3M. Table below elaborates the costing.

Communica	Communication Cost Estimate for Voice-call Messages Exchange rate: 360 28200											
	•	Unit cost for transmitting voice call by	transmitting	Total Cost	Total Cost	Estimated %	# of					
	messages	Twilio (USD)	Twilio (NGN)	Per Client	Per Client	of language	mothers	Total Cost	Total Cost			
Language	(min)	per minute	per minute	(USD)	(NGN)	population	(28,200)*	(USD)	(NGN)			
Yoruba	98	0.12	43.2	11.76	4233.60	35%	9,870	116,071	41,785,632			
Pidgin	101	0.12	43.2	12.12	4363.20	40%	11,280	136,714	49,216,896			
Egun	86	0.12	43.2	10.32	3715.20	10%	2,820	29,102	10,476,864			
Hausa	112	0.12	43.2	13.44	4838.40	5%	1,410	18,950	6,822,144			
Igbo	101	0.12	43.2	12.12	4363.20	10%	2,820	34,178	12,304,224			
Total							28,200	335,016	120,605,760			



#### 2.6. Coordination for TBA Referral & Reporting

#### 2.6.1. Background

- Taking into consideration of roles that Traditional Birth Attendants (TBAs) have been taking as informal community health care providers in the communities, the Project supported TBA registration and training in the past as part of the project intervention.
- An operational research on the effectiveness of TBA training was conducted during the period of October 2016 – March 2017. Comparison was made between the trained and the un-trained in terms of their knowledge and practice. The research concluded that the training of TBAs have some indication of effectiveness in improving TBAs knowledge and practice in some areas; however, they were not good enough to meet the standard criteria of skilled birth attendants. Based on the conclusion, the Project removed expressions containing 'trained TBAs' from the Project Design Matrix (PDM) and stopped supporting training of TBAs. At the Third JCC, the Project was asked to facilitate TBA coordination.
- Lagos State Traditional Medicine Board (LSTMB) submitted a concept paper to LSMOH in May 2017 to recommend necessary steps for clarification of the State's position on TBAs' roles, facilitating TBA registration and training process, establishment of supervision and M&E system and legal sanctions on non-registered practitioners. TBA Standard Operating Procedures accompanied by reporting and referral tools were drafted and submitted to LSMOH and LSPHCB; however, they had not been thoroughly discussed with stakeholders

#### 2.6.2. Activities Undertaken



#### 2.6.2. Progress and Challenges

- JICA convened a stakeholder coordination meeting on 27th October 2017, involving LSPHCB, LSTMB, Eti-Osa and Lagos Mainland LGAs and Yaba LCDA, to create a common understanding regarding the status quo in the realization of the recommendations enumerated in the above-mentioned concept paper, discuss specific needs that JICA can support and how coordination and collaboration can be reinforced.
- Some of the facts were debunked during the meeting. TBA reporting tools was developed with the support from PATHS2 Project; however, not all relevant stakeholders were involved in the process and thus official reporting path was not established. Data collected from TBAs under PATHS2 project was not appropriately handed over to either LSPHCB or LSTMB.



#### 2.6. Coordination for TBA Referral & Reporting

#### 2.6.2. Progress and Challenges (cont.)

- Several urgent needs identified in the meeting were:
  - 1) Harmonization and standardization of referral mechanism from TBAs to health facilities in line with the State's health systems;
  - 2) Standardization of data collection system of TBA service statistics;
  - 3) Development of standard of care for TBA practitioners based on the latest TBA training manual and supportive supervision checklist; and
  - 4) Enforcement of TBA registration policy to eliminate quacks.
- In view of the above and in consideration of the project duration, the Project has determined to support LSPHCB for the development of a standardized referral and reporting system that can be used state-wide through outsourcing the assignment to a technical consultant.
- Terms of Reference for hiring a consultant for the development of TBA referral and reporting system has been approved by LSPHCB. The Project has started the procurement process. A shortlist of consultants was developed.
- The Project has very limited time and budget for this activity.

#### 2.6.3. Looking ahead



- A consultant will be recruited to perform the work.
- A technical working group will be formed to provide technical guidance to the consultant for the development process and inputs for the draft products.
- Pilot-test including training of TBAs will be conducted in Eti-Osa, Lagos Mainland and Yaba.
- The final draft shall be ready by the end of June 2018.

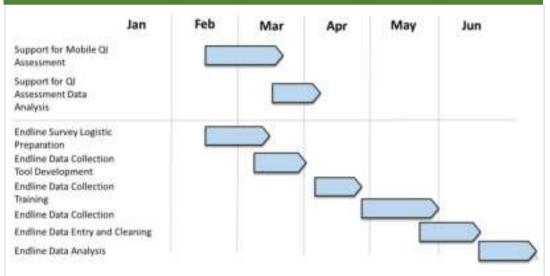
#### 2.7. Quality Improvement and Research

#### 2.7.1. Activities Undertaken

Jun	lut	Aug	Sep	Oct	Nov	Dec
QI Assessme and analysis	nt Data entry				Meeting with PHCB QF Team to	
	Meeting with PHCB QI Team				discuss possible JICA support	
	Transformat ive Action Group (TAG) Workshop on Impact Evaluations					

- In June and July 2017, the Project provided assistance to LSPHCB in data entry and analysis of PHC quality assessment conducted in April and May 2017.
- Transformative Action Group Workshop was conducted in July 2017 on impact evaluation of the Project, involving group members from LSMOH, LSPHCB and Eti-Osa, Lagos Mainland and Yaba LGAs/LCDA.

#### 2.7.2. Looking Ahead



- Support for development of mobile QI assessment tool and data analysis will be provided.
- Preparation for dndline survey data collection shall start in February 2018 and data collection will be conducted in May June 2018.

#### 2.8. Stakeholder Collaboration and Advocacy



2.7.1. Activities Undertaken

- Participation in the advocacy meeting organized by LSPHCB in October 2017 targeting the newly elected LGA/LCDA Chairmen served as an excellent opportunity for the JICA experts to introduce JICA to the Chairmen through the good-will remark.
- Courtesy visit to the Chairman of Lagos Mainland LGA has not been made yet.
- Support was provided for the second Social Mobilization Technical Group Meeting in December 2017.

#### 2.7.2. Looking Ahead



• Measles Vaccination Campaign in March 2018 and MNCH Week in May will be supported by the Project.

## **03** Progress in line with the Project Design Matrix (PDM\*)

\*PDM is an annex of the official document (Record of Discussion) signed by both Nigeria Government and JICA for implementation of the project. It is a matrix laying out the project design that summarizes the project elements in a logical way: goal, purpose, outputs and activities with verifiable indicators and means of verification.









Output 1: Pro-poor community health package and its operation guide are developed and submitted for official approval by Lagos State Ministry of Health.

No.	Activity described in PDM	Actual activity conducted or to be conducted	Implementation Status	S
1-1	Conduct, analyze, and share baseline	Needs Assessment in Eti-Osa	Completed in Dec	
	assessment on geographical,		2014	
	demographic, economic, social, and	Baseline Survey in Eti-Osa	Completed in Aug	
	health aspects in target communities		2015	
		Baseline Survey in Lagos Mainland	Completed in Apr	
			2017	
1-2	Integrate pro-poor community health	Sharing project progress in MNCH CTWG	On-going	
	components into the responsibility of the	Meetings, Routine Immunization TG Meetings		
	Core Technical Working Group on MNCH	and Social Mobilization WG Meetings		
1-3	Jointly develop, pro-poor community	Development of operation guides (Outreach,	To be conducted	
	health package, and operation guide and,	CORPs' Health Education, WHC Empowerment,		
	if needed, revise them based on field-	Appointment Reminder and Defaulter Tracing,		
	testing	Voice-call Message Delivery and TBA Referral		
		and Reporting)		
1-4	Support PHCB in monitoring and	Support for Quality Assessment of PHCs	Conducted in Jul 2017	
	supervision		To be conducted	
		Monitoring and supervision on AR&DT	On-going	
		operation, CORPs health talks, Outreach		
		Monitoring on Voice-call message delivery	On-going with delay	
	Completed On-going To be and on track conducted	To be conducted with delay Not conducted or no concrete plan	l and no plan	

24



Output 2: Capacities of PHC Board, LGA Health Teams, and Ward Health Committees (WHCs) are strengthened to support target communities.

No.	Activity described in PDM	Actual activity conducted or to be conducted	Implementation Statu	JS
	Conduct capacity assessment for effectively implementing project's activities (LSPHCB, LGA Teams and WHCs)	Pre- and post-test of Leadership and Management Training and WHC training/refresher training	Completed in Jun 2015, Jul 2015, Feb 2017 and Dec 2017	
	Conduct basic training on leadership, management, and governance according to the assessment results	Training on leadership, management and Governance for LSMOH, LSPHCB and Eti- Osa LGA Team TOT for C-IMCI (CORPs) Training, WHC Training, AR&DT Training	Completed in Jun 2015	
	Regularly conduct consultative stakeholder meetings for pro-poor community health services among relevant organizations	Consultative stakeholders meetings with LGA Teams	On-going	
	Conduct monitoring and evaluation (M&E) of capacities of PHC Board, LGA Health Teams, and Ward Health Committee (WHC)	No activities conducted or planned for monitoring and evaluation of capacities of PHCB and LGA Team		
		Conduct monitoring and evaluation of capacities of WHCs	To be conducted	



Output 3: Primary health centers (PHCs) are functioning enough to provide pro-poor community health services through improvements of performance of community health officers (CHOs), community health extension workers (CHEWs), other PHC workers and Ward Health Committee (WHC) members

No.	Activity described in PDM	Actual activity conducted or to be conducted	Implementation Status	
3-1	Conduct and review performance and quality assessment for CHOs,	Support for Quality Assessment of PHCs	Conducted in May-Jul 2017	
	CHEWs, other PHC workers and WHC members		To be conducted	
3-2		Adoption of Training Material on C-IMCI for CORPs	Completed in 2015	
	health training materials through	Adoption of WHC Training Material	Completed in Nov 2017	
	reviewing and adopting the existing	Development of AR&DT Training Material	Completed in Jul 2017	
	training materials	Modification of AR&DT Training Material	On-going	
3-3	Conduct on-site training on	On-site Supervision to PHCs on AR&DT	On-going	
	community health services	On-site Supervision to Immunization Outreach	On-going	
		On-site Supervision to CORPs' health education sessions	On-going	
		Support for Quality Assessment of PHCs	Conducted in May-Jul 2017	
			To be conducted	
3-4	Support implementing bi-monthly	Support for implementation of outreach to hard-to-	On-going	
	outreach activity	reach sites		



Output 3: Primary health centers (PHCs) are functioning enough to provide pro-poor community health services through improvements of performance of community health officers (CHOs), community health extension workers (CHEWs), other PHC workers and Ward Health Committee (WHC) members

No.	Activity described in PDM	Actual activity conducted or to be conducted	Implementation Status	
3-5	_	Telephone mentoring & on-site supervision on AR&DT	On-going	
	performance	Support for Quality Assessment of PHCs	Conducted in May-Jul 2017 To be conducted	
3-6		Initial Training of WHCs for Eti-Osa Initial Training of WHCs for Lagos Mainland	Completed in Jul 2015 Completed in Feb 2017	
	members	Refresher training of WHCs	Completed in Nov-Dec 2017	
		Initial Training of CORPs in Eti-Osa Initial Training of CORPs in Lagos Mainland Refresher training of CORPs	Completed in Nov 2015 Completed in Mar 2017 To be conducted	
3-7	Organize joint regular meetings	Refresher training of CORPs Support for TBA registration and training WHC monthly meetings with Health Educators	Completed in 2015 On-going	
	between PHCs and WHCs to strengthen their linkage	Problem analysis and action plan development in WHC refresher training with Facility In-Charges	Completed in Nov-Dec 2017	
		Quarterly meeting for developing a proposal for improvement between PHC and WHC	To be conducted	



Output 4: Populations in the model sites improve health seeking behaviors through health promotion activities at community level

No.	Activity described in PDM	Actual activity conducted or to be conducted	Implementation Statu	IS
4-1	Conduct situation analysis for current status of health promotion	Problem identification, analysis and action plan development by WHC	To be conducted	
4-2	Open a strategic dialogue on community health between community leaders and stakeholders	Problem identification, analysis and action plan development by WHC	To be conducted	
	Create multiple communication channels at community level (eg: Between community health volunteers	Support CORPs to conduct health education sessions in their communities	On-going	
	and mothers' group, School health	Empower WHCs to act as a mediater between their communities and PHCs/LGAs	On-going	
		Delivery of appointment reminder and defaulter tracing SMSs to PHC clients	On-going	
		Delivery of voice-call messages to pregnant women and mothers	On-going with delay	



On-going and on track

To be conducted

To be conducted with delay or no concrete plan





Output 4: Populations in the model sites improve health seeking behaviors through health promotion activities at community level

No.	Activity described in PDM	Actual activity conducted or to be conducted	Implementation Statu	JS
	Develop and conduct innovative approaches for promoting	Development and operationalization of appointment reminder and defaulter tracing SMSs system	On-going	
	community health services	Development and operationalization of voice-call message delivery system	On-going with delay	
		Development of Standardized TBA referral and reporting mechanism	To be conducted	
	Conduct community sensitization, advocacy, and campaigns for	Support CORPs to conduct health education sessions in their communities	On-going	
	community health services	Empower WHCs to act as a mediater between their communities and PHCs/LGAs	On-going	
		Courtesy visits to LGA Chairmen	On-going	
		Support MNCH Week, Measles Campaign, NID	On-going	

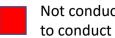


On-going and on track

To be conducted



To be conducted with delay or no concrete plan





Output 5: Strategic options for nationwide and/or state-wide scaling-up pro-poor community health service systems are developed based on evidence generated by operation research.

	Develop research designs and protocols	Develop operational research design and protocol for		
		5 II ,	2016	
	research clearance	LSMOH and the Lagos State Univ. Teaching Hospital		
		Health Research Ethics Committee		
		Develop research designs and protocols for the	Completed in Jun	
		research in Lagos Mainland and get approval by the	2017	
		LSMOH and the Lagos State Univ. Teaching Hospital		
		Health Research Ethics Committee		
5-2	Conduct data collection and analysis	Baseline Survey	Completed in Mar	
	through baseline and end-line surveys		2017	
		Endline Survey	To be conducted	
5-3	Develop strategic options for the state-	Development of operation guides (Outreach, CORPs'	To be conducted	
	wide and/or nationwide scaling-up	Health Education, WHC Empowerment, Appointment		
	strategies in an evidence-based manner	Reminder and Defaulter Tracing, Voice-call Message		
		Delivery and TBA Referral and Reporting)		
5-4	Conduct regular meetings and forums	Sharing project progress in MNCH CTWG Meetings,	On-going	
	with Federal Government Authorities,	Routine Immunization TG Meetings, Social		
	State Government Authorities, Local	Mobilization WG Meetings and SOLM Steering		
	Government Authorities, and	Committee Meetings		
	Development Partners to share project	Sharing project progress at the Federal Level	To be conducted	
	achievements and lessons-learned.			



## Project Purpose: Pro-poor health service systems are established and strengthened for sustenance using standardized models

Indicators described in the PDM	Indicators specified	Means of verification
1. Pro-poor community health	Availability of Pro-poor Community Health Model and	Document
	its Operation Guide for state-wide scale-up	JCC Minutes
2. Full vaccination coverage among	Difference between the intervention exposed and the	Operational
children increases.	non-exposed groups on the % of women age 15-49 who	Research Report
	had a live birth in the past one year and whose child	(Base- and End-
		line Survey)
3. The proportion of pregnant	Difference between the intervention exposed and the	Operational
	non-exposed groups on the % of women age 15-49 who	Research Report
increases		(Base- and End-
	antenatal care more than 4 times during her recent	line Survey)
	pregnancy	
	Difference between the intervention exposed and the	Operational
	non-exposed groups on the % of women age 15-49 who	Research Report
	had a live birth attended by a skilled birth attendant in	(Base- and End-
	the past one year	line Survey)







JICA Technical Cooperation Project For Strengthening Pro-Poor Community Health Services in Lagos State