

National Sickle Cell Anaemia Elimination Mission

**User Manual  
For  
Sickle Cell  
Mobile Application**



Issue Organization:  
**Ministry of Health and Family Welfare**

**Version: 2.1.2  
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**App Developed by**



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## **Objective**

The objective of 'Sickle Cell' mobile application is to facilitate beneficiary registration, entering test details (for test methods like solubility, HPLC/Electrophoresis, Point of Care, CBC etc.) for various haemoglobinopathies like Thalassemia, Haemophilia and Other Variants apart from Sickle Cell Anaemia, captured in both online and offline mode. Furthermore, the application has been integrated with ABDM (Ayushman Bharat Digital Mission) ecosystem. The application supports ABHA ID based registry as well as ABHA ID creation using Aadhaar ID with OTP or Fingerprint based or Face based or Demo based Biometric Authentication.

## Table of Contents

1. Introduction.....	4
2. Pre-requisites.....	5
3. Mobile App Download.....	6
4. Screens.....	7
4.1. Login.....	7
4.2. MPIN.....	8
4.3. Home.....	9
4.3.1. Unsync Records.....	10
4.4. Registration.....	11
4.4.1. With AADHAAR ID/VID.....	13
4.4.1.1. Using OTP.....	14
4.4.1.2. Using Fingerprint Bio Auth.....	14
4.4.1.3. Using Face Bio Auth.....	15
4.4.1.4. Using Demo Auth.....	16
4.4.2. With ABHA ID.....	16
4.4.3. Offline/Manual Entry.....	16
4.5. Screening Tests.....	17
4.5.1. Test List.....	17
4.5.2. Test Details.....	18
4.6. HPLC/Electrophoresis Tests.....	19
4.6.1. Confirmatory Test List.....	19
4.6.2. Confirmatory Test Details.....	20
4.7. View/Add result.....	21
4.8. Syncing.....	24
4.9. Media Gallery.....	25
4.10. Pull Master Data.....	26
4.11. Disease Management.....	27
4.11.1. Patient Search.....	28
4.11.2. Patient Profile.....	29
4.11.3. Medicine.....	30
4.11.4. Lab Investigation.....	31
4.11.5. Blood Transfusion.....	32
4.11.6. Vaccination.....	33
4.12. Medical History.....	34
5. Error Conditions.....	35
6. Help.....	44

## 1. Introduction

### Sickle Cell:

Sickle Cell Disease (SCD) is a group of blood disorders typically inherited from a person's parents. It results in an abnormality in the oxygen-carrying protein hemoglobin found in red blood cells. This leads to a rigid, sickle-like shape under certain circumstances. A number of health problems may develop, like attacks of pain, anemia, swelling in the hands and feet, bacterial infections and stroke. Long-term pain may develop as people get older.

### National Sickle Cell Anaemia Elimination Mission:

To address this serious issue of Sickle Cell Anaemia, other haemoglobinopathies and to prevent morbidity, mortality and reduce prevalence rate, 'National Sickle Cell Anaemia Elimination Mission' has been proposed and is being launched in 17 states and UTs where this disease is most common.

Under this programme, NIC has developed following software:

- Web Application/portal
- Common API to migrate state existing data
- Mobile Application

### **A**Administrative Information

App Name	Sickle Cell
Department	National Health Mission, Ministry of Health and Family Welfare, GoI
Sector	Health
Category	G2G
Coverage	All Government Health Facilities in India
Developer	National Informatics Centre

### **T**echnical Details

Back-end Office Application	<a href="https://sickle.nhm.gov.in/sickle2.0/">https://sickle.nhm.gov.in/sickle2.0/</a>
Platform	Android
Size	15 MB
Language	English
Last Update	19-December-2024
User Authentication	Required, through Mobile number and OTP of associated Health Facility In-charge
Auto Alerts	Yes, through SMS and in app
Special Permissions	Camera
Internet Requirement	Required. But app will work offline also after successful login while connected.
Associated Parent website URL	<a href="https://sickle.nhm.gov.in/sickle2.0/">https://sickle.nhm.gov.in/sickle2.0/</a>

## 2. Pre-requisites:

1. Before downloading the mobile app, the Health Facility In-charge must get her/his mobile number registered through concerned District User / State User / State Admin. Health facility user will be able to login only if her/his mobile number is registered. Mobile number registration is mandatory as the facility user will received OTP on the registered mobile number.

2. Installation of RD Service for Finger Print Biometric from Play Store is mandatory.

Example :-

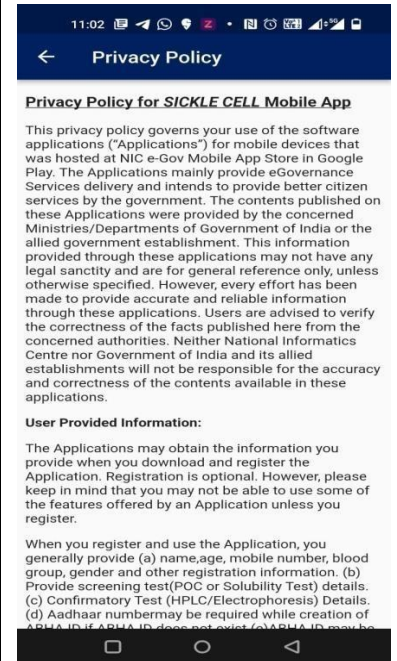
- Morpho SCL RDService application for MORPHO Biometric Fingerprint sensors.
- Mantra RD Services application for MANTRA MFS100 Biometric Fingerprint sensors.
- Mantra L1 RDServices application  
<https://play.google.com/store/apps/details?id=com.mantra.mfs110.rdservice>  
for MFS110 L1 RDServices Biometric Fingerprint sensors.

3. It is mandatory for user to download *AadhaarFaceRd* from Play Store for Face Authentication.

### 3. Mobile App Download:

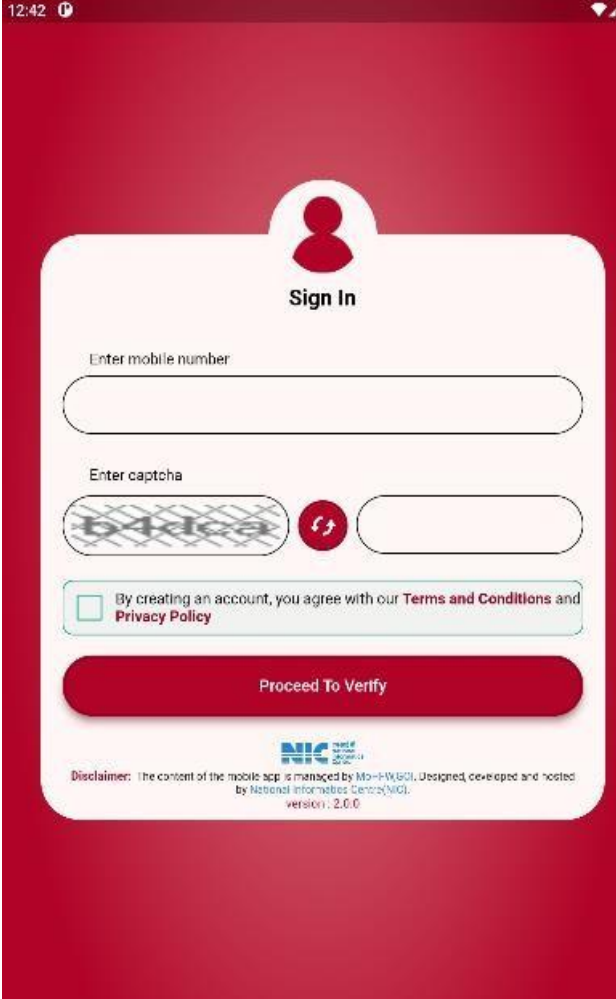

The user can download and install the app from Google Play-store for Android and Appstore from iOS.

Once downloaded the user is suggested to go through the Privacy Policy, link given on login page before using the app. At present, the app is available both for android and iOS.



## 4. Screens:

### 4.1 Login

	
<p>In order to Login into the Application, user has to enter her/his mobile no. and captcha and then click on 'Proceed to verify' button. Internet is required to Sign In.</p>	<p>Next, user will be asked for OTP received on the registered mobile number. User will have to enter OTP and then click on 'Proceed to verify' button. Internet is required to proceed.</p>

## 4.2 MPIN

Next, user has to generate the MPIN which will be used to enter into the app next time onwards.  
Now user will be redirected to Home Screen. Internet connection is not mandatory to set the MPIN.



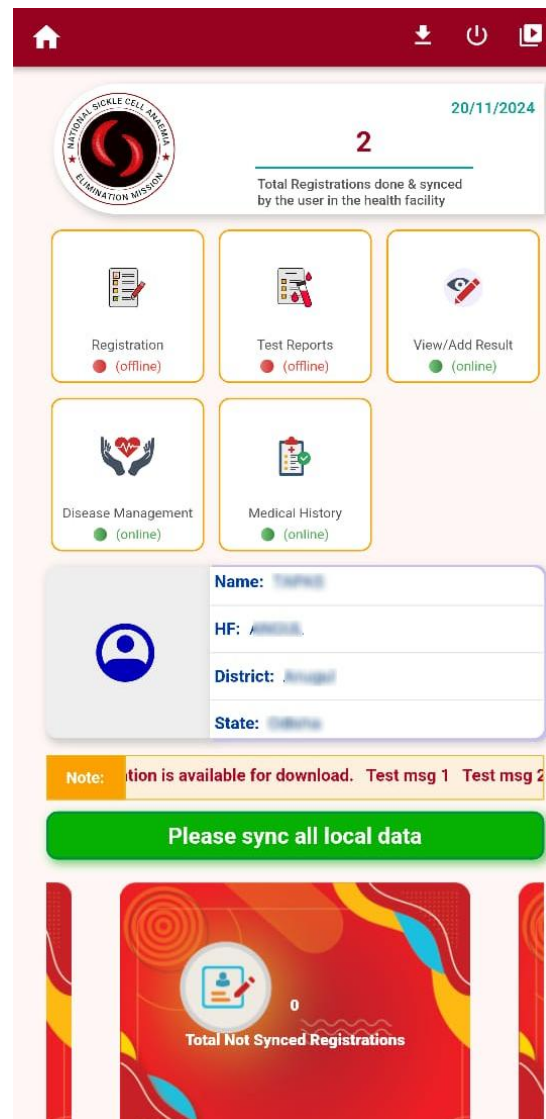


## 4.3 Home

Internet connection is not mandatory to access Home.

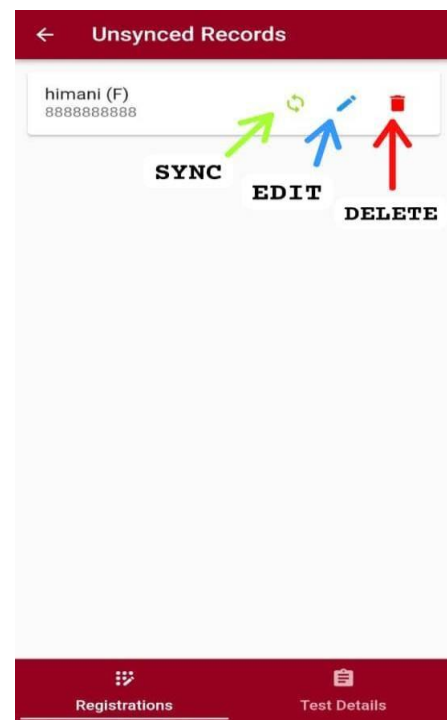
This app contains following features:

- **Registration:** To record the screened person's details.
- **Test Reports:** To record the Screening and Confirmatory test of beneficiary.
- **View/Add Result:** To check and edit the test details of the beneficiary.
- **Syncing:** To Sync offline (local database) data with the server's data.
- **Media Gallery:** To download the Videos, Links, PDFs etc.
- **Note:** Notifications are rendering direct from the server.
- **Master Data:** Master based Subtypes, Total Registrations done by Health Facility, State and District LGD data can be configurable by clicking the arrow on the top right corner of the Home Page.
- **Disease Management:** To record the details of Medications, Lab Investigations, Blood Transfusions, and Vaccinations of the diseased patients.
- **Medical History:** To review the Medicines, Lab Investigations, Blood Transfusions, and Vaccinations administered to the diseased patients in the past, based on their visit history.



### 4.3.1 Unsync Records

By clicking on banner user able to see the records which are not synced with the server. So User can Sync, Edit the Delete the existing record.



## 4.4 Registration

### **Relevance of registration through ABHA ID:**

ABHA number is a 14 digit number that will uniquely identify you as a participant in India's digital health care ecosystem.

It is important to standardize the process of identification of an individual across health care providers, to ensure that the created medical records are issued to the right individual or accessed by a Health Information User through appropriate consent. The ABHA Number will be used for the purposes of uniquely identifying persons and authenticating them.

Thus, the registration records created in mobile app through ABHA will be able to link themselves with health records created in other integrated programmes.

*Hence, the facility user is recommended to register the screened people through ABHA ID.*

**Note: \* ABHA is now mandatory for patient registration \***

Registration of the screened person can be done through following ways:

- Through ABHA ID
- Proceed without ABHA

**Other fields in Registration:**

- Name
- Gender
- Marital Status
- Father/Husband Name
- Blood Group
- DOB
- Address
- Mobile Number
- Category
- Registration Date
- **Save & Test**
  - Saves screened person's details.
  - To record test details immediately following registration.
- **Save**
  - Saves screened person's details.
  - User needs to open 'Screening Test Details' to add test details later.

**Note:**

- Registration can be done online as well as offline. In offline mode user can fill details manually and register themselves without ABHA and AADHARID.

#### 4.4.1 With Aadhaar/VID (Create ABHA)

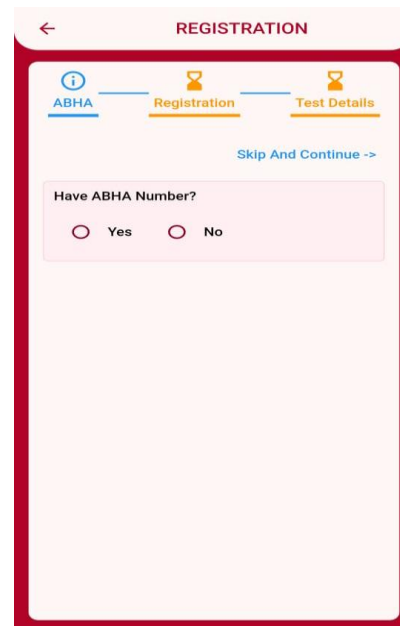
##### Have ABHA Number

- No
  - ✓ If not then you can:
    - Create ABHA through AADHAAR no. or VID.
    - Proceed without ABHA and entering the details manually
    - Internet Connection is mandatory.

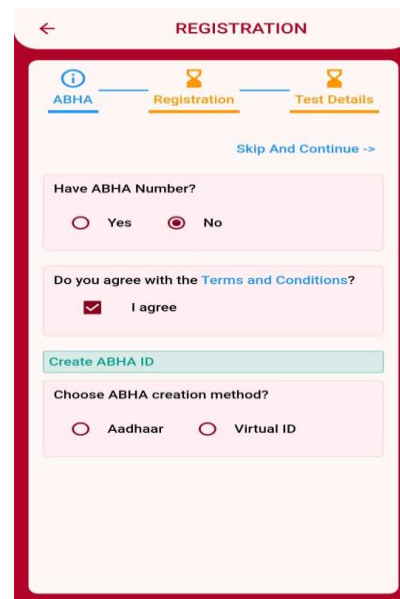
**Note:** The screened person is required to carry AADHAARID for creation of ABHA ID.

To create ABHA ID, following options are available:

- Through Aadhaar ID
- Through Virtual ID



The screenshot shows the 'REGISTRATION' screen with a back arrow on the top left. At the top, there are three tabs: 'ABHA' (with an information icon), 'Registration' (with a person icon), and 'Test Details' (with a person icon). Below the tabs is a 'Skip And Continue ->' link. The main content area contains the question 'Have ABHA Number?' with two radio button options: 'Yes' and 'No'. The 'No' option is currently selected.

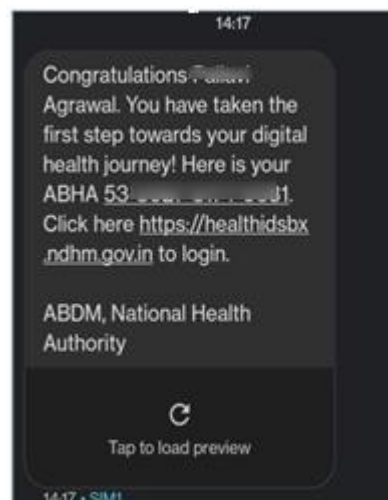


The screenshot shows the 'REGISTRATION' screen with a back arrow on the top left. At the top, there are three tabs: 'ABHA' (with an information icon), 'Registration' (with a person icon), and 'Test Details' (with a person icon). Below the tabs is a 'Skip And Continue ->' link. The main content area contains the question 'Have ABHA Number?' with two radio button options: 'Yes' and 'No'. The 'No' option is currently selected. Below this is the question 'Do you agree with the Terms and Conditions?' with a checked checkbox and the text 'I agree'. Below that is a 'Create ABHA ID' button. At the bottom is the question 'Choose ABHA creation method?' with two radio button options: 'Aadhaar' and 'Virtual ID'.

To create the ABHA ID through Aadhaar ID/Virtual ID the user is recommended to use any of these options in the order given below:

- **Through OTP verification**
- **Through Finger Print Authentication:** Can be used if the screened person's mobile number is not seeded with her/his Aadhaar ID.
- **Through Face Authentication:** In absence of Aadhaar seeded mobile number and STQC certified Biometric device, the user is advised to use this option.

Mobile no. asked, will be used to send the ABHA creation message.



#### 4.4.1.1 Using OTP

##### Through OTP Verification

- AADHAR OTP will be received on AADHAAR registered mobile no.

### 4.4.1.2 Using Fingerprint Bio Auth

- The RD Service of the Biometric device used needs to be installed from Play Store.

**Note:**

1. State NHM procure any STQC certified Biometric Device from market.
2. Each device provider should have RD Service available on Android Play Store.
3. Before placing the order, state NHM official may link the device with Sickle mobile app.
4. *Finger authentication not available in iOS due to unavailability of Finger Rd services on AppStore.*

### 4.4.1.3 Using Face Bio Auth

**Through Face Authentication:**

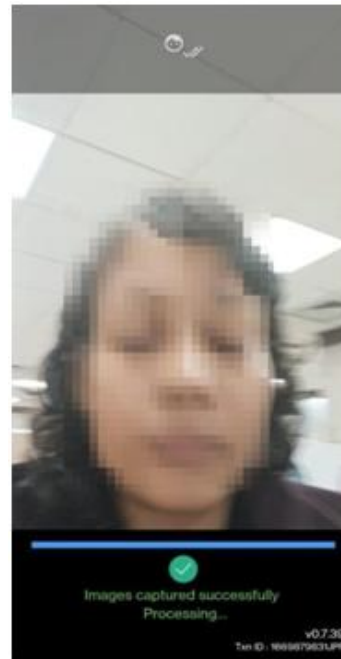
- To access this feature the user needs to download AadhaarFaceRd from Play Store.

<https://play.google.com/store/apps/details?id=in.gov.uidai.facerd>

The user is requested to follow the instructions shown in RD service Application to capture her\his image successfully.

**Note:**

- USB debugging should be off while capturing the image.
- Face authentication not available in iOS due to unavailability of FaceAdharRd in respective of Rd services on AppStore, the option of Face Auth has not been provided in iOS at present.



## Device Specifications:

Feature	New Procurement
Android API version	Android 9 (SDK 34) or greater
RAM	4+ GB
Disk Space	64 GB (Minimum 500MB free disk space)
Display Size	8 inches or greater
Connectivity	Internet Connectivity required
Camera Resolution	5MP or greater
Camera Types	Integrated Rear and Front camera
Non-Rooted OS (Google Play Store Compatible)	Yes

### 4.4.1.4 Using Demo Auth

#### Through Demo Authentication:

Screened person can create ABHA through Demo Auth for this screened person have to fill their details as follows:

- Name
- Gender
- Date of Birth
- State
- District

The screenshot shows a mobile application interface for ABHA registration. At the top, there is a navigation bar with a back arrow and the title 'REGISTRATION'. Below the navigation bar, there are three tabs: 'ABHA', 'Registration', and 'Test Details'. The 'Registration' tab is selected. The form is titled 'Through Demo Auth' and contains the following fields:

- Name:** A text input field.
- Gender:** Radio buttons for 'Male', 'Female', and 'Transgender'.
- Date of Birth:** A date input field.
- State:** A dropdown menu with 'Select' as the current selection.

At the bottom of the form, there is a red button labeled 'Save and Next'.



## 4.4.2 With ABHA ID

### Have ABHA Number

- Yes
- If have then enter ABHA Number using the following options similar to ABHA ID creation.
- **Through OTP verification**
- **Through Finger Print Authentication:** Can be used if the screened person's mobile number is not seeded with her/his Aadhaar ID.
- **Through Face Authentication:** In absence of Aadhaar seeded mobile number and STQC certified Biometric device, the user is advised to use this option.
- Internet Connection is mandatory.

**Note:** The screened person is required to know ABHAID.

The screenshot displays the ABHA registration process. At the top, there are three tabs: 'ABHA', 'Registration', and 'Test Details'. The 'Registration' tab is active. A 'Skip And Continue ->' link is visible. The main content area is divided into two sections:

- Have ABHA Number?**: A section with two radio buttons, 'Yes' (selected) and 'No'.
- Verify ABHA ID**: A section with a text input field labeled 'Enter ABHA Number' and a QR code icon. Below this, there are four buttons for verification: 'OTP', 'Finger auth', 'Face Auth', and 'Cancel'.

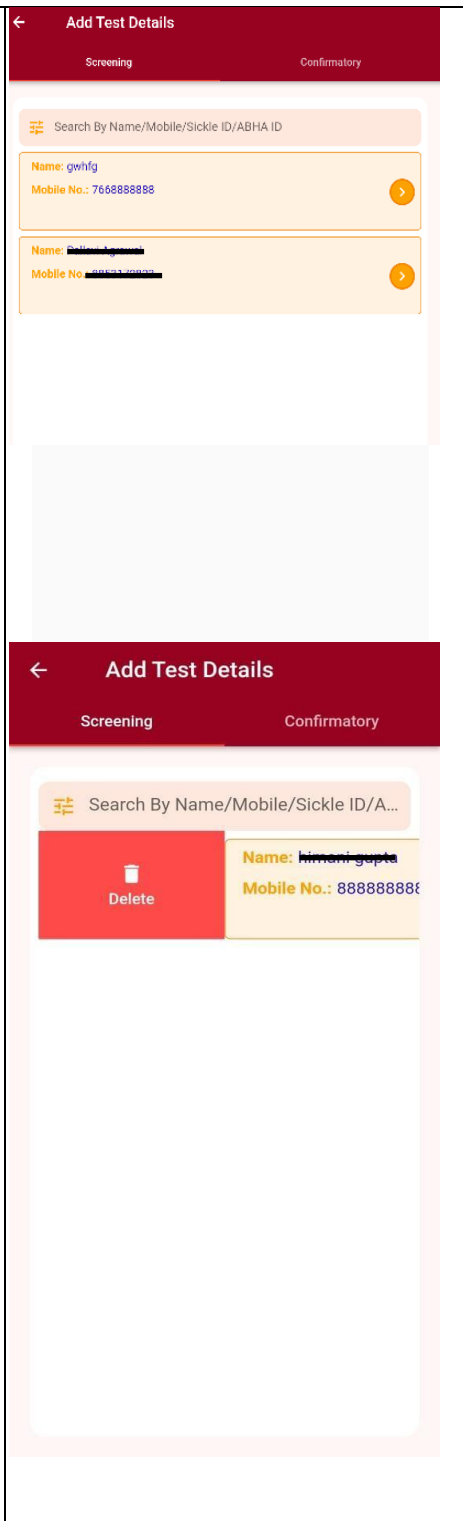
### 4.4.3 Offline/Manual Entry

To enter all registration details manually including the person's image (by clicking camera icon). The user can opt this by selecting *Not Create ABHA* option or if she/he is offline.

The screenshot shows a mobile application interface for registration. At the top, there is a navigation bar with a back arrow and the title 'REGISTRATION'. Below the navigation bar, there are three tabs: 'ABHA' (with a green checkmark), 'Registration' (with a blue information icon), and 'Test Details' (with an orange person icon). The main content area is a registration form with a light pink background. It features a profile picture placeholder with a camera icon and the text 'Upload Profile Image'. Below this, there are several input fields and options: a text field for 'Name', a 'Gender' section with radio buttons for 'Male', 'Female', and 'Transgender', a 'Date of Birth / Age' section with radio buttons for 'Date of Birth' and 'Age', and a text field for 'Enter Mobile Number'.

### 4.5.1 Screening Test List

- Displays the list of people registered and screening test details are not entered.
- Can be accessed offline.
- By sliding the record User is able to delete the record but First the record will sync with the server then it will be deleted.



## 4.5.2 Screening Test Details

### Disease Type : Sickle Cell

- Test Method : Solubility Test
- Date of Sample Collection
- Date of Result
- Solubility Test Result

### Disease Type : Thalassemia

- Type of Test
- Date of Sample Collection
- Date of Result
- Result
- Result Subtype

### Disease Type : Haemophilia

- Date of Sample Collection
- Date of Result
- Result

Details can be saved offline.

**Note:** No Screening of beneficiary can be done after Confirmatory.

Sickle ID	330148
ABHA ID	
ABHA Address	
Name	Hemant Kumar Reddy
Gender	F
Date of Birth (dd-mm-yyyy) / Age	21-11-2024
Father/Husband	Bsbsbsb
Mobile No.	9876543210
Date of Registration	21-11-2024

[Skip And Enter Confirmatory Details ->](#)

**Test for Disease Type \***

SICKLE

THALASSEMIA

HAEMOPHILIA

Submit

Gender	F
Date of Birth (dd-mm-yyyy) / Age	14-11-1996
Father/Husband	Vikas
Mobile No.	9876543210
Date of Registration	26-12-2024

[Skip And Enter Confirmatory Details ->](#)

**Test for Disease Type \***

SICKLE

THALASSEMIA

HAEMOPHILIA

**Date of Sample Collection \***

DD-MM-YYYY

**Date of Result \***

DD-MM-YYYY

**Test Result \***

Hemophilia A

Hemophilia B

Submit

## 4.6.1 Confirmatory Test List

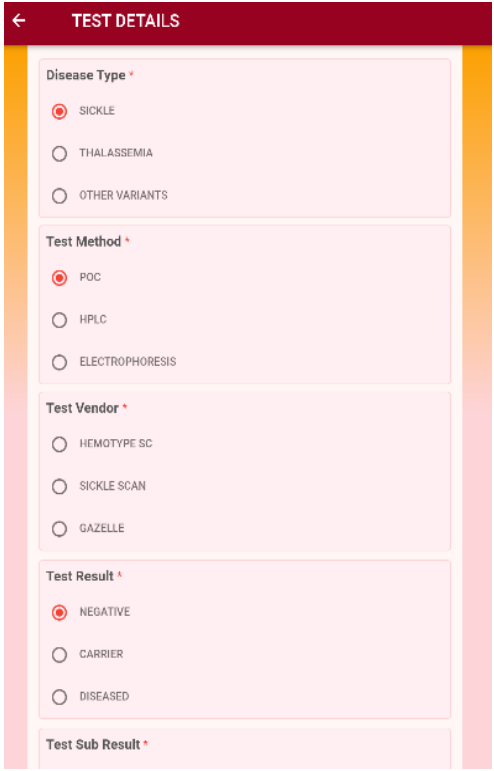
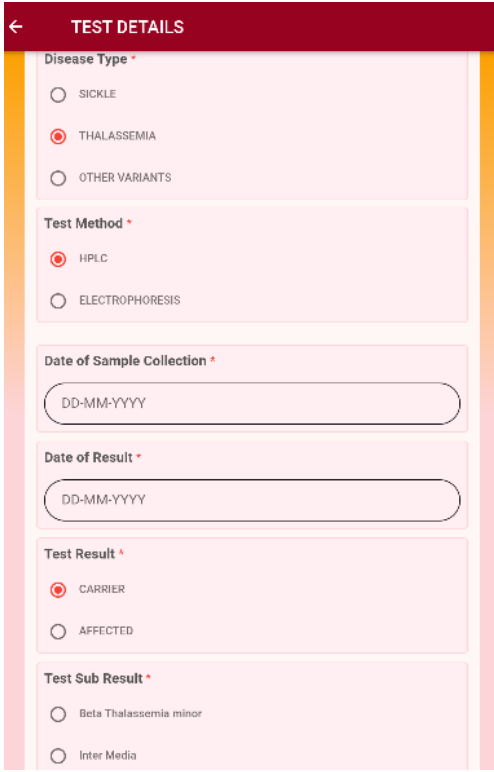
- Displays the list of people whose solubility tests were found positive but the results of HPLC/Electrophoresis tests are not entered.
- Can be accessed offline.

### **Note:**

1. Provision to enter confirmatory test details directly with or without completing screening test details.
2. POC to come under confirmatory test and not under Screening Test.

The screenshot shows the 'Add Test Details' screen in a mobile application. The header is dark red with a back arrow and the title 'Add Test Details'. Below the header are two tabs: 'Screening' and 'Confirmatory', with 'Confirmatory' being the active tab. A search bar with a magnifying glass icon and the text 'Search By Name/Mobile/Sickle ID/A...' is present. Below the search bar is a yellow card displaying 'Name: Himani Gupta' and 'Mobile No.: [redacted]' with a right-pointing arrow button.

## 4.6.2 Confirmatory Test Details

<p>Disease Type : Sickle Cell</p> <ol style="list-style-type: none"> <li>1. Solubility Test             <ul style="list-style-type: none"> <li>• Date of Sample Collection</li> <li>• Date of Result</li> <li>• Solubility Test Result</li> </ul> </li> <li>2. Point of Care Test             <ul style="list-style-type: none"> <li>• Vendor Name</li> <li>• Result</li> <li>• Result Sub Type</li> </ul> </li> </ol> <p>Disease Type : Thalassemia</p> <ul style="list-style-type: none"> <li>• Type of Test</li> <li>• Date of Sample Collection</li> <li>• Date of Result</li> <li>• Result</li> <li>• Result Subtype</li> </ul> <p>Disease Type : Other Variants</p> <ul style="list-style-type: none"> <li>• Type of Test</li> <li>• Date of Sample Collection</li> <li>• Date of Result</li> <li>• Result</li> <li>• Result Subtype</li> </ul> <p>Details can be saved offline.</p>	 
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## 4.7 View/Add Result

- ABHA seeding provision is given for the records registered previously without ABHA.
- Repeated tests( screening and confirmatory) can be recorded for any registered person if required.

**Note :**

- Internet is required.

The screenshot displays the 'View/Add Result(online)' interface. At the top, there is a dark red header with a back arrow and the text 'View/Add Result(online)'. Below this is a light orange search criteria selection box titled 'Search Criteria \*'. It contains four radio button options: 'Mobile No.' (selected), 'Sickle Id', 'ABHA No.', and 'ABHA Address'. Below the selection box is a search input field with the placeholder text 'Search', a magnifying glass icon, and a character count '0 / 10'. At the bottom of the search area is an orange button with the text 'Search Registration Details'.

You can record the status of card distribution and Hydroxyurea.

**Note :**

- The Hydroxyurea option is available only for diseased patients and can be updated once.

By selecting the Disease type User is able to check if the Test details are present or not.

- If Present then By pressing View Test Details button she/he will see the test details of the corresponding disease.
- If not Present then By pressing Enter Test Details button she/he can fill and submit the test details of the corresponding disease.

**View/Add Result(online)**

[Click and Upload Image](#)

**Registration Details**

Sickle ID	330067
ABHA ID	
ABHA Address	
Name	Amam Gupta
Gender	F
Date of Birth (dd-mm-yyyy) / Age	11-11-1998
Father/Husband	VIKU
Mobile No.	8770092719
Date of Registration	06-09-2024

[Seed ABHA ->>](#)

Is Card distributed?

Is On Hydroxyurea?

**Test for Disease Type \***

SICKLE

THALASSEMIA

OTHER VARIANTS

HAEMOPHILIA

[View Test Details](#)

**View/Add Result(online)**

[Click and Upload Image](#)

**Registration Details**

Sickle ID	330067
ABHA ID	
ABHA Address	
Name	Amam Gupta
Gender	F
Date of Birth (dd-mm-yyyy) / Age	11-11-1998
Father/Husband	VIKU
Mobile No.	8770092719
Date of Registration	06-09-2024

[Seed ABHA ->>](#)

Is Card distributed?

Is On Hydroxyurea?

**Test for Disease Type \***

SICKLE

THALASSEMIA

OTHER VARIANTS

HAEMOPHILIA

[Enter Test Details](#)



ABHA and Photo can be updated with beneficiary's profile in registration record through View/Add result.

Photo can be updated through **Click and Upload image** or by **seed ABHA** option (recommended).

ABHA can be seeded by clicking on **seed ABHA** option.

The screenshot displays a mobile application interface for viewing or adding a result online. At the top, there is a red header with a back arrow and the text 'View/Add Result(online)'. Below the header is a profile icon placeholder with the text 'Click and Upload Image'. The main content area is titled 'Registration Details' and contains a table with the following information:

Sickle ID	442
ABHA ID	
ABHA Address	
Name	hey
Gender	F
Date of Birth	15-09-2023
Father/Husband	fjh vg
Mobile No.	8889999999
Date of Registration	15-09-2023

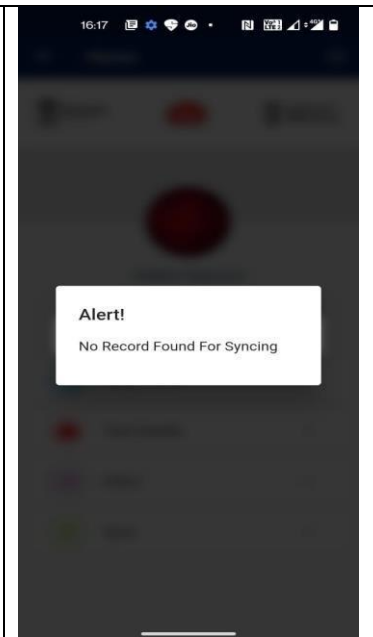
Below the table, there is a link 'Seed ABHA ->>'. Underneath, the 'Disease Type \*' section has three radio button options: SICKLE, THALASSEMIA, and OTHER VARIANTS.

## 4.8 Syncing

- To sync the offline registration and test details to server.
- Internet is required to sync the data.

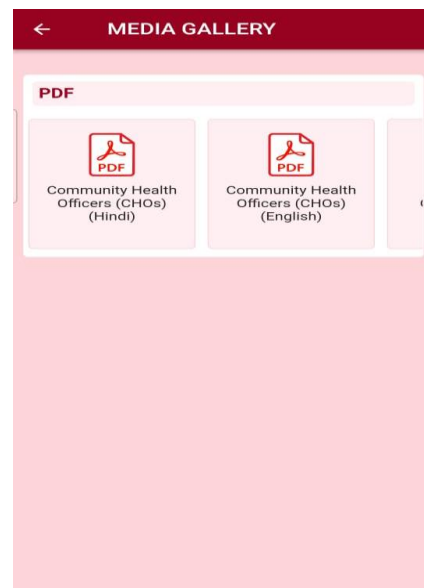
**Note:**

- *The users are requested not to uninstall the app in any case, if mandatory to uninstall then before uninstalling they must sync all local data with server to ensure that no data gets lost.*



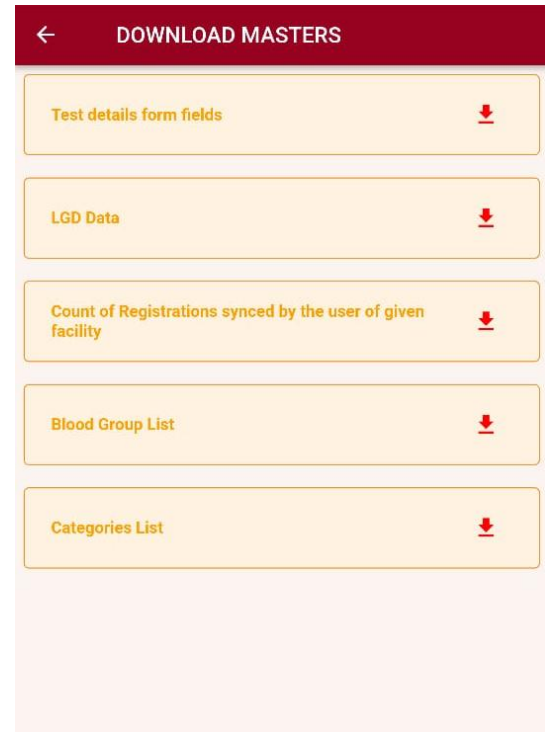
## 4.9 Media Gallery

Beneficiary can download the PDFs, Links and Videos from Media Gallery.



## 4.10 PULL MASTER DATA

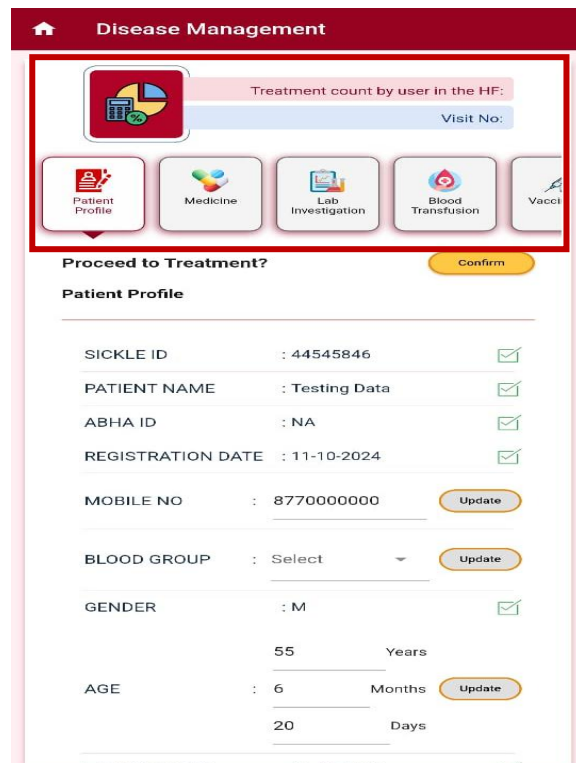
Options to download through “Pull Master data” and offline LGD data option has been provided in the Pull Master data option.



## 4.11 Disease Management

Disease Management includes the following sub-modules: Medicine, Lab Investigation, Blood Transfusion, and Vaccination.

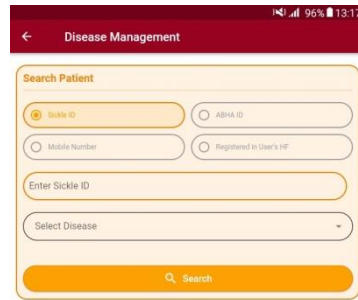
The Visit Number of beneficiary and the total treatment count, which represents the number of treatments provided by the HF user, are also recorded.



### 4.11.1. Patient Search

Patient search is open to all HFs if performed using Sickle ID, ABHA ID, Mobile Number or searching can be done by fetching the list of beneficiaries registered at the user's health facility (HF).

**Note:** Only patients with test reports indicating disease will appear on the list.



The screenshot shows a mobile application interface titled "Disease Management". At the top, there is a red header bar with a back arrow and the text "Disease Management". Below the header, the section is titled "Search Patient". There are four search criteria options, each with a radio button: "Sickle ID" (selected), "ABHA ID", "Mobile Number", and "Registered in User's HF". Below these options, there is a text input field labeled "Enter Sickle ID" and a dropdown menu labeled "Select Disease". At the bottom of the form is a large orange button with a magnifying glass icon and the text "Search". The status bar at the top right shows a signal strength icon, 96% battery, and the time 13:17.

## 4.11.2. Patient Profile

The patient profile will display details such as *Sickle ID*, *Patient Name*, *ABHA ID*, *Registration Date*, *Last Visit On*, *Age*, *Mobile Number*, and *Blood Group*.

Users can update a *patient's Age*, *Mobile Number*, and *Blood Group* only once.

**Note:** After pressing the Confirm button, you can update the *Age*, *Blood Group*, and *Mobile Number*. Additionally, you will be able to enter details for *Medicine*, *Lab Investigations*, *Blood Transfusions*, and *Vaccinations*.

The screenshot shows the 'Disease Management' app interface. At the top, there is a red header with a home icon and the text 'Disease Management'. Below the header, there is a navigation bar with five icons: 'Patient Profile', 'Medicine', 'Lab Investigation', 'Blood Transfusion', and 'Vaccination'. A 'Proceed to Treatment?' button with a 'Confirm' sub-button is visible. The 'Patient Profile' section is highlighted with a red border and contains the following fields:

Field	Value	Action
SICKLE ID	44545846	✓
PATIENT NAME	Testing Data	✓
ABHA ID	NA	✓
REGISTRATION DATE	11-10-2024	✓
MOBILE NO	8770000000	Update
BLOOD GROUP	Select	Update
GENDER	M	✓
AGE	55 Years, 6 Months, 20 Days	Update
LAST VISIT ON	11-10-2024	✓

### 4.11.3. Medicine

In medicine, we record the *drug name* along with its *SNOMED-CT code*, *prescribed quantity*, *dispensed quantity*, *prescription date*, *dispensation date*, and *the name of the center* where the medicine was prescribed and dispensed.

**Note:**

- The quantity dispensed can not be more than the quantity prescribed.
- By default quantity prescribed is equal to quantity dispensed, may be modified as required.
- Minimum date of *Date(Prescribed)* will be the result date of Screening/Confirmatory test entered during beneficiary screening process.
- *Date(Dispensed)* cannot be before *Date(Prescribed)*.
- *Drug name* once taken for a visit will not show for that visit of the beneficiary.

The screenshot displays the 'Disease Management' app interface. At the top, there is a 'Submit' button. Below it, a section titled 'Treatment count by user in the HF:7' shows 'Visit No:1'. A navigation bar contains icons for Patient Profile, Medicine, Lab Investigation, Blood Transfusion, and Vaccination. The main form is titled 'Medicine \*' and includes an 'Add' button. The form fields are: 'Select Drug Name' (dropdown), 'Quantity (Prescribed)', 'Quantity (Dispensed)', 'Date (Prescribed)' (calendar icon, with a note: 'Minimum date : Confirmatory/Screening Result date (15-10-2024)'), 'Date (Dispensed)' (calendar icon), 'Centre Name (Medicine Prescribed)' (text field with 'DH Dhar'), and 'Centre Name (Medicine Dispensed)'. At the bottom, there are 'Add Details' and 'List' buttons.

### 4.11.4. Lab Investigation

In Lab Investigation, we record the *Test Name* along with its SNOMED-CT code, *Sample Collection Date*, *Result Date*, and the *Result* (currently categorized as Normal or Abnormal using SNOMED-CT codes). Additionally, we capture the *Center Name* (default: User's Health Facility Name).

**Note:**

- Minimum date *Date of Sample Collection* will be the result date of Screening/Confirmatory test entered during beneficiary screening process.
- *Date of Result* cannot be before *Date of Sample Collection*.

The screenshot displays the 'Disease Management' application interface. At the top, there is a red header with a home icon, the text 'Disease Management', and a 'Submit' button. Below the header, a dashboard area shows a 'Treatment count by user in the HF:7' chart and a 'Visit No:1' indicator. A navigation bar contains icons for 'Patient Profile', 'Medicine', 'Lab Investigation', 'Blood Transfusion', and 'Vaccination'. The 'Lab Investigation' section is highlighted, showing a form with the following fields:

- Lab Investigation +** (with an 'Add' button)
- Select Test Name**: A dropdown menu with 'CBC - complete blood count' selected.
- Date of Sample Collection**: A date picker with a calendar icon. Below it, a note states: 'Minimum date : Confirmatory/Screening Result date (15-10-2024)'.
- Date of Result**: A date picker with a calendar icon.
- Select Result**: A dropdown menu.
- Lab Center Name**: A dropdown menu with 'DH Dhar' selected.

At the bottom of the form, there are two buttons: 'Add Details' and 'List'.

## 4.11.5. Blood Transfusion

In Blood Transfusion, we record the *Date of Blood Transfusion* along with that, we capture the *Center Name* (default: User's Health Facility Name).

**Note:**

- Minimum *date of Blood Transfusion* will be the result date of Screening/Confirmatory test entered during beneficiary screening process.

The screenshot shows the 'Disease Management' app interface. At the top, there is a red header with a home icon, the text 'Disease Management', and a 'Submit' button. Below the header, there is a section for 'Treatment count by user in the HF:7' with a 'Visit No:1' indicator. A navigation bar contains icons for 'Treatment file', 'Medicine', 'Lab Investigation', 'Blood Transfusion', and 'Vaccination'. The 'Blood Transfusion' icon is selected. The main form area is titled 'Blood Transfusion \*' and includes an 'Add' button. It features a date picker for 'Date of Blood Transfusion' with a minimum date of '15-10-2024' and a dropdown menu for 'Blood Transfusion Center Name' currently showing 'DH Dhar'. At the bottom, there are two buttons: 'Add Details' and 'List'.



## 4.11.6. Vaccination

In vaccination, we record the *Vaccine Name* along with its SNOMED-CT Code, *Vaccination Date* and the *Dose*. Additionally, we capture the *Center Name* (default: User's Health Facility Name).

**Note:**

- Minimum *date of vaccination* will be the result date of Screening/Confirmatory test entered during beneficiary screening process.
- The *Date of Next Vaccination* is suggested based on the vaccine name and dose selected to assist with entry.
- If the Last Dose is selected is selected for a specific vaccine, the next vaccine date will not be displayed.
- The *Date of Next Vaccination* is an optional field.

The screenshot displays the 'Disease Management' interface. At the top, there is a 'Submit' button. Below the header, a dashboard shows 'Treatment count by user in the HF:7' and 'Visit No:1'. A navigation bar includes icons for 'Treatment file', 'Medicine', 'Lab Investigation', 'Blood Transfusion', and 'Vaccination'. The 'Vaccination' form is active, featuring an 'Add' button and the following fields:

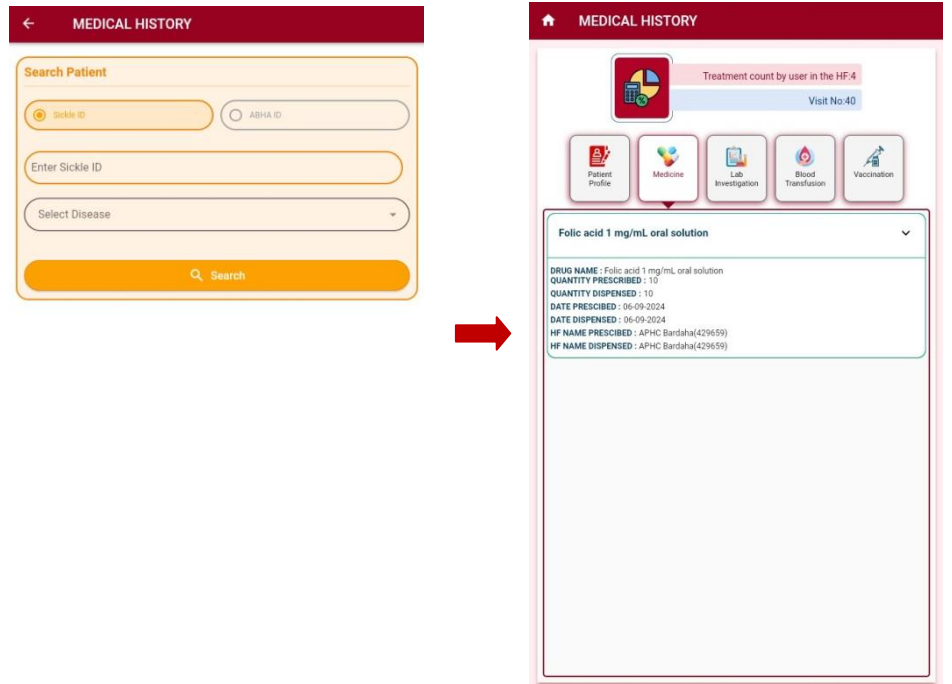
- Vaccine \***: A dropdown menu labeled 'Select Vaccine Name'.
- Date of vaccination**: A date picker with a calendar icon. Below it, a note states: 'Minimum date : Confirmatory/Screening Result date (15-10-2024)'.
- Vaccine Center Name**: A dropdown menu labeled 'Select HF type' with 'Community Health Centre' selected.
- Select HF Name**: A dropdown menu.

At the bottom of the form, there are two buttons: 'Add Details' and 'List'.

## 4.12 Medical History

Patient search is open to all HFs can be performed using Sickle ID or ABHA ID, which retrieves a visit-wise list of that patient.

The user can view and monitor the list of *Medicines, Lab Investigation, Blood Transfusion, Vaccines* added during a particular visit by the health facility (HF) user.



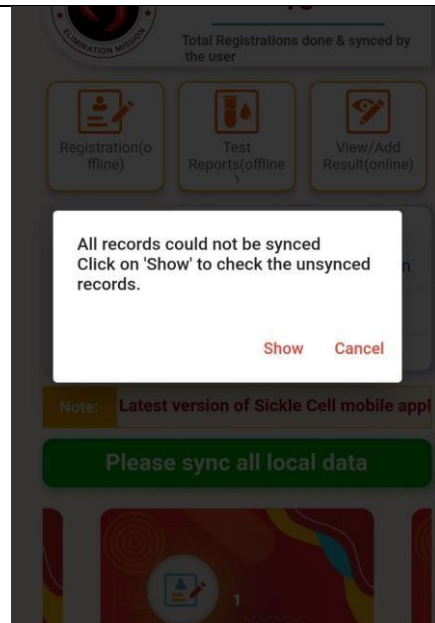
## 5. Error Conditions

### 5.1 Syncing error

While Syncing the data user get this error to resolve this error user have to click on show button and then she/he will be able to edit the data.

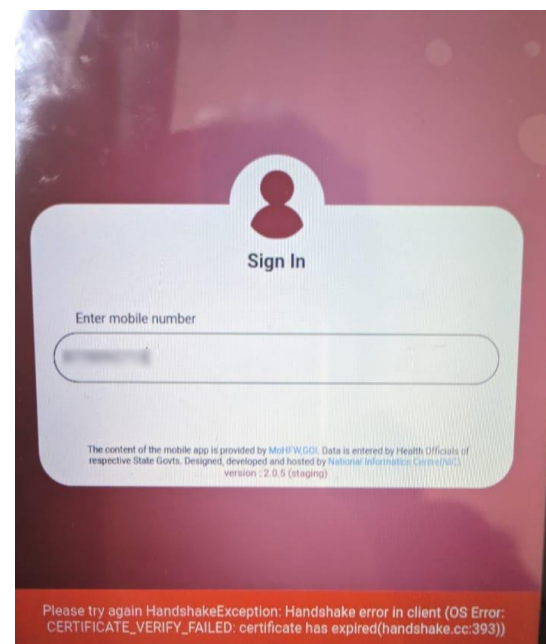
Following are the reasons of this error:

- Mobile number already registered with 5 records.
- Duplicate Record entered.



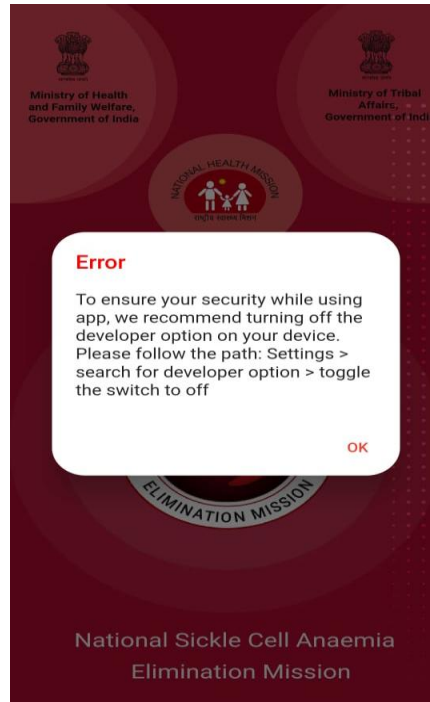
### 5.2 Handshake Exception

While Login getting this error means your android version is lower than 7 and Sickle cell application not running on version lower than 7.



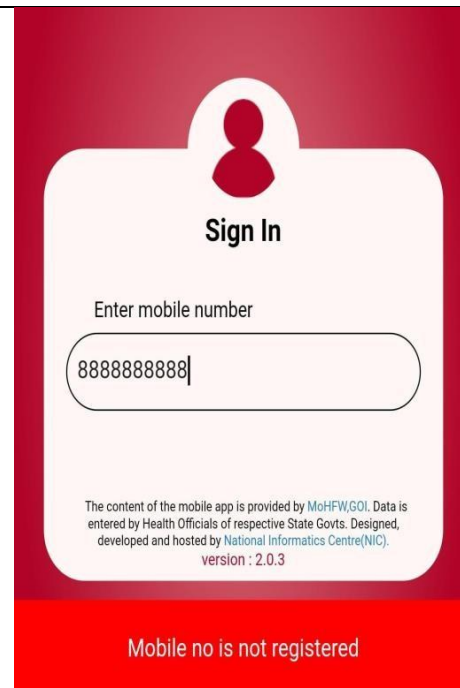
### 5.3 Developer Mode error

The application won't work when the developer option is ON.



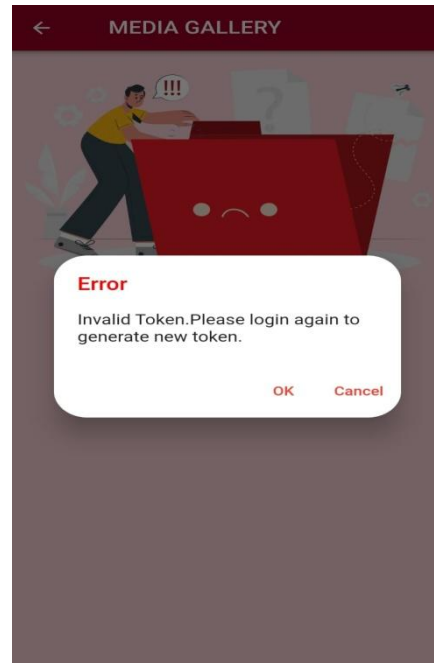
## 5.4 Mobile number not exist

On Login user get this error and for resolving the user must get her/his mobile number registered through her/his district user, state user or state admin.



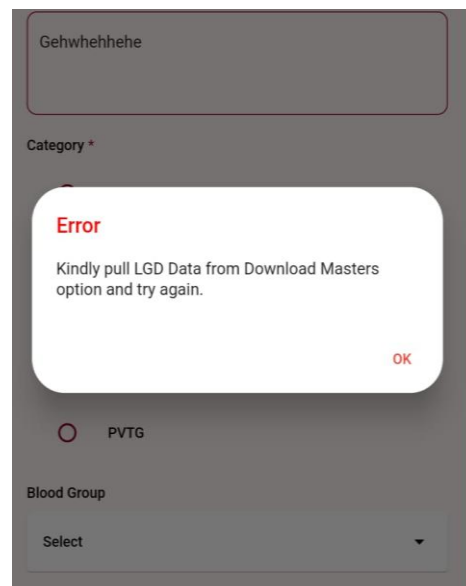
## 5.5 Invalid Token

When any Facility user login to another mobile and then try to use the app in old phone then she/he will get this error. Anyone can use this app in one mobile at a time.

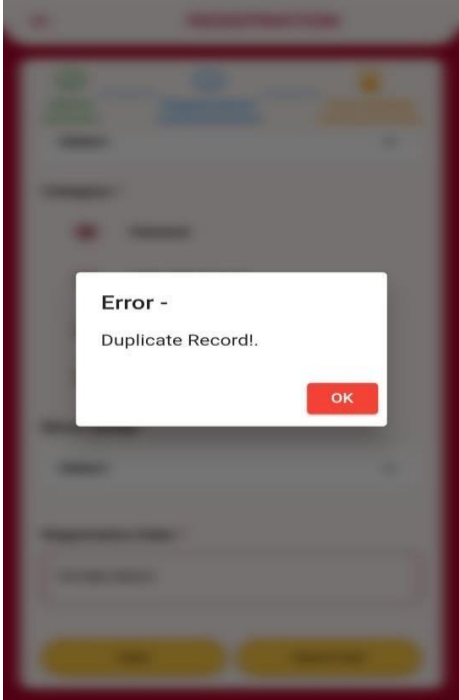


## 5.6 Kindly Pull The LGD Masters.

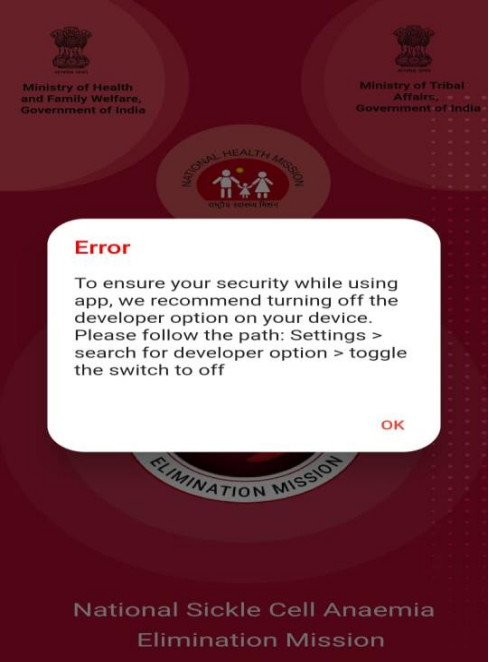
The alert suggests that the user has not downloaded the LGD data i.e. state, district, blocks etc.. To fix this, the user may click ok and download the LGD data from master download option.



## 5.7 Registration details and Test Details already present.

<p>If his/her Registration details and Test Details already present.</p>	
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## 5.8 Developer Mode and Emulators

<p>When the developer mode option is enable on the User's mobile then she/he will get this alert. For the security purpose the user is not allowed to use the application in developer mode.</p>	
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## 5.9 Test Details Blank Fields Error.

When user do not finds any field then she/he have to click on the down arrow of Home screen and pull the 'Test details form fields'.

TEST DETAILS	
Sickle ID	7017
ABHA ID	
ABHA Address	
Name	jvgvgvgic
Gender	F
Date of Birth	10-01-2024
Father/Husband	uytutduutct
Mobile No.	6885257125
Date of Registration	10-01-2024

[Skip And Enter Confirmatory Details ->](#)

Submit

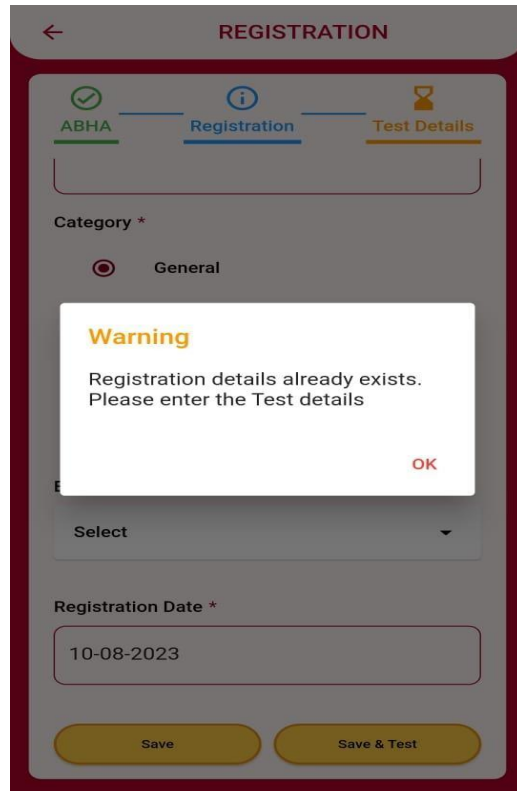
## 5.10 Demo Auth Profile Photo no Exists.

The user gets this error if the profile data of beneficiary is not available with ABDM. The user is then prompted to capture profile and enter other details manually.



### 5.11 Registration details already exists. Test details needs to enter.

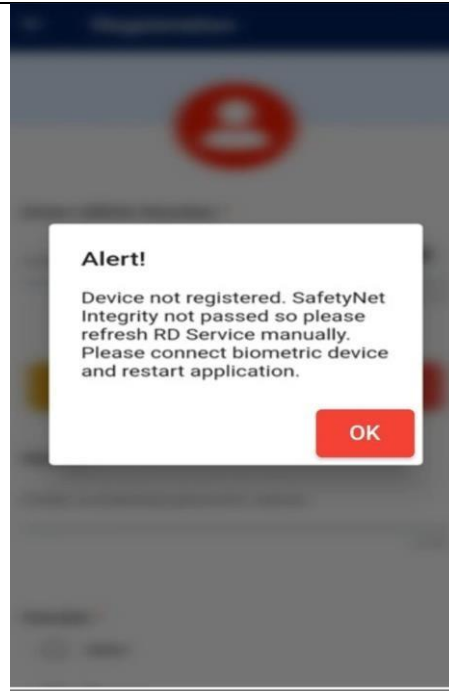
If his/her Registration details already present but the Test details of his/her not present.



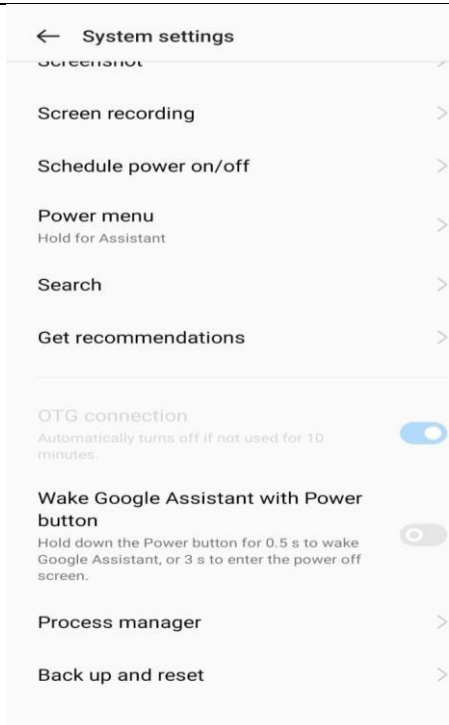
### 5.12 ABHA Creation/Verification using fingerprint Bio Auth



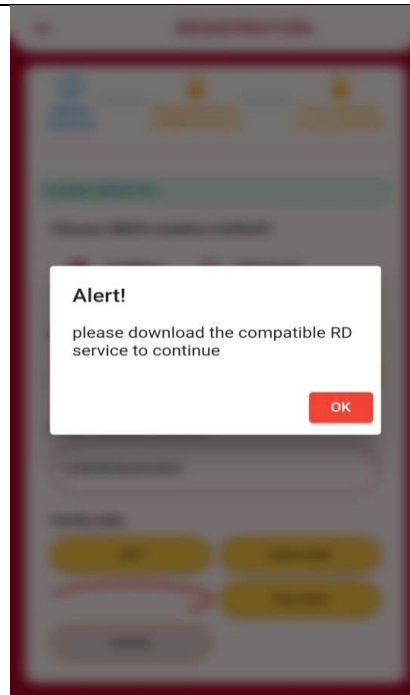
If the user is getting the given alert, then user should disconnect the Biometric device, quit the app, followed by enabling the OTG connection if disabled and reconnecting the device and restarting the app. The user is also suggested to repeat the steps after restarting the mobile if the above steps don't resolve the issue.



At this point the user has to enable the **OTG connection** from your system's settings.

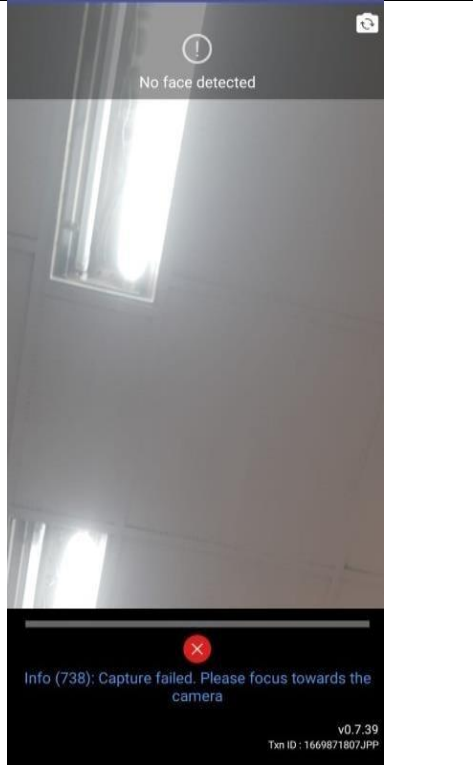


Rd Service not installed, please install from Play Store.

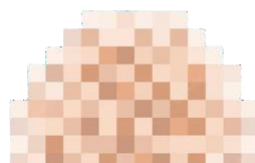
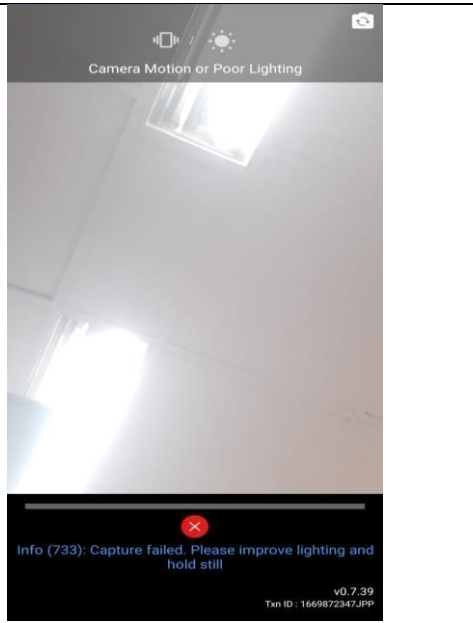


### 5.13 ABHA Creation/Verification using Face Bio Auth

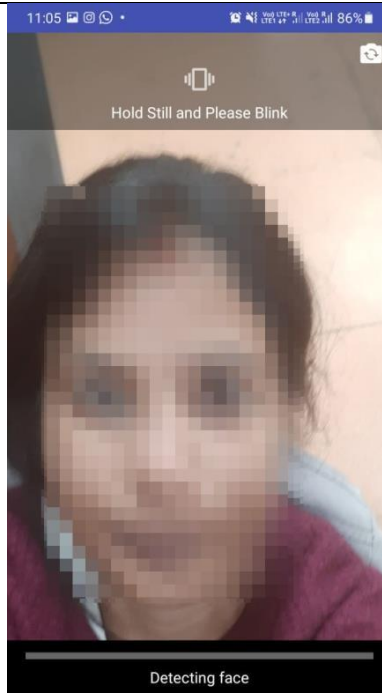
Please focus towards the camera



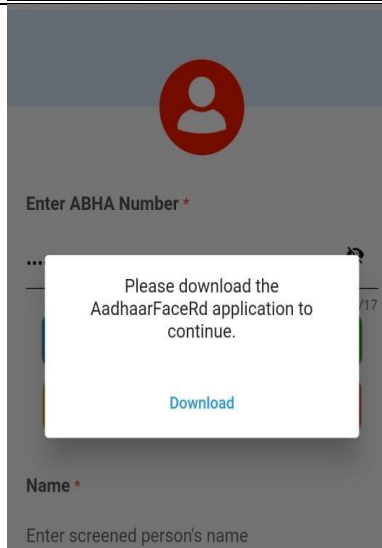
Please improve lighting and hold still



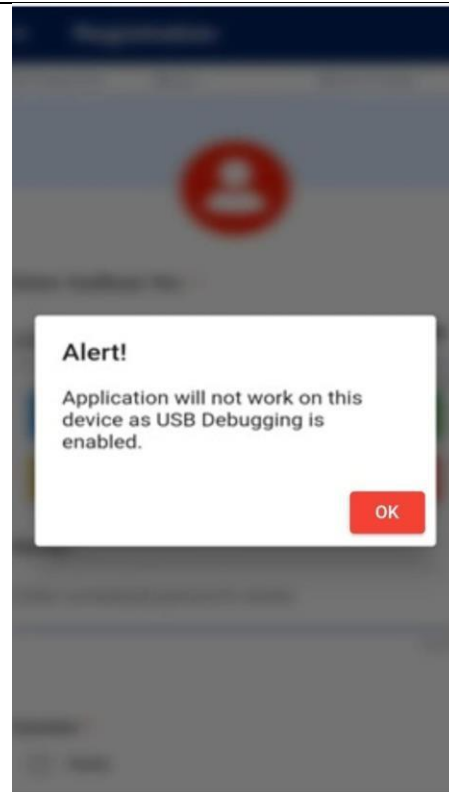
The user should Hold Still and continue blink while capture.



Please download *theAadharFaceRd* Service from Play Store.



Please disable the USB debugging in Mobile Settings while capturing image.



## 6. Help

- To raise an issue, the user is requested to visit <https://sickle.nhm.gov.in/sickle2.0/home> and click on *Raise Ticket* Image on the footer.
- The user will land on iTMS web application, where the user can click on *Raise Ticket* option on top right corner.
- On clicking the *Raise Ticket*, The user can give the mobile number followed by OTP verification.
- Click on *Action Radio Button* and click *Raise Ticket*.
- Select *Mobile App* in *Module*, select *Sub Module* and *Form*, enter issue, attach supporting file and submit.

The dashboard features a blue header with the text "iTMS Integrated Ticket Management System" and navigation links for Home, Admin Login, and Raise Ticket. Below the header is a large illustration of a person working on a laptop, surrounded by icons for a play button, gears, a heart, and a bar chart. At the bottom, there are four colored buttons representing ticket status: Total Tickets (red), PENDING Tickets (blue), REJECTED Tickets (orange), and RESOLVED Tickets (green).

The "Raise Ticket" form is titled "Sickle Cell Disease Control Programme" and includes a "Mobile Number" field with the value "8853172823". Below this is a "User List" table with the following data:

User ID	User Name	Date of Birth	Gender	Action
pallan02@gmail.com	Pallavi SC			

Below the user list is a "Ticket List" table with columns for Mobile, Sub Module, Form, Issue, Remarks, Attachment, and Status. The table is currently empty, and a "New Ticket" button is visible in the top right corner. Below the ticket list is a "Ticket Detail" form with the following fields:

Ticket Type:  Error  New Requirement  Change Request  Shortness  Functional

Module:  Sub Module:  Form:

Issue:  Remarks: