



Appointment Reminder &  
Defaulter Tracing System  
(MyHealth Project)

**Operating Manual**  
**for Primary Healthcare Centers**

March 2019

# Important Notice



Dear Fellow Staff,

The Appointment Reminder and Defaulter Tracing System has been tested in collaboration with Japan International cooperation Agency. It has gone through some challenges that shaped it entirely new system. Lagos State Primary Health Care Board (LSPHCB) has decided to maintain and expand it as a state intervention.

The system is expected to provide us with huge volume of clients' information that will be useful for all of us to plan and evaluate our health services and human resource management.

Be notified that the operation will be supervised

by the Medical Officers of Health (MOHs) and LSPHCB and all equipment for this intervention including Mobile Phones, Chargers and QR Codes are the property of LSPHCB. Please handle them with care and take ownership of implementation.

Thank you for your dedicated work.

A handwritten signature in black ink, appearing to read 'Tayo Lawal'.

Dr. Tayo Lawal

Permanent Secretary, LSPHCB

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# Goal, Purpose and Objectives



**Goal:** To provide primary health care to all

**Purpose:** To decrease defaulters of health services at primary health care level

**Objectives:**

- 1) To remind clients of their appointments by sending automatic SMS;
- 2) To urge clients who don't show up on schedule to return to health facilities for their appointments by sending another SMS;
- 3) To make contact tracing of defaulters with the lists generated by the system through follow-up calls and physical tracing.

# 2

## Implementation Modality and Responsibilities



## A. Lagos State Primary Health Care Board

### 1. Technical Working Group (TWG)

- 1) To plan, monitor and evaluate the intervention;
- 2) To supervise and provide technical guidance for the overall operation;
- 3) To mobilize resources for the maintenance and expansion of the intervention for sustainability;
- 4) To prepare annual budget for the intervention and submit it to the Permanent Secretary;
- 5) To prepare reports with evidence on clients' service utilization to the necessary authorities.

### 2. System Administrators

- 1) To monitor the implementation status at the PHC level and give feedback to TWG and MOHs
- 2) To monitor, manage and update the system
- 3) To provide technical assistance to the end users
- 4) To register users and manage the users' ID and passwords
- 5) To generate QR codes in response to the needs
- 6) To generate data on clients' service utilization and submit it to the TWG
- 7) To liaise with the database administrator to rectify issues on the application or the system

## B. Local Government Level

### MOHs, Apex CNO and Apex CHO

- 1) To supervise the system operation at PHCs under their jurisdiction
- 2) To mobilize funds for mobile communication
- 3) To plan for expansion in their local government areas
- 4) To ensure contact tracing of defaulters
- 5) To take responsibility of the tools provided including phones, chargers and QR codes
- 6) To communicate with the TWG in case of any emerging issues
- 7) To appoint the operators for this intervention

## C. Health Facility Level

### 1. OICs

- 1) To supervise day-to-day operation of the intervention;
- 2) To utilize the information 'Today's Appointment' generated by the system to prepare the facility for the health services;
- 3) To supervise follow-up calls to defaulters;
- 4) To manage the tools provided including phones, chargers and QR codes are always in good condition and in use;
- 5) To ensure that the phones are not misused;
- 6) To ensure that freshers are trained on the system.

### 3. CHOs/CHEWs

- 1) To make follow up calls to defaulters;
- 2) To make contact tracing of defaulters;
- 3) To submit a monthly report to update the Apex CHO and the MOH on the situation of defaulters.

### 2. Medical Record Officers or any other Health Staff

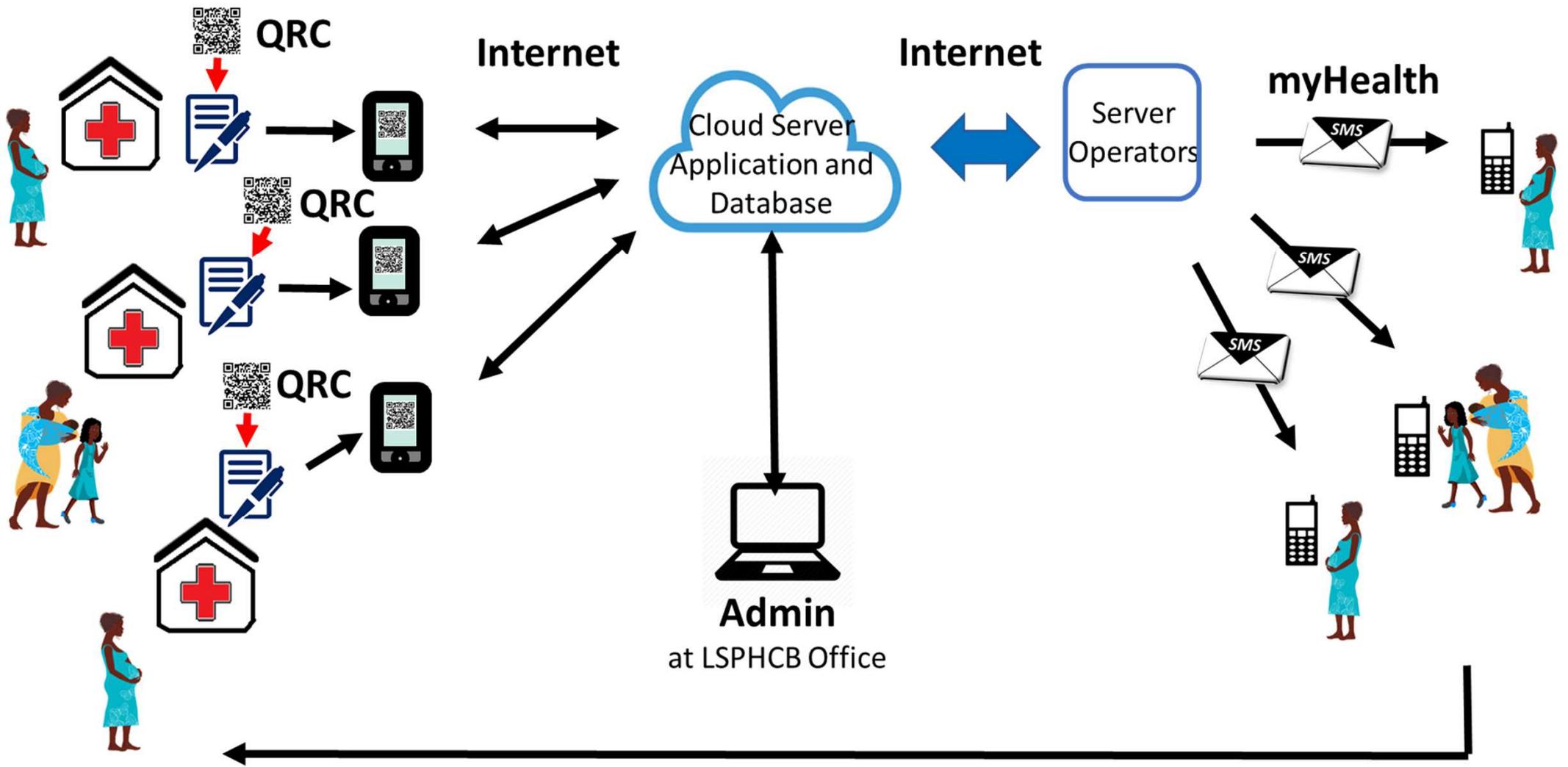
- 1) To ensure registration of all new clients;
- 2) To create appointments of all registered clients;
- 3) To manage QR codes and ensure the availability;
- 4) To ensure the safety of the phones;
- 5) To escalate any technical issues to the system administrators;
- 6) To provide feedback through the WhatsApp platform;
- 7) To assist OIC to train freshers.

**The phones are the property of LSPHCB that are dedicated for Appointment Reminder and Defaulter Tracing. Don't misuse or damage them!**

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# System Design



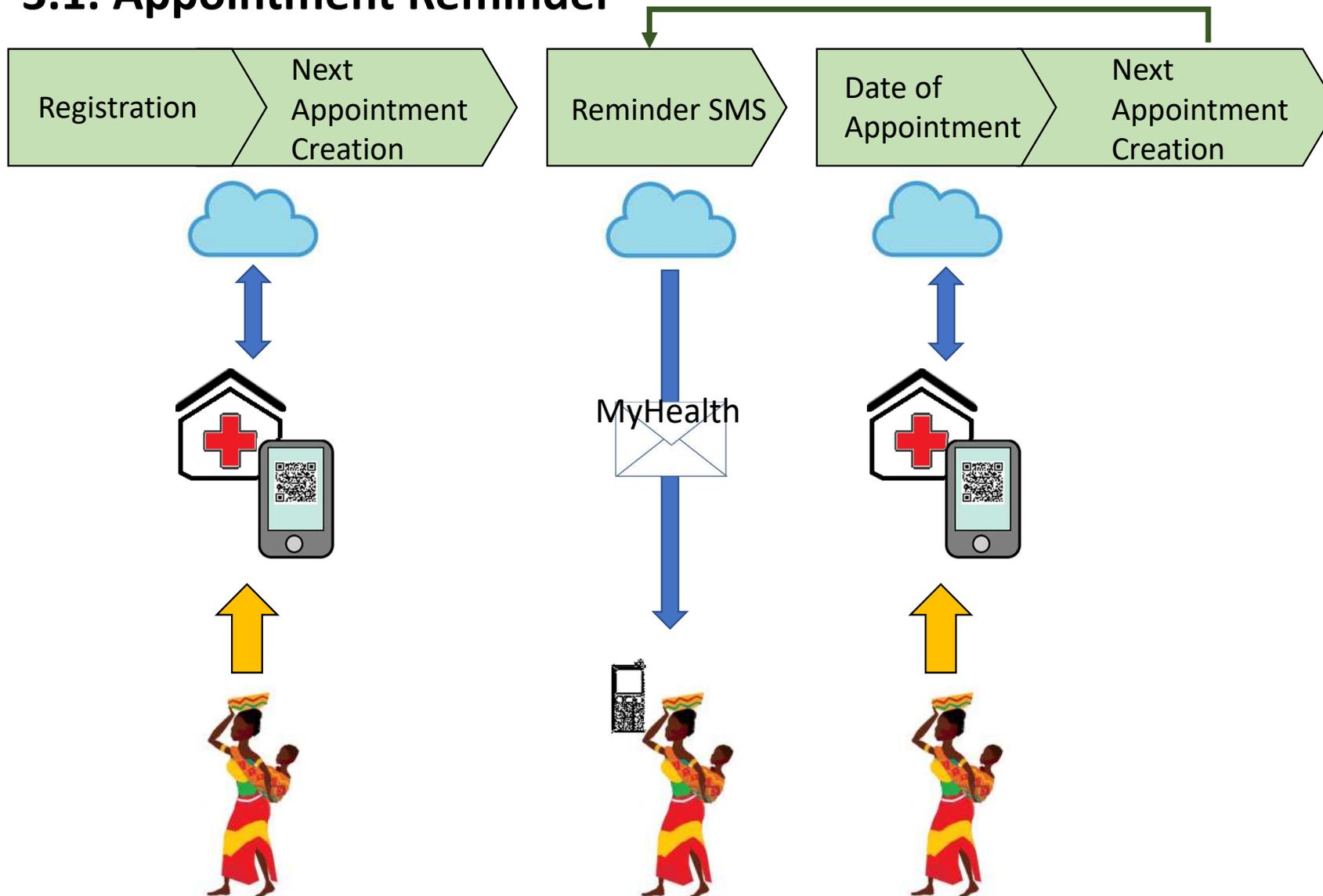


4

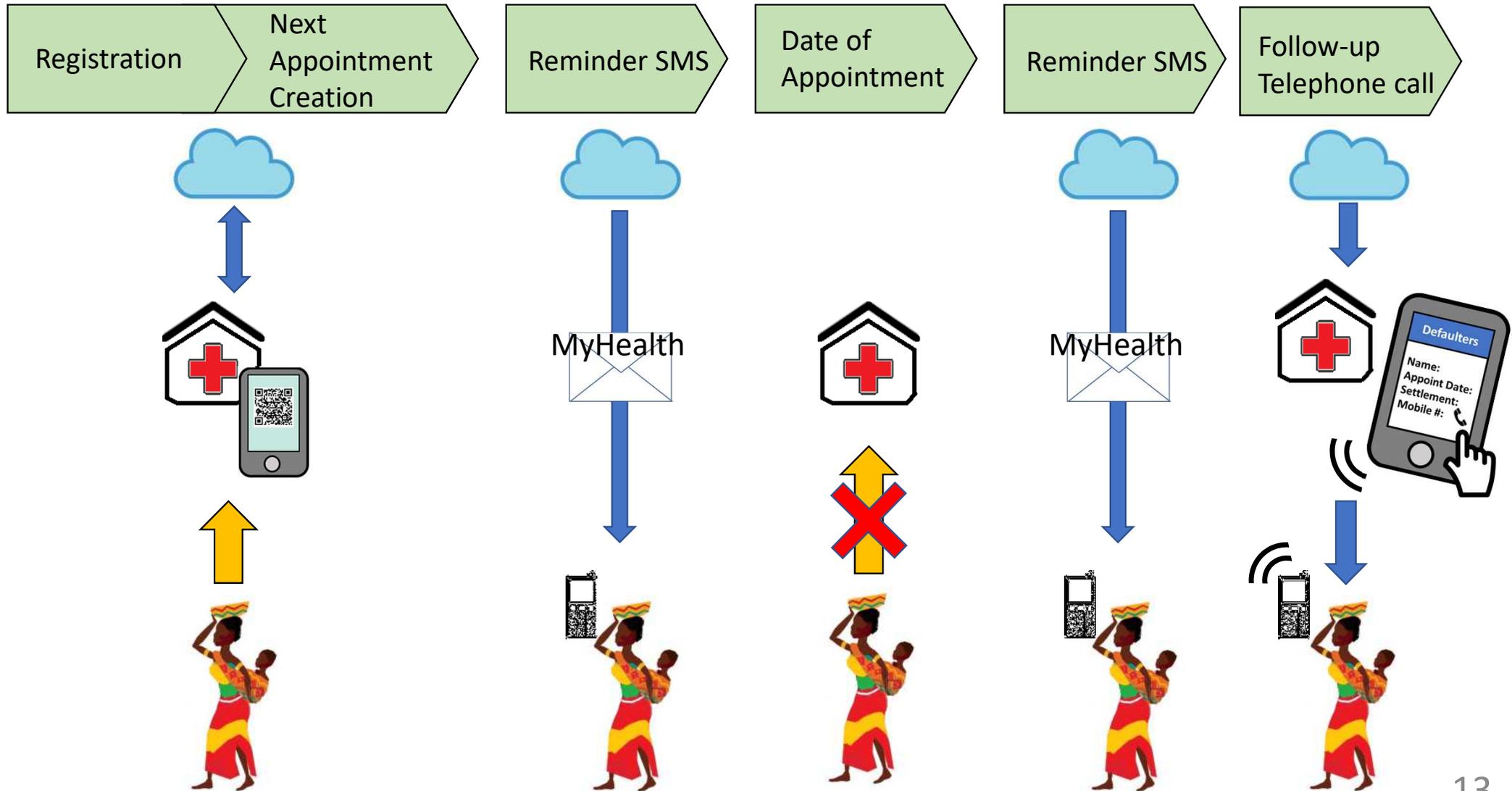
# Operation Flow



### 3.1. Appointment Reminder



## 3.2. Defaulter Tracing



5

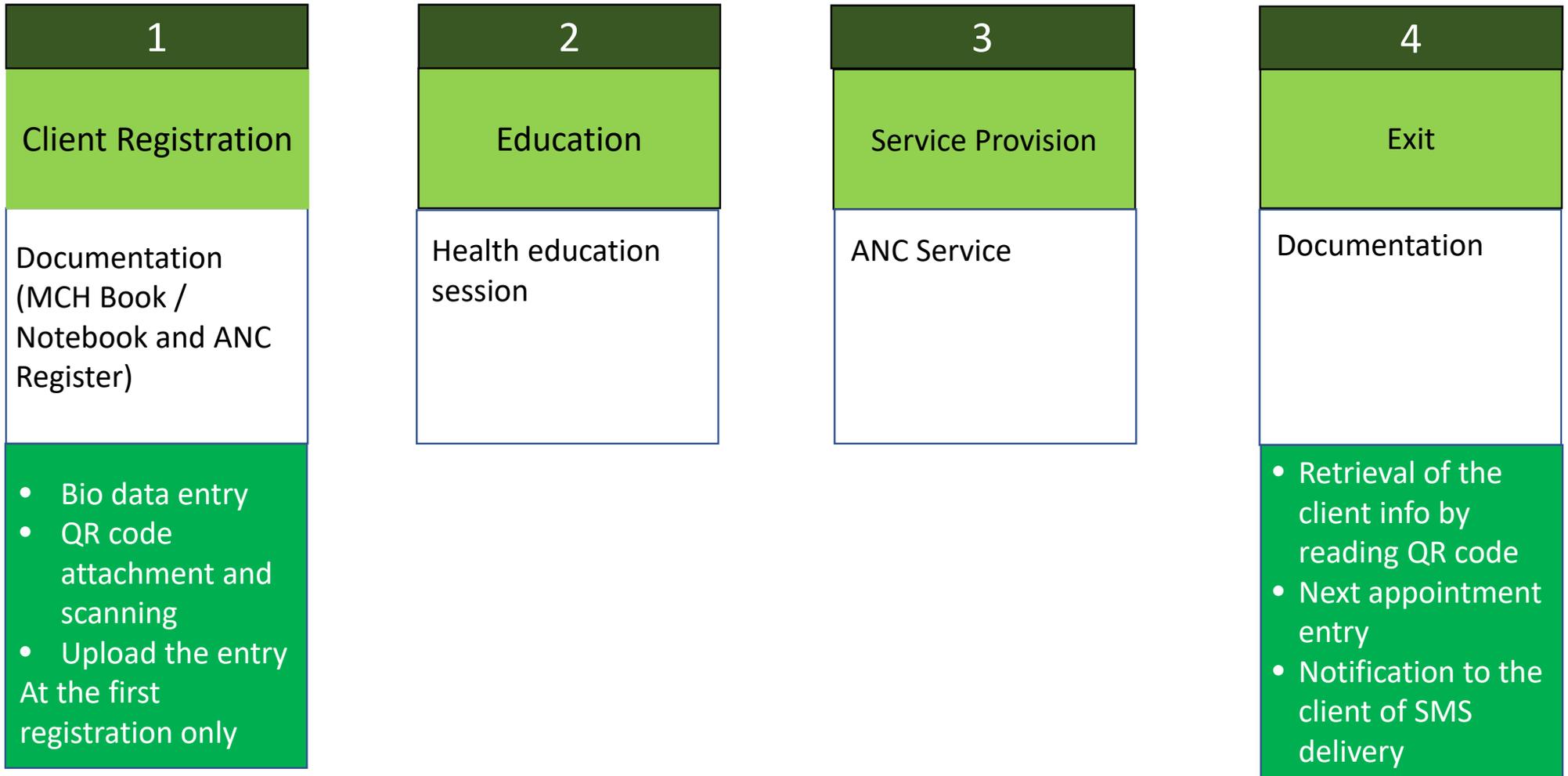
# Standard Operating Procedures



# Standard Operating Procedure (Immunization)

1	2	3	4	5
Client Registration	Growth Monitoring	Education	Service Provision	Exit
Documentation (Daily Register)	Receipt of immunization card, examination and growth monitoring measurement	Health education session	Vaccination	Documentation (Immunization Register and Card)
<ul style="list-style-type: none"> <li>Bio data entry</li> <li>QR code attachment and scanning</li> <li>Upload the entry</li> </ul> At first registration only				<ul style="list-style-type: none"> <li>Retrieval of the client info by reading QR code</li> <li>Next appointment entry</li> <li>Notification to the client of SMS delivery</li> </ul>

# Standard Operating Procedure (ANC)



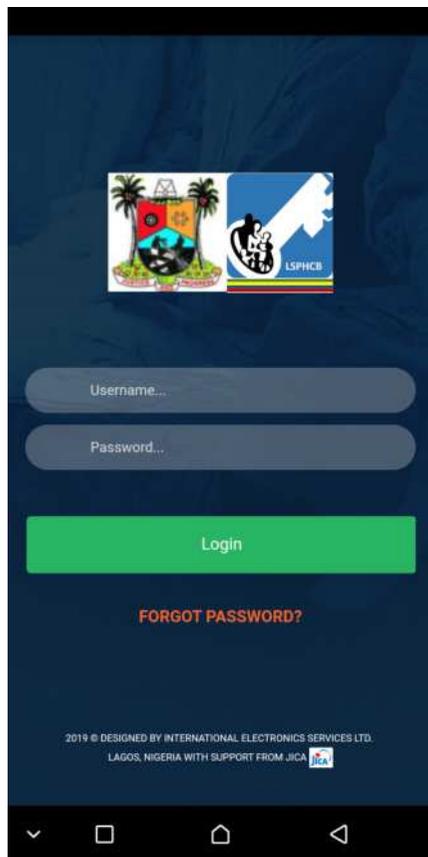
6

# Client Registration



# New Client Registration (1)

Log in



The login screen features a dark blue background with a logo at the top center. Below the logo are two input fields for 'Username...' and 'Password...'. A green 'Login' button is positioned below the fields. A link for 'FORGOT PASSWORD?' is located below the button. At the bottom, there is a copyright notice: '2019 © DESIGNED BY INTERNATIONAL ELECTRONICS SERVICES LTD. LAGOS, NIGERIA WITH SUPPORT FROM JICA'.

Enter user name and his/her password

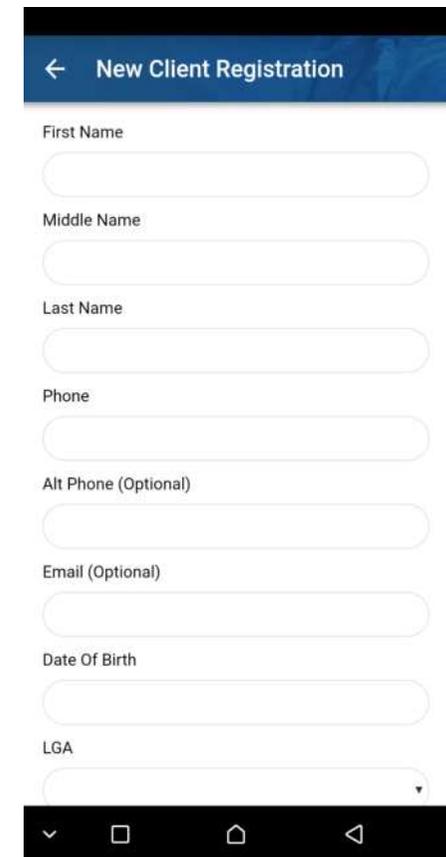
Menu



The menu screen has a dark blue background and a 'Welcome, demo' header. It displays five menu items with icons: 'Today Appointments', 'New Client Registration', 'Defaulters', 'Create Appointment', and 'Update Patient Code'. A hand icon is pointing to the 'New Client Registration' option.

Click 'New Client Registration'

Bio Data Entry



The bio data entry screen is titled 'New Client Registration' and contains several input fields: 'First Name', 'Middle Name', 'Last Name', 'Phone', 'Alt Phone (Optional)', 'Email (Optional)', 'Date Of Birth', and 'LGA'. Each field is represented by a white rounded rectangle on a dark blue background.

# New Client Registration (2)

## Data Entry

← New Client Registration

First Name  
Umar

Middle Name  
Olayinka

Last Name  
Ngozi

Phone  
08093198572

Alt Phone (Optional)

Email (Optional)

Date Of Birth

LGA

Phone #  
should be  
11 digits.

## DOB Entry Calendar

← New Client Registration

2019  
Wed, Jan 16

January 2019

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

CLEAR CANCEL SET

Cancel Submit

Today's date is highlighted at the initial calendar. Choose the DOB if it is in the month or click 'Back Arrow' to find the day. If it is the previous year, then click 2019 to change the year

## DOB Year Selection

← New Client Registration

2019  
Wed, Jan 16

2017

2018

2019

2020

2021

2022

2023

CLEAR CANCEL SET

Cancel Submit

Select the year and the day

# New Client Registration (3)

## Client's Residence

← New Client Registration

Phone  
08093198572

Alt Phone (Optional)

Email (Optional)

Date Of Birth  
01/02/2018

LGA  
L-Mainland

Ward

Scan QR Code

Cancel Submit

## LGA Selection

Agege  
Ajeromi  
Alimosho  
Amuwo  
Apapa  
Badagry  
Epe  
Eti Osa  
Ibeju

Choose a LGA from the list.

## Ward Selection

← New Client Registration

Alt Phone (Optional)

Email (Optional)

Date Of Birth  
01/02/2018

LGA  
L-Mainland

Ward  
Freeman/Glover

Settlement

House Number

Scan QR Code

Cancel Submit

Select Ward

Abule Ijesha  
Abule Oja  
Adekunle/Aiyetoro  
Aderupoko/Ijebu Qters  
Alagomeji  
Aloba/Desalu  
Araromi  
Botanical Garden  
Freeman/Glover

Choose a Ward from the list.

# New Client Registration (4)

## Settlement Selection

The screenshot shows the 'New Client Registration' form with the following fields: Alt Phone (Optional), Email (Optional), Date Of Birth (01/02/2018), LGA (L-Mainland), Ward (Freeman/Glover), Settlement (Freeman Street), and House Number. A red box highlights the Settlement field.

Choose a Settlement from the list.

The screenshot shows a dropdown menu titled 'Select Settlement' with the following options: Abeokuta, Borno Way, Carter Street, Cementry, Freeman Street, Glover Street, Glovers, Herbert Macaulay Way, and Ibadan Street. Each option has a radio button next to it.

If the client's settlement is not included, click 'Other' and type the name of the settlement.

## House # Entry

The screenshot shows the 'New Client Registration' form with the following fields: Email (Optional), Date Of Birth (01/02/2018), LGA (L-Mainland), Ward (Freeman/Glover), Settlement (Freeman Street), and House Number (21). A red box highlights the House Number field.

Enter the house number (not compulsory.)

# New Client Registration (5)

## Attachment of QR Code

The image shows a screenshot of a child health card form from the National Primary Health Care Development Agency. The form includes sections for 'ENTER CARD NUMBER HERE', 'INFORMATION ABOUT CHILD', 'CHILD'S PERSONAL ADDRESS', and 'PHYSICAL GROWTH MONITORING'. A QR code is located in the top left corner of the form. A red arrow points from a grid of QR codes on the right to this QR code. A text box with a black border contains the instruction: 'Remove a QR code and stick it on the individual record'.

Remove a QR code and stick it on the individual record

# New Client Registration (6)

## Scanning QR Code

← New Client Registration

Email (Optional)

Date Of Birth

LGA

Ward

Settlement

House Number

Scan QR Code

Click 'Scan QR Code', then the QR Code Reader (Camera) appears



# New Client Registration (7)

## QR Code Found!

The screenshot shows the 'New Client Registration' form with the following fields and values:

- Email (Optional):
- Date Of Birth:
- LGA:
- Ward:
- Settlement:
- House Number:

At the bottom, there is a 'Scan QR Code' button with a camera icon. To its right, the text 'QR Code found!' is displayed in blue. Below these are 'Cancel' and 'Submit' buttons.

QR Code is  
successfully  
scanned.  
Then click  
'Submit'.

## Uploading Bio Data

The screenshot shows the same 'New Client Registration' form as the previous one, but with a 'Success' dialog box overlay. The dialog box contains the following text:

**Success**  
Approved and completed  
successfully

An 'OK' button is located at the bottom right of the dialog box. The background form is dimmed.



# Appointment Creation



# Create Appointment (1)

Menu



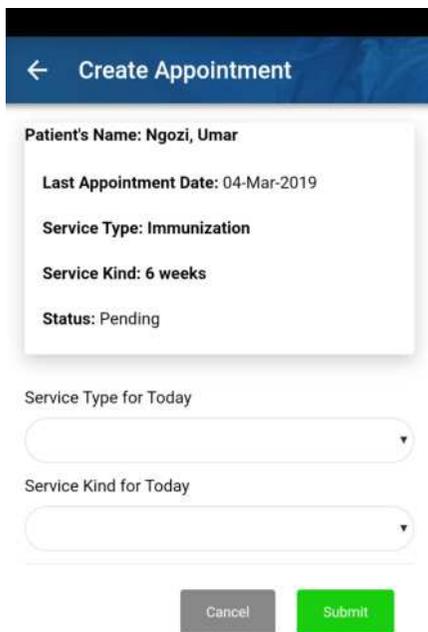
Click 'Create Appointment' then QR Code Reader (Camera) will come up

QR Code Reading by Camera



# Create Appointment (2)

## Retrieval of Client's Information



← Create Appointment

Patient's Name: Ngozi, Umar

Last Appointment Date: 04-Mar-2019

Service Type: Immunization

Service Kind: 6 weeks

Status: Pending

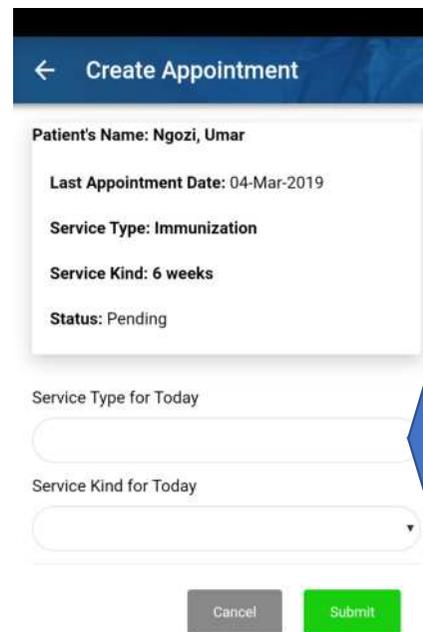
Service Type for Today

Service Kind for Today

Cancel Submit

Client's most previous appointment information and status appears

## Selection of Service Type for Today



← Create Appointment

Patient's Name: Ngozi, Umar

Last Appointment Date: 04-Mar-2019

Service Type: Immunization

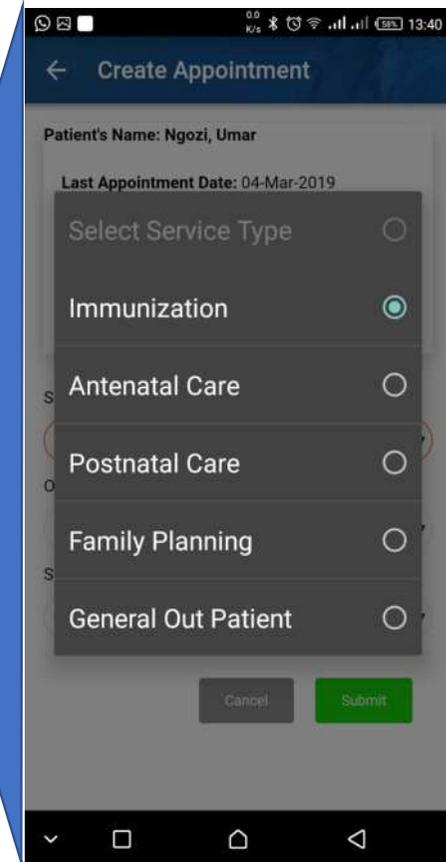
Service Kind: 6 weeks

Status: Pending

Service Type for Today

Service Kind for Today

Cancel Submit



← Create Appointment

Patient's Name: Ngozi, Umar

Last Appointment Date: 04-Mar-2019

Select Service Type

Immunization

Antenatal Care

Postnatal Care

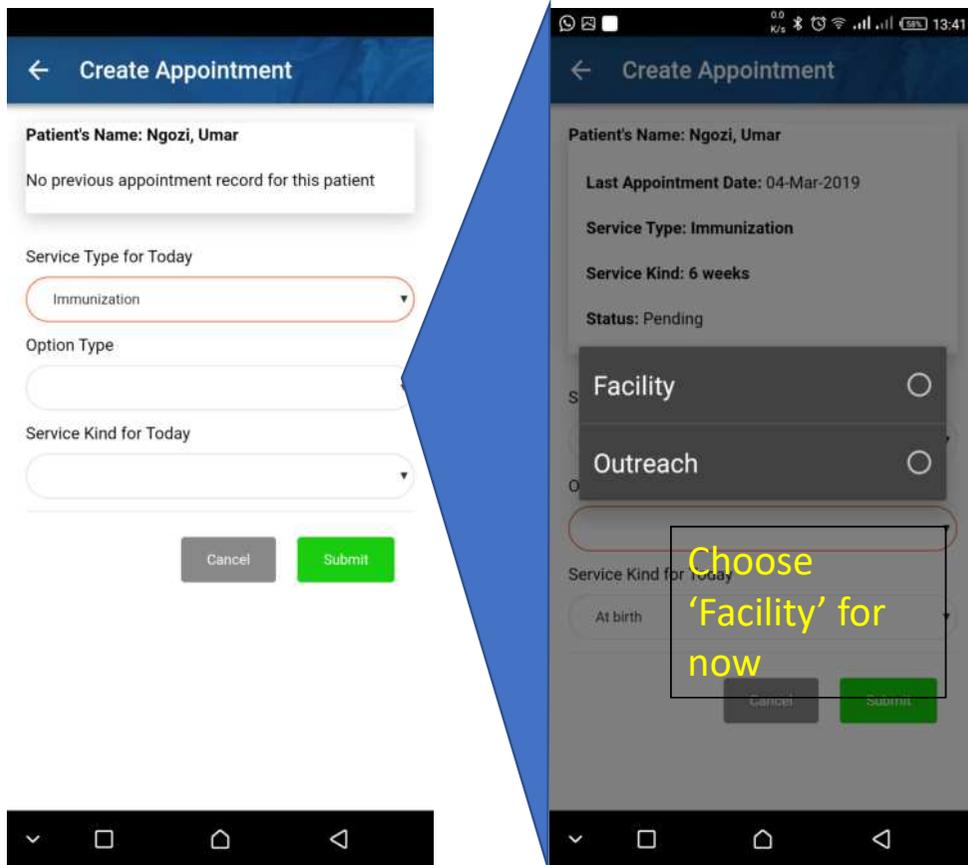
Family Planning

General Out Patient

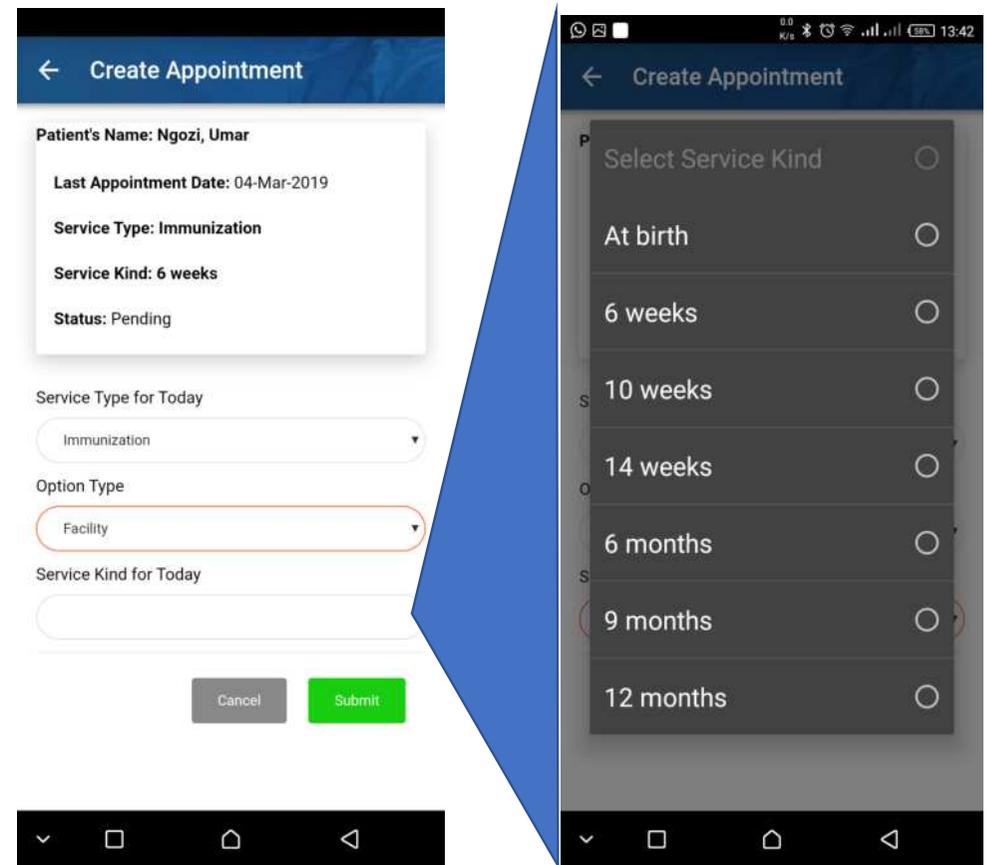
Cancel Submit

# Create Appointment (3)

## Option Type Selection for Immunization



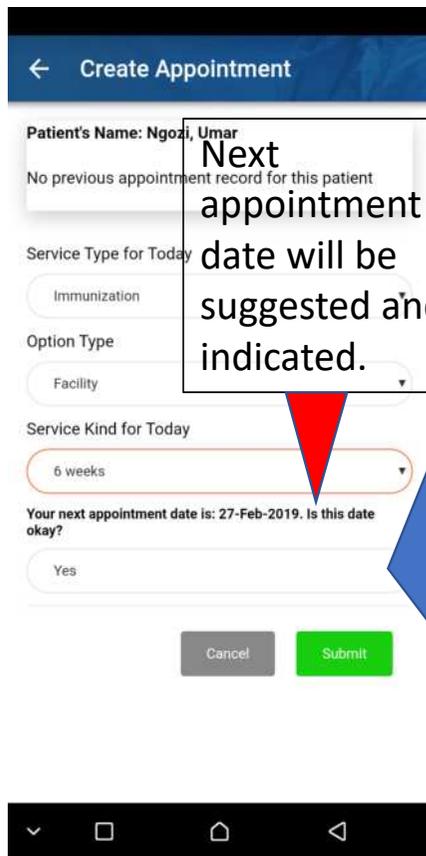
## Service kind Selection for Today



# Create Appointment (4)

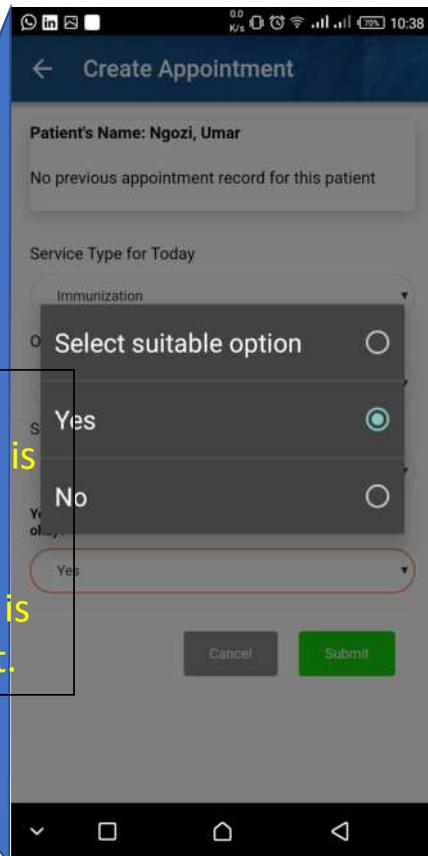
Recommended appointment date

Confirmation of the next appointment day

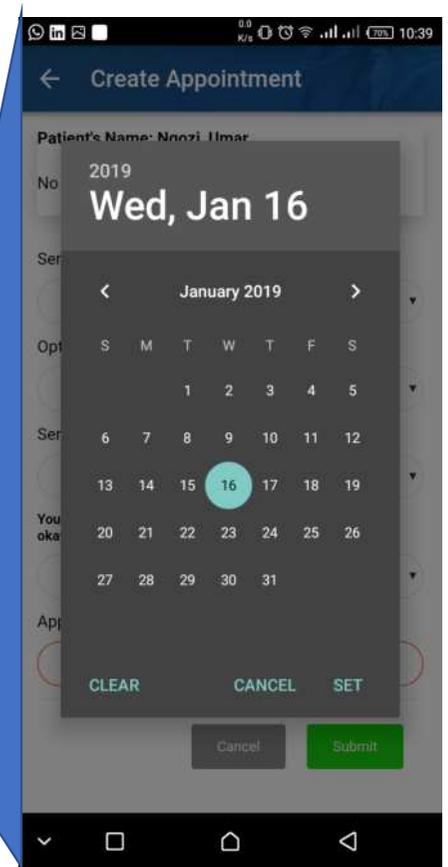


Next appointment date will be suggested and indicated.

Choose 'Yes' if it is right. Choose 'No' if it is not right.

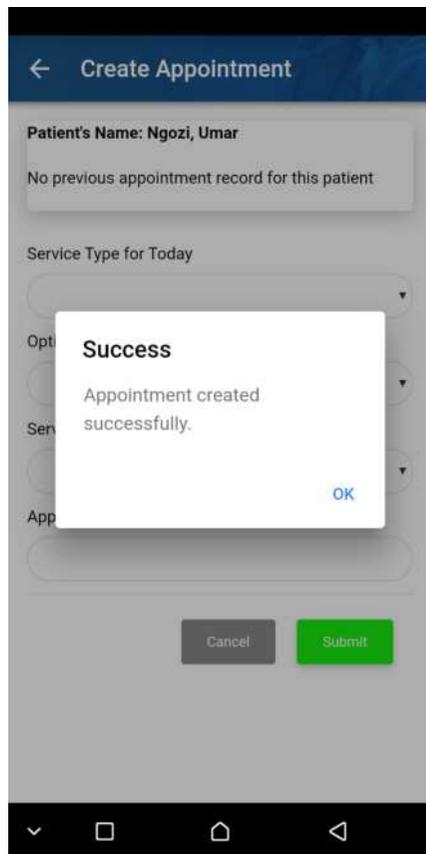


If you choose 'No' then choose an appropriate date



# Create Appointment (5)

## Data submission



Submit the appointment data to the server by clicking 'Submit'.

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# Defaulter Tracing



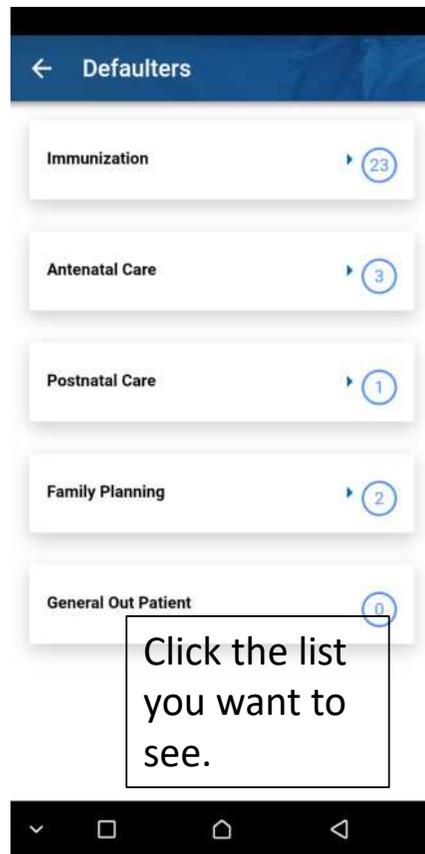


# Defaulters Tracing

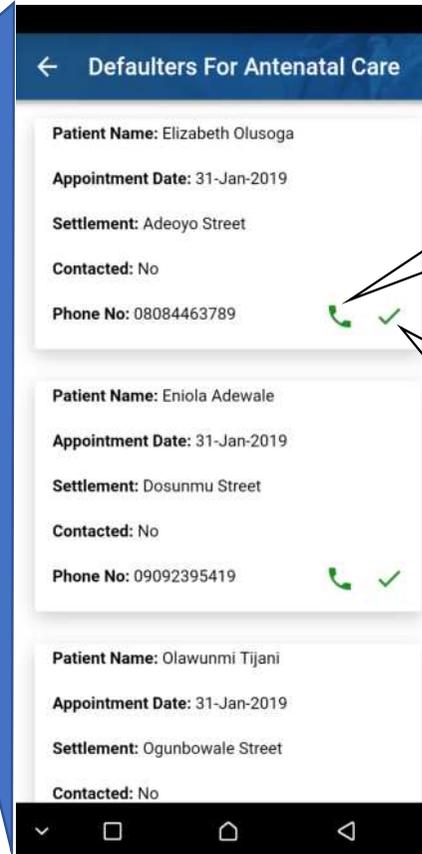
## Menu



## # of Defaulters as of Today



## List of Defaulters as of Today



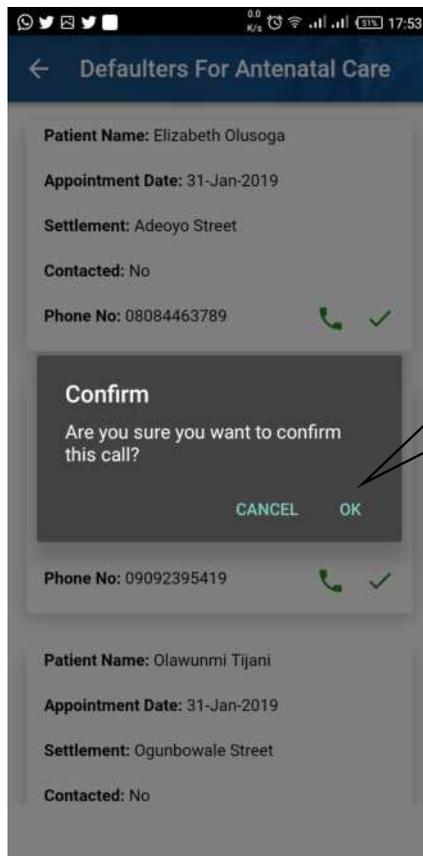
## Follow-up call

Click the phone icon to make a call. It will automatically call the number.

After talking with the client, click the check mark to confirm that you have called the client. This process will help you avoid redundant calls.

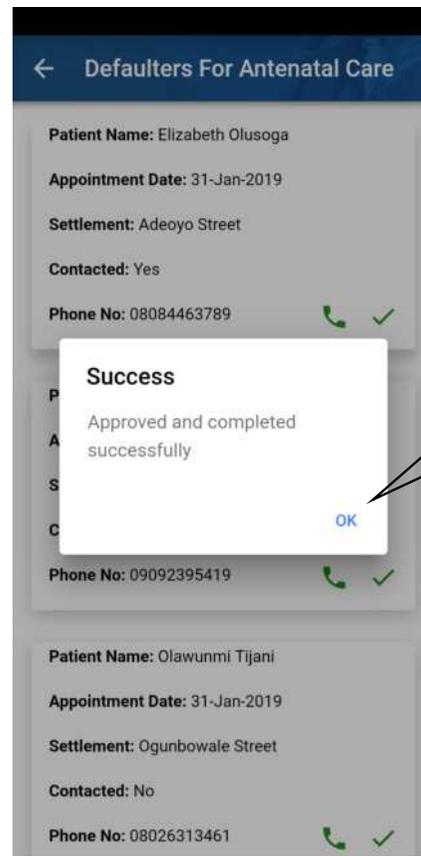
# Defaulters Tracing

## Confirmation of your call (1)



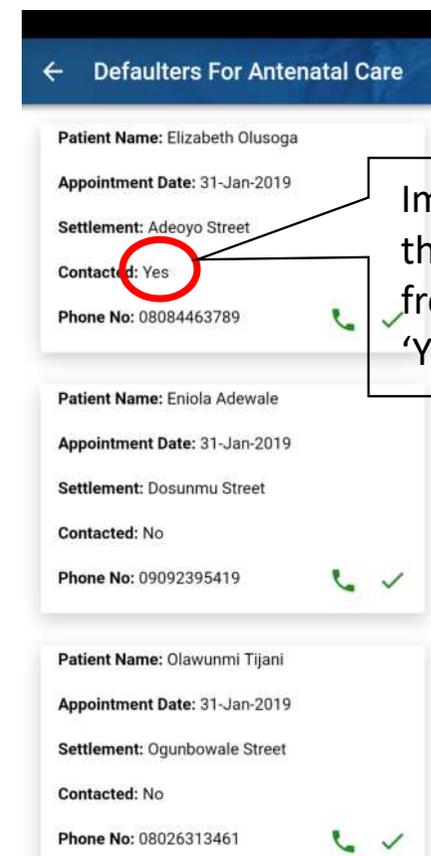
Click OK to confirm

## Confirmation of your call (2)



Click OK

## Confirmation of your call (3)



Immediately this will turn from 'No' to 'Yes'.

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# Today's Appointments



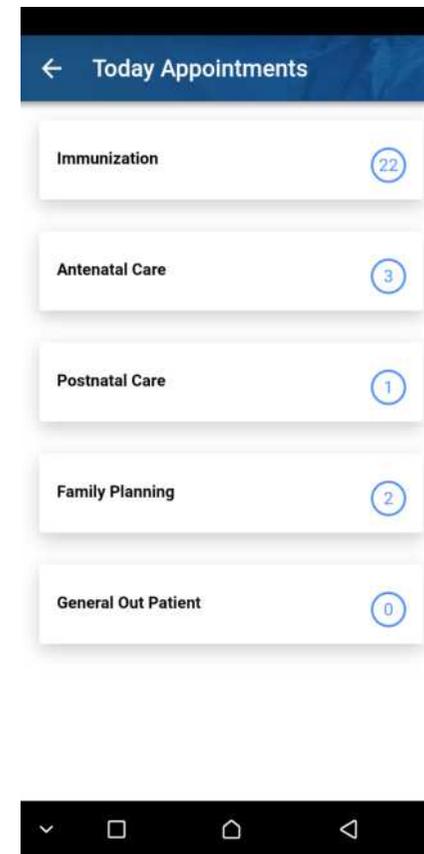
# Today's Appointment

## Menu



You can know the number of appointments for today by clicking 'Today's Appointment'.

## Today's Appointment



Number of today's appointments for each service type will appear on the screen. This may help you to prepare yourself for the provision of the services.

10

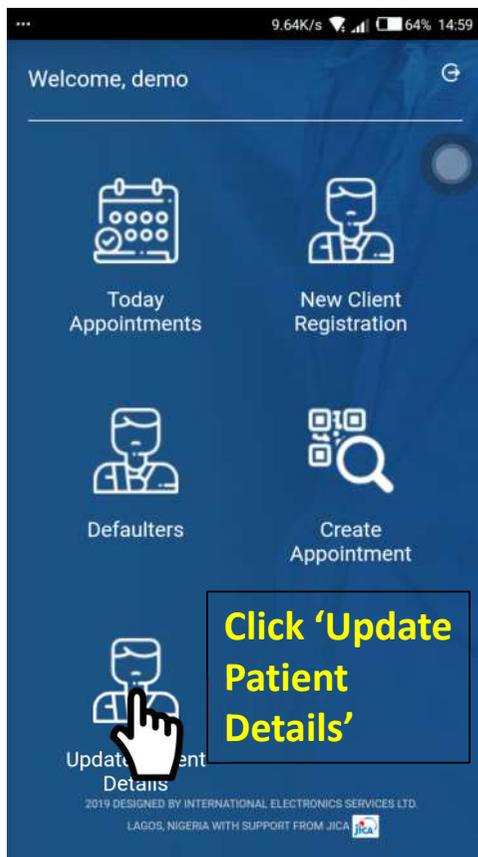
# Update Patient Details



# Update Patient Details (1)

In case a client lost her card with QR code, we can reissue a new QR code.

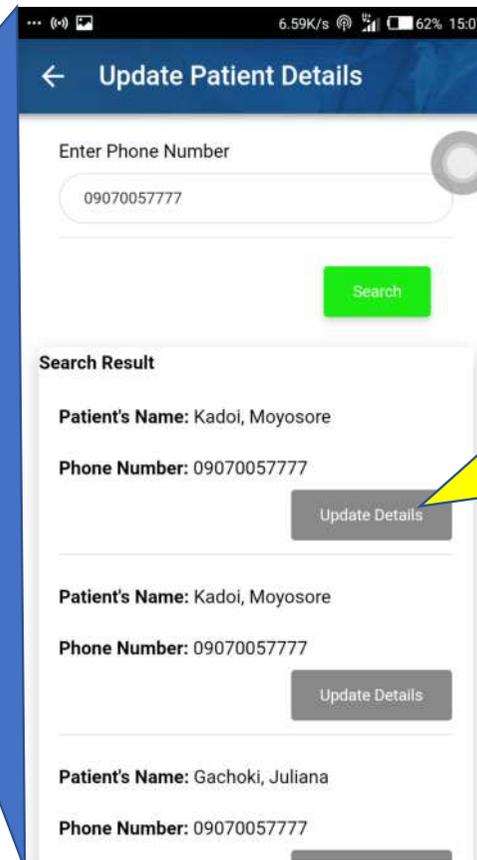
Menu



Enter Phone #



List of Clients



It will bring a list of all clients registered with the phone number. Search the client from the list. Then, click 'Update Details'.

# Update Patient Details (2)

In case a client lost her card with QR code, we can reissue a new QR code.

## Update Details

Update Patient Details

First Name  
Moyosore

Middle Name

Last Name  
Kadoi

Phone  
09070057777

Alt Phone (Optional)

Email (Optional)

Date Of Birth

LGA

Change information you need to change

## Summit the changes

Update Patient Details

Date Of Birth

LGA  
L-Mainland

Ward  
Harvey

Settlement  
Spencer

House Number  
11

Scan QR Code  
154143892554178

Cancel Update

Then Submit

## Completion

Update Patient Details

Enter Phone Number  
08093198572

Search

Success  
Approved and completed successfully

OK

Patient's Name: Idris, Jide  
Phone Number: 08093198572

Update QR Code

Patient's Name: Fiyi, Titi  
Phone Number: 08093198572

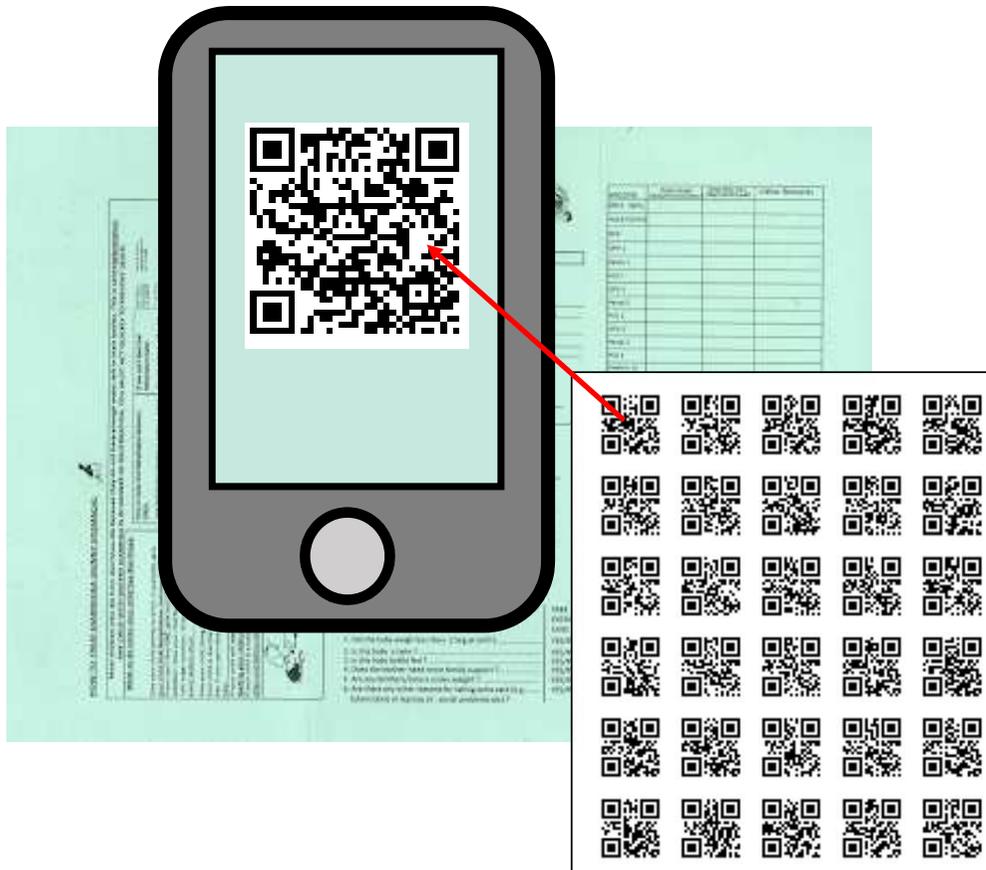
Click OK to complete the process

# Update Patient Details (3)

Reissue a new QR

**If you need to reissue a QR Code, then you need to scan the new code.**

Affix the code on the new card, Scan it and Submit.



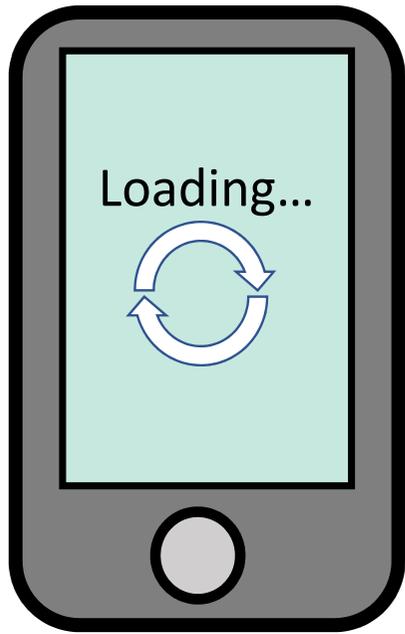
New code successfully issued

**Click OK to complete the process.**

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# Tips for Problem Solving





If you encounter the system is taking time in loading when creating a new appointment, try the following:

- 1) Log out the application once by minimizing screen and clear all. Then, log in again.
- 2) Check mobile data is On.
- 3) Check if other phone is working.
- 4) Check the balance of the Data by calling the following number: Airtel \*141#, 9Mbile \*228#, Glo \*127\*0# and MTN \*131#.
- 5) Check if the QR code is registered. Go to “**Update Patient Details**” and type the telephone number of the client and search the name. Select the client name and scan the QR code you have already issued. You may have registered the client without scanning QR Code. The system has already been improved to reject the submission without scanning QR code. However, the records already uploaded without QR codes cannot be automatically rectified.

# 12

## Technical working Group and System Administrators



## Technical working Group

### Lagos State Primary Health Care Board

**Focal Person and Secretariat:**

Mr. Okeralin Babatunde (DCH)

**Members:**

Dr. Balogun T. K. (DPRS),  
Mrs. Folarin-Williams (HdM&E),  
Mrs. Tokunbo Idowu (HdMR),  
Dr. Folami Ojulari (MO-DMS),  
Mr. Olatunji Oluyide (QI-DMS),  
Mr. O. Charles (ICT)

### Lagos State Ministry of Health

**Members:**

Dr. Adesina A.M., SMO  
Mr. Olanyian O., Head of ICT

## System Administrators

Dr. Balogun T. K.  
Mr. Okeralin Babatunde  
Dr. Adesina A. M.

Mrs. Idowu O.  
Mr. Olatunji Oluyide  
Mr. O. Charles

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## Contact



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