

Version 2.0

# User Manual

Android Application for PHC Health Data  
Collection (PHC\_HDC\_V-1.7)



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GLOBAL COMMUNICATION CENTER  
GRAMEEN COMMUNICATIONS

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# Introduction

Portable Health Clinic (PHC) aims to build an affordable, usable and sustainable preventive healthcare system for unreached people. It helps to produce technologies to provide healthcare service to the doors of the unreached. The portable clinic is a health checkup booth or a box with necessary diagnostic tools. A certified nurse will collect health record of an individual of each family in a village/urban area and upload them to a centralized database. There are two platforms (web & android) that aid this project technically. This document will guide what are the functionalities of PHC Health Data Collection android application and how to operate it.

## Functionalities – In a Nutshell

The android application is basically used to store (locally) and submit the health data of a subject/member to the remote database server through internet which are checked using the tools of portable health box. A new member can be registered by this application individually or family wise. Therefore the application can do the following:

- ✓ Check Up Data Entry & Prescription Printing
- ✓ New Family Registration
- ✓ New Member Registration (With or without family)
- ✓ Offline data synchronization

## Initial Setup

As this is a private android application of GCC for PHC project still now, it is not available in “Google play store” or any public domain. The authorized users will get this application through their mail. He/she has to install the application by keeping that in their device’s storage location. Before installing he/she has to ensure that his/her device allows installation of apps that are from unknown source (device Settings → Security → Unknown Sources).

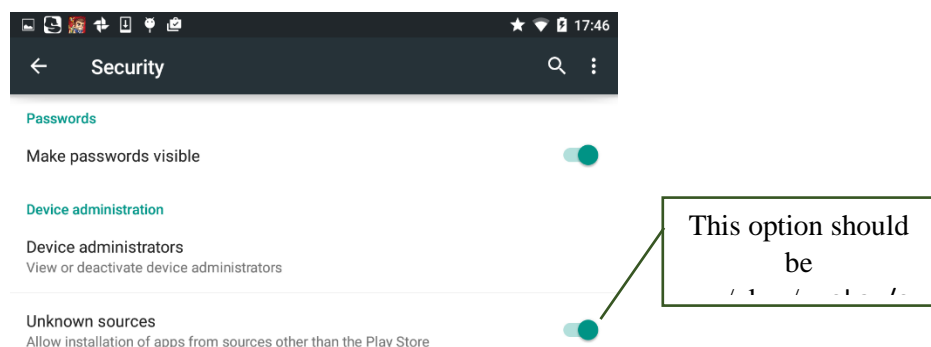


Fig: Allowing installation of any unknown sources’ applications

For the very first time, the user has to load initial backup data from remote server using internet. This option will be appeared when the user launches the application for the first time. He/she has to press okay button to load the initial synchronization. Internet is required for this process.

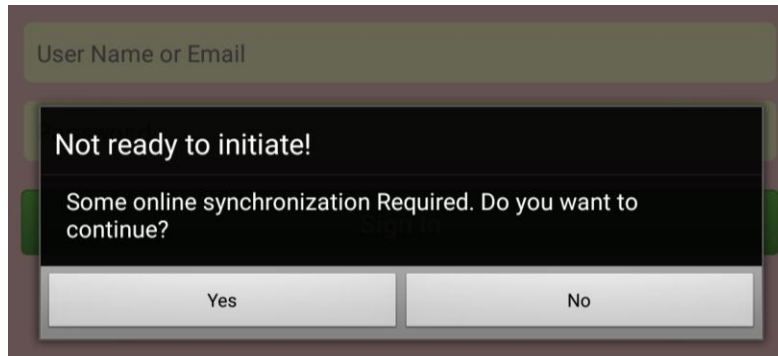
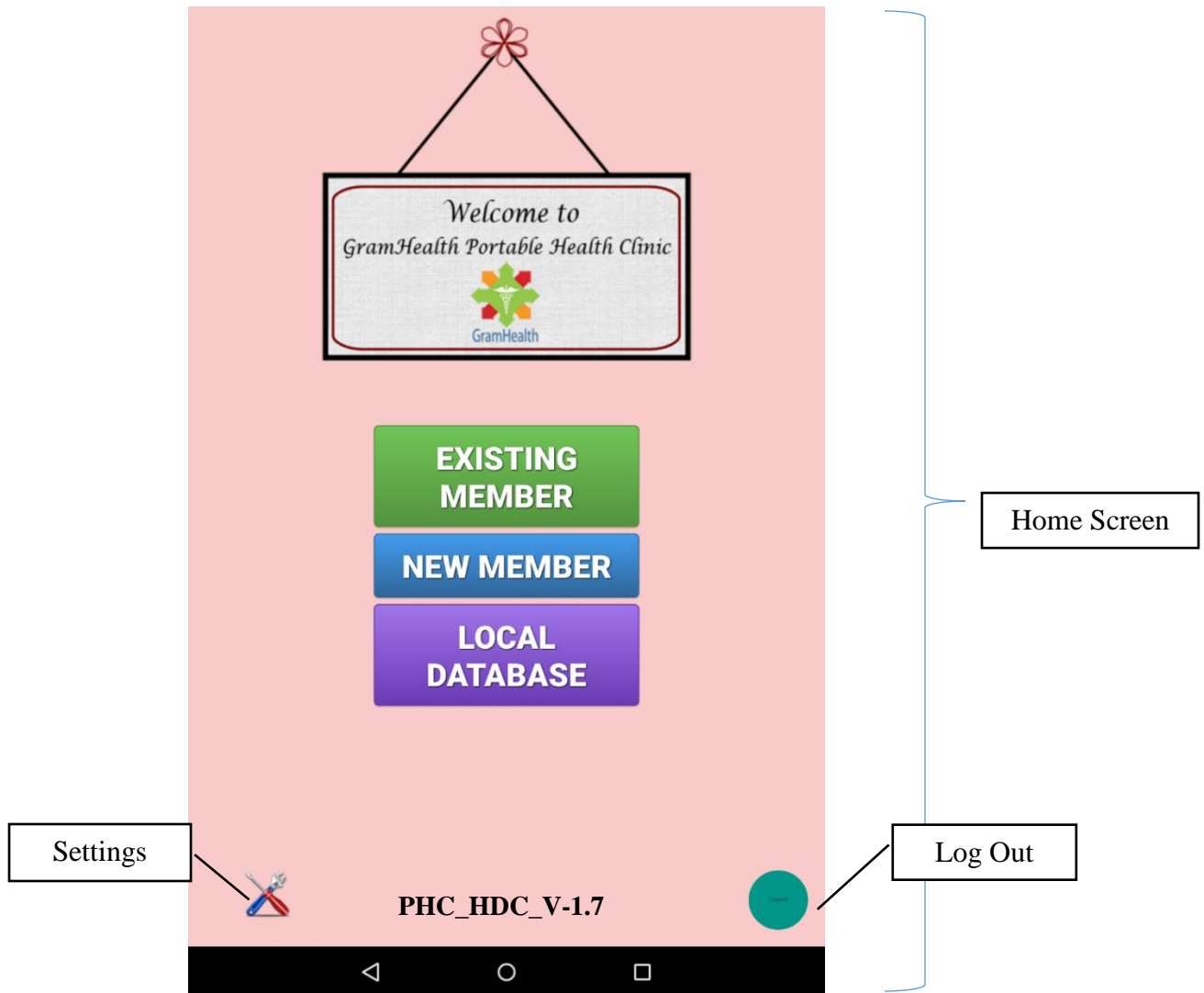


Fig: Initial Pop Up for offline data synchronization

And then the user has to login to the system using internet (***Offline login is not available in the current version***). Once a user logged in to the system, the application will be stayed as logged in state until the user press the “logout” button. Even, if the application is closed, it will be in logged in state whenever it will be re-opened.



After doing all the above, the application won't be ready yet to start data entry. The user has to set the site and some optional values from the settings screen by clicking the settings icon which resided at the bottom-right corner of the home screen.

The screenshot displays the settings interface. On the left, under 'Mandatory Settings', the 'Site' option is highlighted with a blue arrow pointing to a list on the right. Below 'Site' are 'Optional Settings (If any)' including 'Set Default Value' (checked), 'Company/Shop Name', 'Address', 'Company Mobile', 'AlternateMobile', and 'Registration No Prefix'. The right panel shows a list of sites with a 'Cancel' button at the bottom.

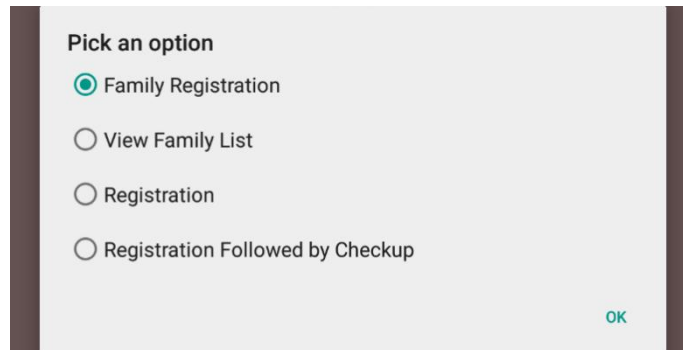
Site	Status
Popadia, Chittagong	Unselected
Social Business Day-2013	Unselected
Sharwatoli, Chittagong	Unselected
demonstration	Selected
Jamalpur	Unselected
Sheltech Niribili	Unselected
Lakshmipur	Unselected
Concord Emporium	Unselected
Monihar Complex	Unselected
Park	Unselected
Siza Court	Unselected
Sheltech Momena	Unselected

Cancel

## New Member Registration

A member/patient/subject is treated as a new member if he/she comes for the first time to get the PHC service and is not being registered into our system. In our current system, we have another process which is “Family Registration”. So, a new member can be registered under a family also. In that case, his/her family has to be registered first. After that, he/she will be registered as a member of that family. Multiple members can be added under a family.

A member can be registered without family registration also. So basically, to register a new member there will be one of the following four situations:



The screenshot shows a dialog box titled "Pick an option" with four radio button options: "Family Registration" (selected), "View Family List", "Registration", and "Registration Followed by Checkup". An "OK" button is located at the bottom right.

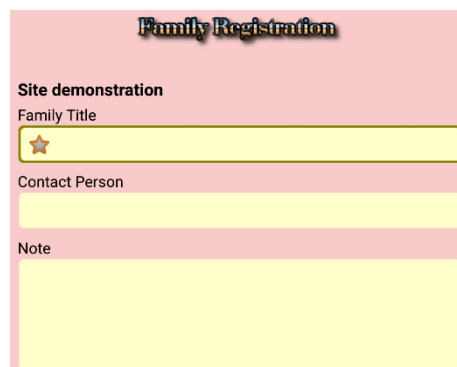
### *a. Family wise registration required, but family is not registered*

Solution: Select “Family Registration” option

Steps:

1. Go to Home → New Member → Family Registration
2. Fill up the fields of “Family Registration” form (only “Family Title” field is required)
3. Click Save → Member Registration Screen
4. Fill up all the fields (All are required) \*
5. Click Save and register another member (if any) of that family.

\*Tips of Member registration screen are given in the third situation



The screenshot shows the "Family Registration" form. It has a title "Family Registration" at the top. Below it, there is a section "Site demonstration" with a "Family Title" field (required, indicated by a star icon). Below that is a "Contact Person" field, and at the bottom is a "Note" field.

Fig: Family Registration Screen

***b. Single/Multiple member registration with family is required and family is registered already***

Solution: Select “Family Registration” option

Steps:

1. Go to Home → New Member → View Family List
2. Select the particular family and click on “Add Member”
3. Fill up all the fields (All are required) \*
4. Click Save and register another member (if any) of that family.

\*Tips of Member registration screen are given in the third situation

GramHealth: Portable Health Clinic			
Family List			
371	Tutul family	1000332233 hdjjc	Add Member
370	evening test	1472583691	Add Member
369	evening family test offline	1231236544 hjjk	Add Member
368	evening family test	1236543211 gh	Add Member
367	Test Sync Family 2	1000254855 bjuhjn	Add Member
366	Test Sync Family 2	1000254855 bjuhjn	Add Member
365	test family android	5478555688 test	Add Member
364	Chowdhury	1000775606 JGC-12A	Add Member
363	khadiza tul kobra	1000775347 f-1003	Add Member
362	Md. Ruhul Amin	1000775325 JGC-11, 1207	Add Member
361	fatema tuz zahura	1000775404 f-1005	Add Member
360	Md.abul kashem	1000775123 jgc 12 a	Add Member
359	Shafiqulislam	1000775369 staff	Add Member

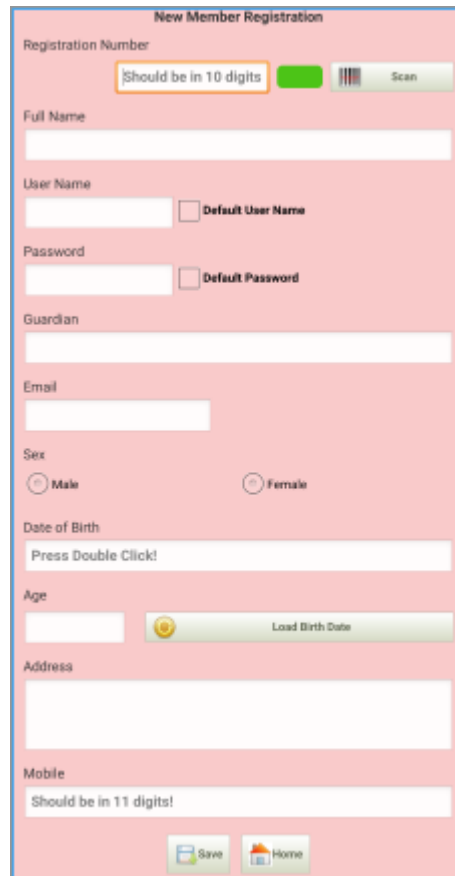
Fig: Family List Screen

***c. Single/Multiple member registration without family and not followed by checkup***

Solution: Select “Registration” option

Steps:

1. Go to Home → New Member → Registration
2. Fill up all the fields (All are required)
3. Click Save and register another member (if any).



**New Member Registration**

Registration Number  
 Should be in 10 digits

Full Name

User Name  
 ☐ Default User Name

Password  
 ☐ Default Password

Guardian

Email

Sex  
☐ Male ☐ Female

Date of Birth  
 Press Double Click!

Age

Address

Mobile  
 Should be in 11 digits!

Fig: Member Registration Screen

#### Tips:

1. If there is any common part of the pre determined barcodes for registration number, the common part can be set as registration prefix from “Settings” menu of Home screen.
2. Registration Number can be entered using barcode scanning feature. To do that, click on Scan button.  
N.B. This scanning feature won’t work when any prefix is given
3. User name will be disabled during offline state by
4. Checking “Default Password” checkbox, password will be automatically placed in password box. Similar process can applied in “Email” field also.  
N.B. The checkbox for email will be visible after providing full registration number
5. If anyone knows only age or date of birth, the other value will be automatically calculated. For date of birth calculation, user has to click the load birth date button after giving age value.
6. In order to, set the default values automatically without clicking any checkbox, use the settings option. (Home→Settings→Set Default Value --Checked)



***d. Single member registration without family and followed by checkup***

Solution: Select “Registration Followed by Checkup” option

Steps:

1. Go to Home → New Member → Registration Followed by Checkup
2. Fill up all the fields (All are required)
3. Click Save and check up screen will be appeared.
4. Provide checkup data and click “submit” button. Detail is given in next chapter.

## Check Up Data Entry

### New Check up

In order to enter any member's check up data into the system, at first, the user has to determine whether the member is registered or not. If the member is registered, then follow the bellow's steps to go the check-up screen.

Home → Existing Member → New Check Up → Check Up Data Screen

If the member is not registered, then use the last option of New Member (described in the option “d” from the last chapter).

The entry fields are categorized into six categorized which are illustrated as below:

**GramHealth: Portable Health Clinic**  
Check-up Report

Registration No : 13006224  
Name : Mosammat Asia Begum  
Age : 52

**Health Status**

BMI (Body Mass Index) Check Up

Waist-Hip Ratio Check Up

Blood Related Check Up

Rate (Pulse & Heart) Check Up

Urinary System Check Up




Miscellaneous Check Up

Preview Home Submit

*Some Instructions for checkup data entry*

1. Member/patient's personal information can be viewed through "profile" button
2. In some cases, unit can be altered
3. Whenever any unusual value is entered into any field, an "exclamatory" sign will be appeared. In that kind of cases, user has to re check those entries.
4. Before submitting check up data, please check the data from "Preview" screen.

Checkup Preview of Mst.Laily akther

 **GramHealth: Portable Health Clinic**    
**Check-up Report**

Height (cm)	167
Weight (Kg)	55
BMI	19.72
Waist (cm)	75
Hip (cm)	79
Waist-Hip Ratio	0.95
Blood Type	A+
Oxygenation of Blood (%)	100
Blood Pressure (mm Hg)	
Blood Glucose (mmol/l)	
Blood Hemoglobin (g/dl)	
Pulse Rate (beats/min)	no


Okay  Print

Fig: Preview Screen

### Check Up Editing

#### Conditions for editing check up

1. Only present date's data can be edited for both offline and online mode
2. The checkup which are already submitted to online cannot be edited locally
3. In case of online editing, prescribed check up data cannot be edited

Steps: Home→Existing Member→Edit Check-Up

## Prescription Printing

The prescription can be printed from this application using wifi-hotspot technology (for the nonce). Later, Bluetooth/wired technology will be used for printing prescriptions. This feature can be done through online only.

Steps:

1. Complete and submit check up data entry to the remote server.
2. Follow Home→Existing Member→Type Registration No→Click Submit
3. If one or more prescriptions are prepared on behalf of that patient, a dropdown menu will be appeared showing the list of those prescription date & time
4. Select the desired date & time and click “Print Prescription”
5. From the prescription page, click the device’s option menu and click on “print” option

The screenshot shows the 'View Prescription' screen of the PHC\_Health\_Data application. The interface includes a header with the application name and a menu icon. Below the header, there is a patient information section with fields for User Name, Full name, Barcode ID, and Age. A 'Back' button and a 'Black & White' button are also present. The main content area displays the patient's vital signs (Height, Weight, BMI, Waist, Hip, Waist-Hip Ratio) and a list of prescriptions. The prescriptions are listed with their names, dosages, and frequencies. The interface is designed for a mobile device, with a status bar at the top showing the time and battery level.

PHC\_Health\_Data

Portable Health  
An Affordable, Usable and Sustainable  
Healthcare System for Unreached p

Settings  
Print

Home / View Prescription

View Prescription

User Name: 13001971  
(13001971@domain.com)

Full name: Mst.Laily akther

Barcode ID: 13001971

Age: 38

Back Black & White

GramHealth: Portable Health Clinic  
A GramWeb Healthcare Initiative For Unreached Communities  
Health Check-up Report

Full name: Mst.Laily akther

Age: 38

Gender: Female

Checkup Date:

Barcode ID:

Health Status:

Height 155 cm

Weight 48.6 Kg

BMI 20.23 (18.5 - 25)

Waist 83 cm

Hip 82 cm

Waist-Hip Ratio 1.01

C/C:  
» 1.breathlessness for 4 years 2. h/o of diabetes with irreg

Rx

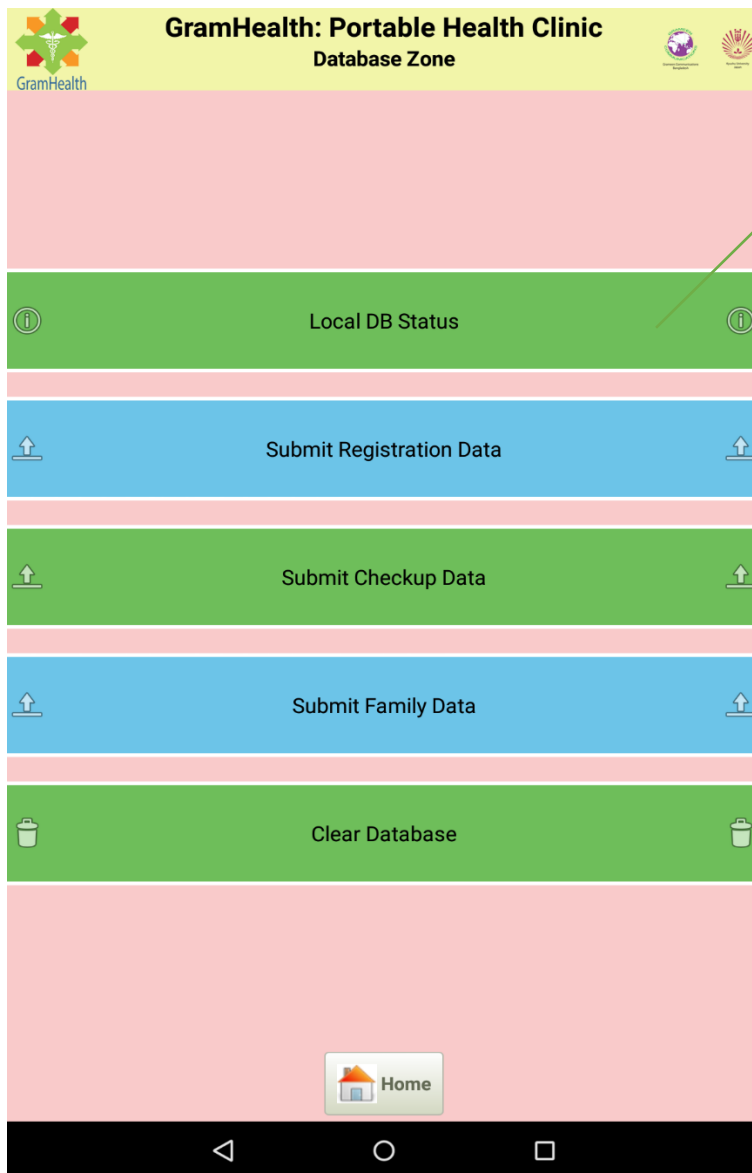
1) Tab. Ventolin 4 mg 1+0+1 (   
খাস কষ্ট হলে খাবেন

2) Tab. Glucozid 80 mg 1+0+1/2 (Cont. )   
খাস কষ্ট হলে খাবেন

3) Tab. Glucozid 80 mg

## Database Synchronization

The user has to check the local database status periodically whenever the device has the net connectivity. And if any undelivered registration/checkup/family data is found, click the respective button to submit/sync that data to the remote database server.



View the statistical  
info of local data

Local Database Status	
Registration Records Status	
Total Registered Members:	1
Total Undelivered Registration Records:	0
Check Up Records Status	
Total Checkup Records:	2
Total Undelivered Checkup Records:	0
Family Records Status	
Total Family Records:	1
Total Undelivered Family Records:	0
Okay	

## **Conclusion**

The android application will be upgraded periodically due to new requirements. So, whenever any new version of this application will be released, the user manual will also be updated accordingly. The application has multilingual feature. So, if any user changes his/her device's language from settings, the application's buttons' as well as options' titles will be converted to that specific language. However, the new version of the application can be downloaded from the user dashboard of the PHC website.