



Mobile Application for Tuberculosis Screening (MATS) User Manual

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Version 4.0



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Table of Contents

1	Introduction	3
2	Application Details	3
3	User Guide.....	3
3.1 <i>New Health Worker</i>	3
3.2	.... <i>Registered Users</i>	4
3.3	.... <i>Application Dashboard</i>	4
3.4	.... <i>Screening Process</i>	5
3.5	.... <i>Offline Mode</i>	6
3.6	.... <i>Change Password</i>	6
3.7	.... <i>Forgot Password</i>	7
4	Conclusion	7
5	Glossary	8



1 Introduction

The Mobile Application for Tuberculosis Screening (MATS) is the first step in improving tuberculosis care. It is an *mHealth* application used by a trained healthcare worker to perform tuberculosis (TB) screening. It has the ability to work in both online and offline modes. In the offline mode (or when there is no data network), screened data is stored on the user device. Stored data is then pushed off the device as soon as the online mode is activated (i.e. when the data network is restored).

2 Application Details

Website: www.matslagos.com.ng

Android Application APK Link:

www.matslagos.com.ng/moapps/matsv1.2.apk

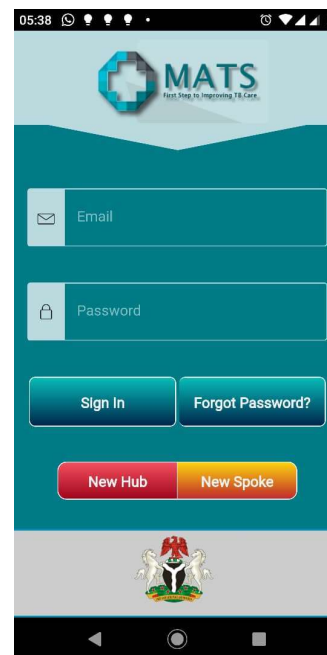


Figure 1.1: MATS Start-up Screen

3 User Guide

3.1 New Health Worker

A new user will register from the android application after downloading and installing the android APK from the provided download link above or through the Google Playstore by searching for “MATS”. Registration begins by clicking “New Spoke” button (for Assessors) and the “New Hub” button (for Facilities) on the start-up screen on the MATS Start-up Screen (Figure 1.1) and the registration form for Assessors (Figure 3.1) and Facilities (Figure 3.2) will appear.

Figure 3.1: New Assessor Registration (Spoke)

Note that after registration, the registered user will be confirmed by the MATS admin who will assign the registered user to a health facility.



**Unless the MATS Admin confirms the registered user, the user won't be able to login.*

3.2 Registered Users

Registered users that have been assigned to a health facility will be able to login after clicking on “Login” button on the application start-up screen. The login form will appear as shown below:

After inputting the right access details on the login form, the application dashboard will appear as shown in the image below.

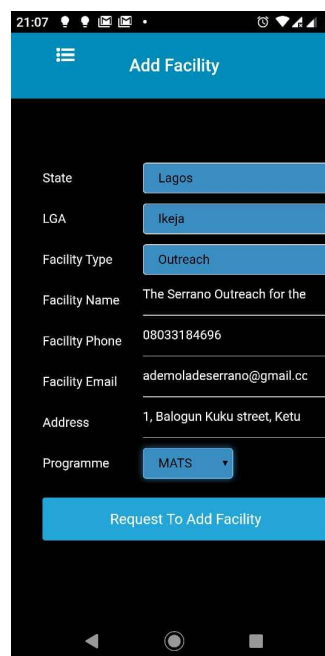
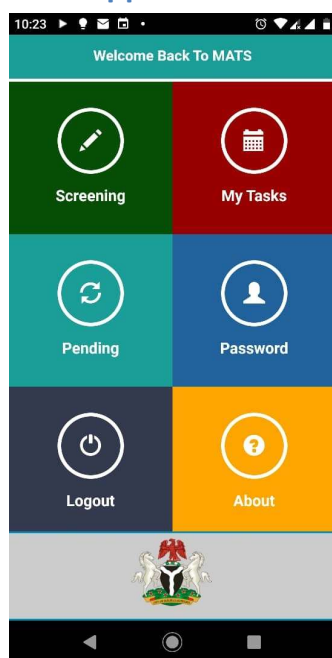


Figure 3.2: New Facility Registration (Hub)

3.3 Application Dashboard



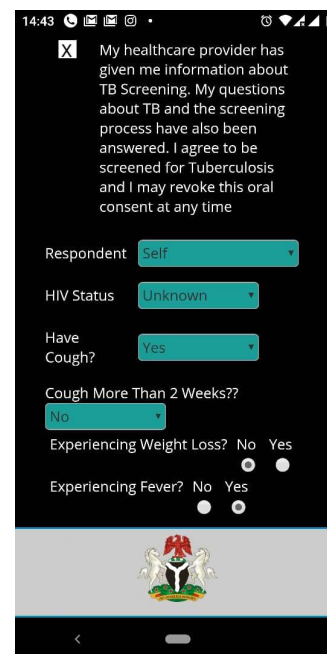
The application dashboard has four menus which are listed below:

1. **Screening:** This contains the survey questions for the tuberculosis screening process.
2. **My Tasks:** This shows a record of all the screenings done by this Assessor, including screening outcomes
3. **Pending:** This contains the summary view of the user data taken by the health worker but still reside on the user's device because there is no data connection or network.
4. **Password:** This provides accessibility security which enables users to change the access passwords at their convenience to the desired passwords.
5. **Logout:** Enable user to logout of the application.
6. **About:** shows where and how to get more information on the MATS program

Figure 3.3: MATS Dashboard

3.4 Screening Process

Once the “Screening” button has been clicked from the dashboard(or “Start Screening” from the main menu), the survey form will be revealed as shown in Figure 3.4below. If any of the input fields are not filled by the health worker/user, a validation error will be displayed at submission.



14:43

My healthcare provider has given me information about TB Screening. My questions about TB and the screening process have also been answered. I agree to be screened for Tuberculosis and I may revoke this oral consent at any time

Respondent: Self

HIV Status: Unknown

Have Cough?: Yes

Cough More Than 2 Weeks?: No

Experiencing Weight Loss?: No Yes

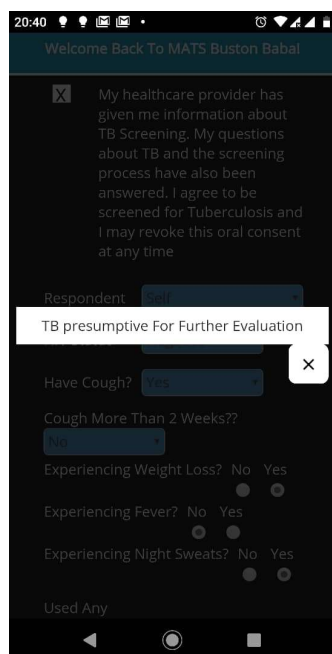
Experiencing Fever?: No Yes

Experiencing Night Sweats?: No Yes

Used Any

Figure 3.4: MATS Screening Form

The image above (Figure 3.4) shows a prototype of a completed survey form. A pop-up modal will show up signifying whether the screened person is a TB presumptive or not as shown in Figure 3.5. When the form has been completed, the “End Survey” button will appear. The screening process ends when “End Survey” button has been clicked and pop-up modal confirms screened data submission (Figure 3.6)



20:40

Welcome Back To MATS Busto Babai

My healthcare provider has given me information about TB Screening. My questions about TB and the screening process have also been answered. I agree to be screened for Tuberculosis and I may revoke this oral consent at any time

Respondent: Self

TB presumptive For Further Evaluation

Have Cough?: Yes

Cough More Than 2 Weeks?: No

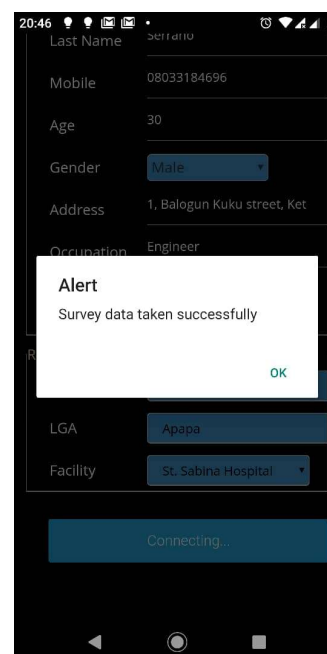
Experiencing Weight Loss?: No Yes

Experiencing Fever?: No Yes

Experiencing Night Sweats?: No Yes

Used Any

Figure 3.5: TB Presumptive



20:46

Last Name: Serrano

Mobile: 08033184696

Age: 30

Gender: Male

Address: 1, Balogun Kuku street, Ket

Occupation: Engineer

Alert

Survey data taken successfully

OK

LGA: Apapa

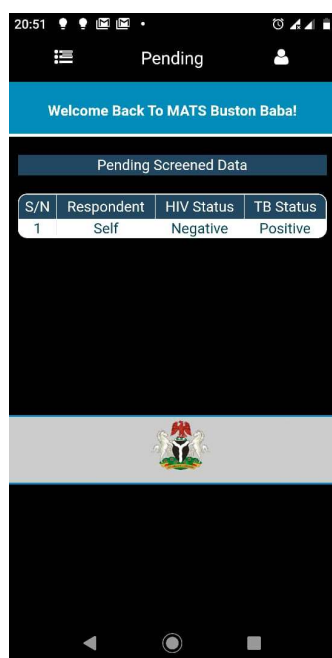
Facility: St. Sabina Hospital

Connecting...

Figure 3.6: End Survey

3.5 Offline Mode

The application has ability to store screened data locally on the user device if there is no data network or internet access. Anytime the application senses loss of data network on the parent device, a modal pop up with a message “You are now in Offline Mode!” to notify the user of its switch to offline mode; and it begins storingscreened data on the phone. Once the data network is restored, all the stored screened data will be sent to the online database for storage.



By clicking on “Pending Screens” from the main menu or “Pending” on the dashboard, the image in Figure 3.7 on the left appears showing the summary data of the pending screens i.e. The screened data that have not been sent to online database which will automatically disappear when data network or internet is restored to the device and the data will be sent to the online database.

Figure 3.7: Pending Screened Data in Offline Mode

3.6 Change Password

To Change password, the old password must first be inputted to provide security around the password change. The new password will be confirmed to avoid inputting mistakes from the user input as shown in Figure 3.8

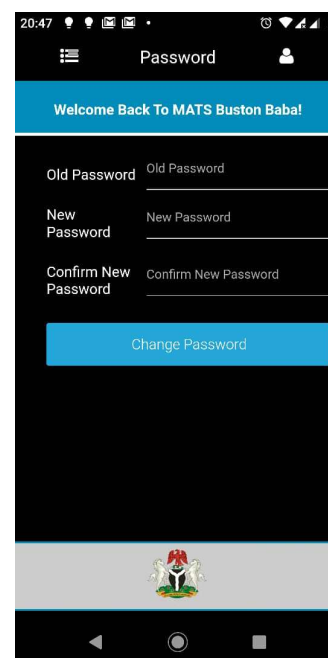


Figure 3.8: MATS Password Change



3.7 Forgot Password

To recover current password, click on the “Forgot Password” button on the start-up screen and the image below (Figure 3.9) will be revealed. If a valid registered email is inputted, a mail containing the password will be sent to the email. This is useful in the case of health worker not remembering the current password.

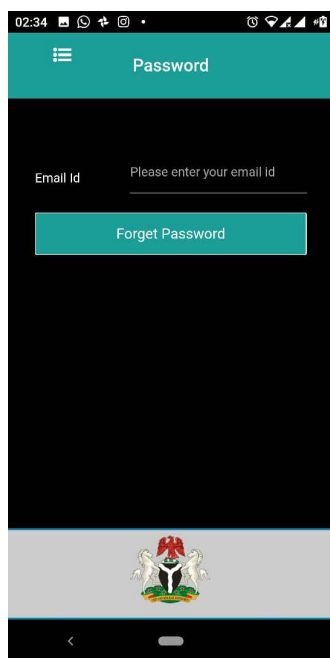


Figure 3.9: Recover Password

4 Conclusion

For more information or questions on using MATS, please contact the MATS Admin by mail to a.serrano@pharmaccess.org



5 Glossary

MATS: Mobile Application for Tuberculosis Screening

mHealth: (mobile health) is a general term for the use of mobile phones and other wireless technology in medical care. The most common application of mHealth is the use of mobile phones and communication devices to educate consumers about preventive health care services.

Modal: User interface design for computer applications, a modal window is a graphical control element subordinate to an application's main window

ScreenedData: User information that has been checked for errors and correcting them prior to submission into the database.

Data Network: This is one way that mobile device users can gain wireless access to the internet. Depending on how much you use the internet, and where, having a data-enabled device will give the best experience by giving you on-the-go access to the information you need

Dashboard: A user interface that organizes and presents information in a way that is easy to read which also gives user quick access to other features on the software and make it more interactive.

Android: An open-source operating system used for smart phones and tablet computers

APK: An Android Package Kit (*APK* for short) is the package file format used by the Android operating system for distribution and installation of mobile apps.