

MANAGEMENT INFORMATION SYSTEM *FOR PRIMARY HEALTH CENTERS* **PHC MIS**

GOVERNMENT OF KARNATAKA

PHC MIS is aimed at making available real-time Healthcare information of PHCs. The Primary Health Centre (PHC) Management Information System (MIS) in Karnataka is centrally consolidating information such as patient treatment, delivery details, disease report and drug availability along with GPS information.

This PHC MIS is a software developed by M/s CoDe Consulting Pvt. Ltd. as a part of the CSR initiative of 1000 Samsung iRIS tablet devices provided to the Department of Health and Family Welfare.

Being the first tier of the public health system, the PHCs serve as the primary stop for treating minor ailments, handle regular delivery cases, decide on referral cases, take curative and preventive action in cases of epidemics, administer various welfare schemes meant for the poor and underprivileged, etc. Despite being the vital institutions serving the poor and the needy, PHCs are far behind as far as the use of digital techniques is concerned in managing their operations. Record keeping of day-to-day work, monitoring disbursement of medicines and the availability of stock, reporting trends pointing to epidemics, accounting for welfare schemes implemented and a score of other activities at these centres are still paper based. Due to this, decision making at these centres gets delayed.

PHC MIS is said to be first of its kind in the country. This project would initially capture four critical aspects of the functioning of the PHCs in electronic form. The activities identified to be captured are:

- Patient module – capturing details of outpatients attended on a given day.
- Drugs monitoring – capturing drugs indented, issued and current stock levels.
- Disease monitoring – capturing diseases reported during a given day.
- Birth monitoring – delivery cases attended to with relevant details.

PHC MIS assists for Reporting of Health Management Information System (HMIS) details on a daily basis and also provides online data for

Maternal & Child Tracking System (MCTS). In addition to electronic record keeping, the regular activities of the centre namely implementation of welfare schemes like post-natal care kit for poor and underprivileged women, Janani Suraksha Yojana, etc., would also be maintained.

Updating of electronic health data is the main activity PHC MIS application. It is the deployment of Tablets with the capability to scan the iris of the individuals and linking to Aadhaar, is what that makes the project the first of its kind in the country which is to be implemented.

Under the project, the data generated at the PHC level would then be transmitted to a central server through the mobile network, almost on a real time basis.

Analysis of the data received would make MIS reports instantaneous, which can facilitate decision making by the concerned officials and in turn facilitate the Department in taking needful actions and planning ahead. Thus, quick intervention in reported in cases of epidemics, avoiding stock out situation of drugs required by the needy, better targeting of welfare measures and monitoring of schemes are some of the benefits of this application. Sending alerts to neighboring areas in cases of suspected epidemics, facilitating preventive action would be major benefit of the application.

This application is taken up as a CSR initiative in the 1,000-24x7 PHCs in the State. Under the project, preparatory activities like development of an app and training of master trainers have been done. The state data centre has hosted the application, which receives and stores data generated by the PHCs.

PHC MIS has four key modules.

- 1. Patient Summary**
- 2. Delivery Case reporting**
- 3. Disease Report**
- 4. Drug Report**

Brief functionality of main four modules in PHC-MIS application.

Main Screen



Patient Summary:

In Patient Summary module the end user need to enter the number of adult male, female and children(below 12 years) patients for new OPD and old OPD. Automatically total number of patients will be stored in the app.

And Blood Smear for MP, and sputum for AFB test results also can be entered. After submitting the data it will capture the gps location to monitor the data.

PHC Management Information Sy...

Patient Summary : 09/03/2017

Category	New OPD	Old OPD
Adult Male	0	0
Adult Female	0	0
Children (less than 12 yrs)	0	0
Total Patients	0	0
Blood Smear for MP	0	0
Sputum for AFB	0	0

SUBMIT

Delivery Cases:

This module contains two sub modules such as DELIVERY CASE, DELIVERY CASE EXIT. This information need to be entered as and when the delivery patient comes.

PHC Management Information Sy...

DELIVERY CASE

DELIVERY CASE EXIT

Delivery Cases - Entry form:

The screenshot shows a mobile application interface for the PHC Management Information System. At the top, there is a blue header with the text "PHC Management Information System". Below the header, there is a blue area with a camera icon labeled "Photo of Beneficiary" and a white circle containing a person icon. Below this, there is a form with several input fields: "Aadhar No.", "Name", "Age", "Village", "Caste", "No. of Children" (with the value "0" displayed), and "APL or BPL?". A blue "SUBMIT" button is located below the form. At the bottom, there is a numeric keypad with buttons for digits 1-9, 0, a backspace key, and a "Next" button.

In this module we have the fields to enter the patient details such as Aadhar Facing network problem. , Name, Age, Village, Caste, Facing network problem. of children, APL or BPL?. The image of the patient also can be captured for future use.

Delivery Cases - Exit form:

If the baby born in this module the end user can enter the details of the baby such as Health of the baby, weight of the baby, sex of baby, health of mother. Date of birth and time of birth can also be entered. And image of the baby can also be captured.

PHC Management Information System

Photo of Beneficiary

Aadhar No.

Health of Baby: **Healthy** Weight of Baby

Sex of Baby: **Male** Health of Mother: **Healthy**

Benefits Availed

Madillu Kit JSY

Prasoothi Aaruke Thai Bhagya Plus

Cheque No. Amount

Date of Birth

08 Feb 2016 M T W T F S S

09 Mar 2017 1 2 3 4 5

10 Apr 2018 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

Time of Birth

Disease Report:

PHC Management Information System

Disease Summary	Adult Male	Adult Female	Children
Communicable Diseases			
Acute Diarrhoeal diseases_including Acute Gastro-entritis	0	0	0
Bacillary Dysentery	0	0	0
Viral Hepatitis	0	0	0
Enteric Fever	0	0	0
Malaria	0	0	0
Dengue/DHF/DSS	0	0	0
Chickungunya	0	0	0
Acute encephalitic syndrome	0	0	0
Meningitis	0	0	0
Measles	0	0	0
Diphtheria	0	0	0
Pertusis	0	0	0

1 2 ABC 3 DEF

4 GHI 5 JKL 6 MNO Next

7 PQRS 8 TUV 9 WXYZ Sym

* 0 + #

This module contains around 300 disease names.

The end user can enter the number of patients for the particular diseases in a day.

Drug Report:

This module contains the list of drugs in the hospital. The end user can enter the opening stock in balance main store , utilized closing Balance and Requirement in terms of number of tablets.



PHC Management Information System

Enter filter text

Drug Report

Acetofenac Tablet 100mg 1x10x10	0	0	0	0	0
AcetylsalicylicAcid DispersibleTablet 150mg 1x10x10	0	0	0	0	0
AcetylsalicylicAcid ECTablet 150mg 1x10x10	0	0	0	0	0
Diclofenac Injection 25mg/ml 1x3mlAmp	0	0	0	0	0
Diclofenac Tablet 50mg 1x10x10	0	0	0	0	0
Diclofenac TopicalForm 1%w/w 1x30gm	0	0	0	0	0
Ibuprofen Suspension 100mg/5ml 1x60ml	0	0	0	0	0
Ibuprofen Tablet 200mg 1x10x10	0	0	0	0	0
Pentazocine Injection 30mg/ml 1x1mlAmp	0	0	0	0	0
Tramadol Capsule 100mg 1x10x10	0	0	0	0	0
Tramadol Capsule 50mg 1x10x10	0	0	0	0	0
Ibuprofen Tablet 400mg 1x10x10	0	0	0	0	0
Paracetamol Drops 125mg/5ml 1x15ml	0	0	0	0	0
Paracetamol Drops 150mg/ml 1x15ml	0	0	0	0	0

SUBMIT

Link to view data uploaded to the app:

<http://202.138.105.22/phcmis//web/report.php>

The daily data upload status can be viewed through the dash board :

<http://codeco.in/phcdashboard/>