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Current Record Keeping Systems in the Context of Delivery of Essential Services Package: A Review

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Acronyms

AHI	Assistant Health Inspector
ANC	Antenatal Care
ARI	Acute Respiratory Infections
CAR	Contraceptive Acceptance Rate
CIS	Clinic Information System
CPR	Contraceptive Prevalence Rate
DOTS	Directly Observed Treatment Short course
EDD	Expected Date of Delivery
ELCO	Eligible Couple
EPI	Expanded Programme on Immunization
ESP	Essential Services Package
FHC	Family Health Card
FP	Family Planning
FWA	Family Welfare Assistant
FWV	Family Welfare Visitor
GoB	Government of Bangladesh
GR	Geographical Reconnaissance
HA	Health Assistant
HPSP	Health and Population Sector Programme
IEC	Information, Education and Communication
IMR	Infant Mortality Rate
IUD	Intra-Uterine Device
LMP	Last Menstrual Period
MA	Medical Assistant
MCH	Maternal and Child Health
MCWC	Maternal and Child Welfare Centre
MIS	Management Information System
MMR	Maternal Mortality Rate
MO	Medical Officer
MO-CC	Medical Officer - Clinical Contraceptive
MOHFW	Ministry of Health and Family Welfare
ORS	Oral Rehydration Salt
ORT	Oral Rehydration Therapy
PHC	Primary Health Care
PNC	Postnatal Care

Acronyms (Contd.)

RD	Rural Dispensary
RTI	Reproductive Tract Infection
SACMO	Sub-Assistant Community Medical Officer
SDP	Service Delivery Point
SrFWV	Senior Family Welfare Visitor
STD	Sexually Transmitted Disease
TBA	Traditional Birth Attendant
TH&FPO	Thana Health and Family Planning Officer
THC	Thana Health Complex
TT	Tetanus Toxoid
UHFWC	Union Health and Family Welfare Centre

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Summary

This paper is a review of the existing Management Information Systems (MIS) record keeping and reporting of the Directorate General of Health Services (DGHS) and Directorate of Family Planning (DFP) of the Ministry of Health and Family Welfare (MOHFW) of the Government of Bangladesh (GoB). It reviews the current GoB setup for service delivery from the grass root level up through the Thana Health Complex (THC) in rural areas and the setup for urban areas as well. The job descriptions and record keeping activities of the Health Assistants (HA) and Medical Assistants (MA)/Medical Officers (MO) of DGHS and the Family Welfare Assistants (FWA) and Family Welfare Visitors (FWV) of DFP have been reviewed, including the specific forms and data items collected by each of these providers. A brief review is also given of the former MCH-FP Extension Project (Urban) of ICDDR, B on developing a Clinic Information System for urban primary level NGO clinics.

This paper also reviews the expected information needs in each service delivery category under the new Health and Population Sector Programme (HPSP) and the possible programme indicators for monitoring programme progress and impact in the future. Needs of the future are discussed in light of the Essential Services Package (ESP) strategy under HPSP which implies substantial reorganization of the MOHFW's current service structure and the likely unification of MIS for ESP services at the thana level and below.

Background

In Bangladesh, over the last two decades, the mainstay of the health and family planning programme, particularly in rural areas, has been the doorstep delivery of services. Up to now, the Family Welfare Assistant (FWA) has provided mainly family planning and maternal health services, and the Health Assistant (HA) has provided EPI services, health education and other services related to vertical programmes on diarrhoeal diseases control, acute respiratory infection control, malaria, tuberculosis and other infectious disease control programmes at the doorstep.

The next tiers of service delivery are the satellite clinics at the unit/ward level and the Union Health & Family Welfare Center (UHFWC) at union level. Mainly a Family Welfare Visitor (FWV) who provides antenatal care and clinical contraceptive service staffs these service delivery points. At satellite clinics, HAs also provide immunization, whilst at the UHFWC and rural disciplinary (RD), a Sub-Assistant Community Medical Officer (SACMO) and/or a Medical Assistant (MA) provides curative services for common ailments.

The fourth tier of service delivery is the Thana Health Complex (THC), staffed by physicians and has laboratory facilities as well. Immunization is also provided from the THC.

The information systems at these four tiers of the government health and family planning service structure of Bangladesh traditionally suit the requirements of vertical programmes. The current system used to record and report the provision and utilization of health and family planning services, typically, refer to each service in isolation.

There has presently been a number of major developments in the health and population sector of Bangladesh.

1. The new Health and Population Sector Programme (HPSP) of Bangladesh emphasizes the provision of an Essential Services Package (ESP).
2. The government has adopted the policy to integrate different departments under the Health Directorate and the Family Planning Directorate of the Ministry of Health and Family Welfare (MOHFW). For instance, a Unified Management Information System Unit and a Unified Behavior Change Communication Unit has been formed. At thana level and below this may mean that only one cadre of worker will be providing services at each level.
3. The government also examined different options of providing services at the first tier through static centres with or without any domiciliary service [1]. The government has decided to establish community clinics from where the HA and FWA will provide services to around six thousand population.

These have important implications for the record keeping and reporting system. There would be a need for such a Management Information System (MIS) that integrates both the health and family planning activities in the first three tiers of service delivery that also fits into the strategy of service delivery through fixed centres with or without domiciliary services. The later would mean that routine collection of household data might be reduced or eliminated and that more importance might have to be given to data generated from static service centres.

In fact, maintaining longitudinal data collected through routine house-to-house visits by field workers have proved to be wasteful [2]. There is another aspect of the problem with the current information system maintained by MOHFW. At the field level, the basis of all the records is the routine (monthly/bimonthly) collection of household data by the field workers through visits to all households in the area. However, survey reports indicate that the field workers visited only about 38 percent of the couples in six months period. Nevertheless, the records contained in the different registers and formats and the reports generated from them are reported to represent 100 percent of all the couples/households in the area. Therefore, the usefulness of such a data collection exercise becomes questionable.

Information systems are often perceived as mechanisms to generate reports to higher levels. The feedback to and use of MIS by those who generate the data is not always realized. Study findings in other countries which appear similar to Bangladeshi context, have shown that information systems often seem to be "data-led", generating data on the premise that the provision of a wide range of health information to health planners and managers is a useful and necessary activity [3]. Many of the data recorded and reported by health service staff are not needed for the task the staff perform [3]. Considerable staff time is spent at the different levels of the health system handling data and reports, yet few apparent improvements is seen in services and programmes [3].

A management information system (MIS) is a system for collecting, storing, updating and retrieving management information about an area. Central to the concept of a MIS is the maintenance of a set of spatially registered data layers, each of which can be analyzed independently or in combination with a number of other layers [4]. The different data layers can be national, district, thana, union and sub-union levels. MIS has a number of sub-systems: programme performance and services, personnel, logistics, financial, and surveillance. This paper only covers the programme performance and service related MIS and attempts to review the existing MIS with the objective to understand what modifications or adaptations are necessary in order to meet the information requirements that will support the delivery of Essential Services Package (ESP) through one-stop shopping strategy.

The Service Delivery Strategy in GoB Set-up

The Current Set up

In the GoB set up, there are two categories of staff - health staff and family planning staff. The service delivery strategies differ to a certain extent among the rural and urban settings as follows:

Fig. 1. GoB service delivery setup

Health		Rural		
Service Provider	Service Point	Level	Service Point	Family Planning Service Provider
HA	Doorstep	<i>Field</i>	Doorstep	FWA
HA	EPI outreach	<i>Unit/Ward</i>	Satellite Clinic	FWV, FWA
MA/MO	Rural Dispensary	<i>Union</i>	UHFWC	FWV, SACMO
MO, Technicians	THC	<i>Thana</i>	THC	MO-MCH, FWV

Health		Urban		
Service Provider	Service Point	Level	Service Point	Family Planning Service Provider
		<i>Field</i>	Doorstep	FWA
MA/MO	Urban Dispensary	<i>Unit/Ward</i>	FP Clinic	FWV
		<i>Thana</i>	TFPO Office	MO-MCH
MO, Specialists	Hospital	<i>District</i>	MCWC	MO-CC, FWV

HA – Health Assistant, FWA – Family Welfare Assistant, FWV = Family Welfare Visitor,
 MA – Medical Assistant, SACMO – Sub-Assistant Community Medical Officer
 MO – Medical Officer, MCH – Maternal and Child Health,
 MO-CC – Medical Officer-Clinical Contraceptive,
 THC – Thana Health Complex

The Record Keeping and Reporting System

The Health Assistant's (HA) Information System

Before looking into the record keeping and reporting activities of the HA, it may be useful to understand what the actual job description of an HA entails. This could help in associating his/her record keeping and reporting activities with the activities he/she is supposed to perform and report.

Job Description of Health Assistant [5].

Health

Malaria control

- Detect malaria cases
- Collect and send blood slides
- Treatment and referral
- DDT spraying.

Control of other infectious diseases

- Supply ORS for diarrhoea patients, and educate them on preparation and use of ORS
- Provide EPI vaccines (including EPI motivation campaigns)
- Identify, refer and report (to appropriate authority) infectious cases like cholera, typhoid or infectious hepatitis
- Control epidemics, mainly of cholera and other diarrhoeal diseases and malaria.

Vitamin A distribution

Health education with emphasis on nutrition, sanitation, use of safe water.

Family Planning

- Provide IEC to couples, particularly to men
- Follow-up FP method acceptors
- Residence of every HA will be designated as Commodity Distribution Point (CDP) and during two days of every week FP commodities will be distributed from that point at specified times.

Other

- Updating GR (geographical reconnaissance)
- Liaise with HFWC, village health volunteer/union parishad
- Record keeping according to specified rules.

In addition to these jobs, responsibilities related to special programmes not mentioned in the original job description are as follows:

ARI Programme

- Identify cases with pneumonia, severe pneumonia and very severe disease.
- Treat cases with pneumonia.
- Refer ARI cases as appropriate
- List cases of deaths due to ARI
- List cases of ARI by age group and ARI disease classification.

Tuberculosis and Leprosy Control Programme

- Identify suspected tuberculosis and leprosy cases
- Refer
- Follow-up referred cases and provide Directly Observed Treatment Short course (DOTS).

Likewise, he has similar responsibilities for kala-azar control.

Record Keeping Activities of the HA

The twenty-two forms maintained by the HA for record keeping and reporting are described below.

- **General Register (or *khata*)**

The HA uses this to record the activities he carries out during daily house-to-house visits. This register has a free-style format where the HA records information on diseases he encounters, the treatment he gives and the other actions he takes during his daily visits.

It should be reiterated here that this register is not a pre-formatted register provided to the HA. In fact, the HA himself enters a simple format onto an ordinary legal-size register book (or *khata*) he can purchase from any market. In Abhoynagar thana, the HA drew a format on a blank *khata* and used it as his general register.

Data from this register are also used to complete the Daily Epidemiological Information System Record Form and the Monthly PHC Activities Compilation Form. The HA also uses this to prepare a list of night blind cases and to list births and deaths.

The HA drew another format in the same *khata* for recording information on household sanitation facilities. These data are used to prepare the Monthly Sanitation Report.

- **EPI Register for Children under One Year**

This contains a list of under 1 year children and their immunization status. During regular rounds and EPI sessions, information on the under one year children are updated and new borns are added to the list.

HA uses the data to determine the targeted number of under one year children of each EPI session.

- **15-49 Woman's Register**

This contains a list of all women between ages of 15 and 49, including pregnant women. It is used to determine the number of women to target for TT immunization during each EPI session.

- **EPI Tally Sheet**

This sheet is used to record, by antigen, the number of children and women (pregnant and non-pregnant) given vaccinations and vitamin A and/or ORS during an EPI session. A copy of this tally sheet is sent to the EPI technician at the Thana Health Complex.

- **Daily Epidemiological Information System (six diseases) Record Form**

This form is used to record data on six specified diseases on a daily basis. Compilation of these forms is done weekly. The compiled report is then sent to the TH&FPO office. In practice, the HA uses data from the general register to complete this form.

- **ORT Communication Campaign Form**

This form is used to record the number and attendance of ORT communication meetings held by the HA. After completion, it is sent as a report to AHI each month.

- **ARI Case Record and Referral Form**

This form is used to record and report on monthly basis, the name and address of under-5 ARI patients, their diagnosis and the treatment given. It also requires that the HA calculates the total number of cases with no pneumonia/simple cough and cold by age group and the total amount of cotrimoxazole tablets dispensed. This form also contains the information on cases of deaths due to ARI.

- **Referral Slip for ARI Cases**

The HA is required to complete a referral slip when referring a patient to the THC.

Daily PHC Activities Compilation Form

This is a daily compilation of all the primary health care (PHC) related activities of the HA. At the end of the month, the figures are added on the same form to give as a monthly figure. This form is then sent to AHI as a report. Data from the general register is usually used to complete this report.

- **Blindness Prevention Compilation Form**

This form was used to record and report distribution of vitamin A to night blind and healthy children by age of 1-5 years and 5-15 years groups during vitamin A distribution rounds. Currently, this form is not in use because vitamin A is now distributed during the EPI sessions and is recorded in the EPI tally sheet.

- **Birth List**

During visitation, the HA records any births on this form, which is used to calculate the total number of births in the area.

- **Death List**

During regular visitation, the HA records any deaths on this form, which is used to calculate total number of deaths by age and sex and reasons for death.

- **Geographical Reconnaissance (GR) Forms 1a and 2 a**

GR Form 1 and GR form 2a are used during the geographical reconnaissance round to collect information on individual households and public utilities like educational and religious institutions, markets, etc. The data from these two forms are then summarized in the daily GR Compilation Form.

- **Daily GR Compilation Form (1b and 2b)**

This form is used during the GR updating round carried out once a year. Data from GR Forms 1 and 2 are consolidated on the form by date. Then a total compilation is done to provide the yearly data on GR. A separate sheet is used to consolidate the data by area (or *mouza*).

- **Advance Tour Programme**

The HA prepares an advance tour programme which is submitted to the AHI at the beginning of each month. With this programme, the supervisors can have an idea where the HA is working on any a particular date and so that he can supervise the HA's activities in the field.

- **Monthly Drug Distribution Report**

Monthly logistic supply and distribution is recorded in the following form and reported to the AHI.

- **Monthly Age-wise ORS Treatment and Result Report**

This is a reporting requirement of the National Oral Rehydration Project. It compiles such data as "No. of patients recovered," "Recovered after using how many ORS packets?" "How many packets used before referring to hospital", etc. However, there is no supporting record keeping format from where this report can be completed.

- **Monthly Sanitation Report**

The data for this report is taken from the previous month's report and the data recorded in the General Register for the current month. The HA also maintains a list of households with sanitary latrines. This list is updated regularly.

- **Monthly EPI Report**

This is the compilation of monthly data from the EPI tally sheets. This report also contains the EPI spot-wise antigens given each month. This report is sent to the AHI.

- **Blood Slide Collection Report**

Whenever the HA identifies a case of fever, the patient is registered using this form. Blood slide is collected from the patient and later follow-up results of the patient are also recorded here. At the end of the each week this report is sent to AHI.

A Health Assistant has to make over 153 different entries in the forms described above. (Annex 1: Samples of Forms Used by HAs). Among these entries are duplications of data that an HA is, nevertheless, required to do to fulfil the reporting requirements of various departments or sections within the Health Directorate. For example, the HA maintains a General Register Book, a Daily Epidemiological Information System Record Form and a Daily PHC Activities Compilation Form. These are all used to record disease information. ORS distribution is recorded in the General Register, EPI Tally Sheet, Daily PHC Activities Compilation Form and the Monthly Age-wise ORS Treatment Result and Report. Clearly enough, an HA is responsible for a great deal of data collection and recording/reporting functions. Much of it, however, is duplication.

The sheer number of formats an HA uses and the number and types of different data items that s/he has to collect and report, indicate the complexity of the record keeping and reporting activities carried out by the HA. If all these data

items are grouped together and presented in a simplified manner, the HA is virtually collecting information on the following:

Identification data

- Mouza number and name
- Name of client/patient
- Father's/Husband's name
- Age, sex
- Name of under one year children with date of birth
- Occupation, marital status.

Demographic

- Births
- Deaths; causes of deaths
- Number of < 1 yr., 1-4 yr., 5-9 yr., 10-14 yr., 15+ children
- Total households; total ELCOs
- Age-wise distribution of household members
- Households with latrine by type
- Households with water supply by type
- Information on public utilities.

Disease related

The disease conditions that are covered by HAs included diarrhoea, dysentery, pneumonia, tetanus, polio, measles, night blindness, tuberculosis, kala-azar, leprosy, and malaria.

The information required related to these diseases included:

- Identification of person suffering
- Date of attack
- Treatment given
- Number of cases, referrals, deaths due to the disease
- Information on blood slide collection
- Number/amount of different drugs dispensed: ORS, metronidazole, tetracycline, iron tablets, vitamin A.

Immunization

- Information on individual infants and women receiving immunization
- Aggregate number of infants and women receiving immunization by antigens
- Number of EPI sessions planned and held.

Health education

- Number of sessions held; location and attendance

Administrative

- Number of thana-level, union-level, or special meetings held

Even with this simplified presentation, it is evident that both in terms of programme activities and record keeping/reporting, how much is expected from an HA who has only a secondary education, minimum basic training on primary health care and demography, and is a third class employee in the government system. In contrast, a Medical Officer in the Thana Health Complex uses only a simple register to record the name, diagnosis and treatment given to patients coming to him for treatment.

The MIS related functions of an HA should match with his overall role in the delivery of primary health care. Review of the record keeping and reporting formats may falsely give an impression to an outsider that the HA is the sole person responsible for carrying out:

- demographic enumeration,
- disease surveillance,
- behavioral change communication activities,
- control of infectious diseases,
- control of epidemics,
- treatment of cases,
- providing immunization, and
- vector control.

The role of the HA should primarily be to serve as the first entry point to the PHC service delivery system and to provide field-based support to the various health care programmes and activities. In the Health and Population Sector Programme (HPSP) [6], the role of the HA has been identified as one in which he detects and refers severe or complicated cases of tuberculosis, filaria or iodine deficiency cases; provides IEC and basic treatment to cases with diarrhoea or ARI; provides first aid treatment; and holds immunization sessions. The record keeping and reporting activities of an HA should be in line with that.

The FWA's Information System

Job Description of the FWA

The FWA is the field-level worker of the FP Directorate. Her job responsibilities include the following [7]:

Family Planning

- Organizing group meetings for IEC
- Screening new users
- Supplying pills and condoms, and if trained, providing subsequent doses of injectables
- Referring clients for clinical contraceptives
- Referring FP users with side-effects or complications
- Listing FP users, dropouts, cases of method complication.

Satellite Clinic

- Organize satellite clinics
- Inform ELCOs about satellite clinic
- Assist FWV in conducting satellite clinics.

Maternal Health

- List and update pregnant women
- IEC for pregnant women
- Identify high-risk pregnant women and refer them
- Refer delivery cases
- Visit postpartum mothers.

Immunization

- Promote child and maternal immunization
- Inform community about time and place of immunization sessions
- Follow-up dropout clients and motivate them to complete immunization doses.

ORS/Diarrhoea Control

- Educate community about personal hygiene
- Educate mothers on preparation of ORS or salt-sugar solution and on child care during diarrhoea
- Provide ORS packets
- Refer children suffering from severe diarrhoea.

Nutrition Education

- Provide health and nutrition education to mothers, with the help of demonstration, flash-cards, etc.
- Refer severely undernourished or anaemic patients.

Record Keeping Activities of FWA

The FWA maintains a single register, known as the FWA Register, for record keeping purposes. The FWA Register also contains checklists for screening family planning clients and pregnant women. There are a number of sections for record keeping. These are described below:

- **Eligible Couples (ELCO) Chart**

Used for recording data on individual eligible couples of the area assigned to the FWA. Longitudinal data on services provided to the clients during house-to-house visits are also recorded in this section.

- **List of Children 0-1 Years of Age**

In this section, the immunization status of the enlisted under-one year old is recorded and updated over time.

- **Birth List**

In this section, all the newborns are enlisted and their immunization status is followed-up and updated.

- **Death List**

All deaths in the area are registered in the section along with age group in case of children or pregnancy status in case of women.

- **Daily Activity Record Sheet**

In this section, the FWA enters tally marks for the FP users contacted and number of commodities distributed. A monthly compilation is made from this tally sheet. In addition, data on satellite clinics held, and monthly compilation of births and deaths, changes in number of total ELCOs and in method mix is recorded in this section. This data is used for completing the monthly report, which the FWA submits to the FPI.

- **List of Injectable Contraceptive Users**

This section is used to record the due dates and actual dates of providing injectables to injectable contraceptive users.

- **Monthly Stock and Distribution Record Sheet**

This section is used to record the family planning commodities and syringes received and distributed by month.

- **Household Population Record Sheet**

This sheet is used to record the number of household members of each house visited by the FWA, by sex.

- **Village-wise Population Record Sheet**

This sheet is used to calculate the total population of the village by sex.

- **Distribution of Eligible Couples by Family Planning Method Use Status by Age and by Number of Living Children**

This is calculated on a yearly basis.

The FWA uses a single register which contains several sections designed to accommodate her activities in the field. Reports are generated from the data in this register. The register has undergone several revisions since its introduction in the government system. In the latest (third) generation of the FWA register the weight of the register was reduced, different checklists were reorganized, the number of codes was reduced from 20 to 13, provisions were made to record only those data that are absolutely necessary for the FWA, and the forms which had not been used in the last few years were discarded [8]. The register itself has been proved to be a very useful tool for the FWA and her supervisors. However, with the changing situation where emphasis is now on providing a package of essential services from static sites, the role of FWA is under revision. The MIS for the FWAs will, therefore, require reorganization.

Record Keeping Activities of FWV

Family Welfare Visitor (FWV) is a paramedic appointed by the Directorate of Family Planning. The FWV is posted at a UHFWC, but has to extend services to satellite clinics organized at far reaching areas. She offers following categories of services:

- Counselling, screening of clients for appropriate family planning methods and distribute pill and condom, provide injectable contraceptives and insert IUD, and assist Medical Officer in performing sterilization.
- Offer selected MCH service including ANC, PNC, safe delivery and general treatment to pregnant women and eligible couples and < 5 year aged children.
- Manage contraceptive side effects and complications like bleeding, amenorrhoea, vomiting, pain in abdomen, irregular menstruation.

- Conduct health education sessions both at UHFWC and at Satellite Clinic spots and educate community members on immunization, contraception, birth spacing, safe delivery, RTI/STD prevention and treatment, personal hygiene and nutrition.

While providing these services she has to maintain a total of 19 different registers, forms and cards which may be divided into three categories:

- Service Registers
- Client Cards
- Format for Client Screening

Service Registers

- **Patient Register**

This is used for recording information about clients of all ages and sexes coming for general treatment to the HFWC.

- **Child Register**

This is used for recording information about children coming for general treatment. There is a format to record findings of physical examination, e.g., jaundice, anaemia, pulse rate, lung, heart, liver etc., diagnosis and treatment given.

- **Pill and Condom Register**

This register is used for recording clients receiving pills and condoms. There is an in-built checklist for screening new pill client. The quantity of pills and condoms distributed and revenue earned through selling of condom is also recorded.

- **ANC and PNC Register**

This is used for recording identity, pregnancy history, LMP, EDD, blood pressure, weight, edema, hemoglobin, urine analysis of the women and pulse rate of the fetus. Post delivery condition of mother and the newborn is also recorded here. There is provision to record data on up to 6 ANC visits and 3 PNC visits in the same record.

- **MR Register**

This is used to record particulars of MR clients, i. e., age, parity, number of living children, LMP and MR history. It also has provision for documenting problems encountered by provider during conducting MR as well as post-MR complication, if any.

- **Injectable Forward Register**
This register is used for recording identity of the client and type of injectables provided, each time a client receives injectable contraceptive.
- **IUD Follow up and Removal Register**
This register is used to record the follow up findings, causes of removal, if any, and use status of post-removal contraception of IUD clients.
- **IUD Payment Register**
The identity of client as well as of the referrer, transportation cost, performers' fees, signature of referrer and signature of authority disbursing transport cost to the client and performers fee is recorded in this register.
- **Stock Register**
This register contains information on quantity of medicine and contraceptive received from TFPO and the amount disbursed.
- **Birth Register**
This is used to register all the newborns brought to the service points. Information on the identity of parents, name, birth weight and sex of the newborn, and the name of the birth attendant is recorded here.
- **Satellite Clinic Register**
This is used for recording information about clients of all age and sex coming for general treatment to the satellite clinic.
- **Inventory Control Register**
This is an inventory of all the assets lying at UHFWC.

Client Cards

- **IUD Acceptors' Card**
This card is issued for IUD acceptors only and contains client's identity, address, and age of last child as well as the type of IUD inserted and the date of insertion.
- **Injectable Users Card**
This card is issued for injectable contraceptive users only and contains client's identity, type of injectable contraceptive provided, date of pushing and the due date for next dose. This card also contains some IEC messages on injectables.

- **TT Card**

It is issued to all women aged 15-49 years with particular focus on pregnant women receiving TT immunization. It contains clients identity, pregnancy status (if applicable), and the due date for next dose.

- **EPI Card**

This is issued for under-one children receiving immunization. The card contains date of birth, address, immunization antigen provided and the date for next dose of immunization.

- **Children Health Card**

This card is used to record date of birth and address of the child, immunization status, status of vitamin A supplementation, and diagnosis and treatment offered in case of child's illnesses. It also contains a graph for growth monitoring and a pictorial guideline on preparation of ORS.

Format for Client Screening

- **IUD Clients History and Consent Form**

This form is used for screening IUD clients, to obtain the client's consent and record the referee's name. It is preserved at the clinic for future reference.

- **Sterilization Clients' Information Form**

It is a two-page format used for screening sterilization clients. It has provision to record obstetrical history, physical examination, menstrual history, and client's consent. It is also preserved at the clinic for future reference.

Monthly Report

FWV prepares a monthly report using FP MIS form-3 to report on all the services provided by her, i.e., immunization, family planning, maternal and child health, contraceptive side-effect management and general treatment. This form is also used to report on commodities distributed and the balance in hand.

Record Keeping Activities of Other GoB Staff at Thana and Below

The MA and the MOs do not have any formatted register for record keeping. They usually use a *khata* which has a free-style format where they record information on diseases encountered and the treatment given.

Information from the MA/MOs' registers are used to report on a 33-diseases report that is submitted to the TH&FPO. The MA at the UHFWC, however, reports his performance along with FWV's report using the FP MIS form-3. The list of different formats used by other staff is given as Annex-2.

The Changing Strategy

The Health and Population Sector Programme (HPSP)

In order to promote provision of Essential Services Package (ESP) through 'one-stop shopping' the government under its Health and Population Sector Programme (HPSP) is considered different options of service delivery at field level [9]. These are:

Service Delivery Options

Option-1	Option-2	Option-3
<p>Four fixed centres per team (HA and FWA work jointly). One per 1500 population.</p> <p>The team will provide services on rotational basis once a week in each centre.</p> <p>FWV will provide higher level services once a month</p> <p>One day per week the team will provide the domiciliary services.</p>	<p>One fixed centre per team (HA and FWA working jointly). One per 6000 population.</p> <p>The centre will remain open for all working days.</p> <p>FWV will provide higher level services once a month at each centre.</p> <p>Domiciliary services will be rendered by HA and FWA alternatively one day in week, so as to keep the static centre open.</p>	<p>Two fixed centres (alternately attended by HA and FWA). One per 3000 population.</p> <p>The centre will remain open on all working days.</p> <p>FWV will provide higher level service once a month at each centre.</p> <p>No domiciliary visit.</p>
Disadvantages		
<p>Centres not open every working day</p> <p>Additional FWV may be required</p> <p>Expected number of clients may be less (cost-effective issue?)</p>	<p>Not so close to the doorstep of the people.</p>	<p>No domiciliary visit (follow up and dropout tracing may be hampered)</p>

Specific Functions of the Static Centres

- Registration of pregnant women
- Informing the pregnant mothers in advance for attending clinic for FWV services and ensuring that pregnant women come for antenatal services

- Maintaining the expected date of delivery information to provide assistance if danger signals appear
- Referral to the higher centre
- Providing FP methods: pills and condoms
- IEC: hygiene, diet, immunization, intestinal parasites, breast feeding etc.
- EPI: Informing families in advance about outreach clinic and ensuring that children are timely immunized
- Minor treatment: ORS, vitamin A, antihelminthics, ARI, Directly Observed Treatment Short Course (DOTS) for TB, anti-malarial drugs etc.

The Government has now decided to go for the Option 2, i.e., to establish Community Clinics one per 6,000 population where both HA and FWA will be providing services. Thus, there will be 4-5 Community Clinics in one union with a population of around 24,000 to 30,000. The centre will remain open five days a week. One day in a week the HA or FWA will go for selected home visits particularly for follow-up of drop-out cases and for behaviour change communication activities. The FWV will attend each Community Clinic once a month to provide clinical services. Community Clinics will be constructed throughout the country in a phased manner over five years. The MIS implication of this phased approach to introducing Community Clinics is that in areas where Community Clinics will be established, regular house-to-house data collection will not be possible making the existing system of population based reporting by the field level staff difficult. On the other hand, in places where doorstep service will continue for the time being, the staff will be able to continue providing population based reports. This may lead to a dual reporting system none of which can individually or collectively represent national figures.

The Essential Services Package (ESP) Intervention

Under the ESP Intervention of ORP, ICDDR,B, essential services were provided in tiers. These were:

- Limited Service Centres (LSC), staffed by an FWA and a HA. Basic family planning and health services were provided from these centres. The staff held one LSC session for about 250-300 population once a month.
- Extended Service Centres (ESC), staffed by FWA, HA and FWV. In addition to the basic family planning and health services, clinical contraceptives and immunization services were provided from these centres. The ESC was meant to provide services to around 3000 population once a month.
- Union Health and Family Welfare Centre (UHFWC), is staffed by FWV and SACMO/MA. This is a fixed centre for the union.

- Thana Health Complex (THC). It has Medical Officers, laboratory facilities and in-door facilities. Immunization services are also provided from this centre once a week.

Under this intervention, the HA and the FWA were using the HA Register and FWA Register, respectively, to record client-wise longitudinal data. Some additions in the coding system of the FWA Register were done to accommodate recording of services like treatment of scabies and intestinal worms and distribution of iron tablets. These two registers were used for the intervention on a temporary basis until an efficient information system was developed that suited the information needs of the intervention.

Review of Works in the Field of MIS

The Clinic Information System

The MCH-FP Extension Project (Urban) of ICDDR,B carried out an operations research during 1996-1997 in two NGO clinics in Dhaka city to test a Clinic Information System (CIS). The CIS was a card-based, client-centred information system that was introduced to improve the record keeping and reporting system for the primary level MCH-FP clinics in the urban areas. The CIS replaced the traditional multiple register-based record keeping system that served mostly to report service outputs. The CIS involved a Family Health Card (FHC) retained by the client and a set of clinic-retained cards: Woman's Health Card, Child Health Card, Antenatal/Postnatal Care Card, and an Index Card.

Based on the experience gained during the implementation of the intervention, the project designed a simpler system of cards that preserves the benefits of the CIS at a lower cost. This second generation CIS involves a single, family-retained card and a single, clinic-retained client card issued to each family. The family-retained card has been introduced in the satellite clinics. Due to storage constraints, however, the clinic-retained card could not be used in this capacity.

As a management tool, the CIS contributed in the monitoring of programme implementation, identification of problems, and in programme planning. However, the problem probing exercises were done in an ad-hoc manner. A systematic approach to programme management through the use of data from the CIS cards was felt essential to ensure sustenance of such an exercise. Most importantly, such an approach to local-level programme management needs continued support from central level of the organization.

Home-based Mother and Child Card (A Study in India) [10]

In order to simplify the collection, recording and reporting of information on maternal and child health care in a rural area of India, a home-based mother and child card and a tally sheet were introduced. This made it possible for the community to evaluate the health services provided.

In this way, duplication of records was avoided, as was the need to retrieve information from various sources for the purpose of making reports. The introduction of tally sheets saved a lot of time. Supervisors received performance data at the village level, and were enabled to compare coverage in difficult and remote villages with that in sub-centre villages.

The main advantage of the system is that mothers are given a card detailing the services rendered. In this way, information is transmitted to the community. The card also helps to coordinate the efforts of various agencies providing maternal and child health services. By consulting it, each provider can discover what services have already been obtained. In addition, the card is an educational tool, reminding mothers about the services needed by themselves and their children. It serves as a checklist as well for health workers in respect of services which have been provided. The community can use the home-based information for evaluating the services provided to mother and children. An evaluation in the areas of two primary health care centres covering nearly 20,000 people revealed that 46 percent of antenatal women had been given a home-based mother and child card during the first year of the programme.

MIS for the National Integrated Population and Health Programme (NIPHP) of Bangladesh

In order to achieve its objective to reduce fertility and improve family health, one of the strategies of NIPHP is the one-stop provision of Essential Services Package through static sites. This approach is different from the previous Family Planning Health Services Project (FPHSP) where the main programme thrust was on family planning through doorstep service delivery. This change has a direct implication on the Management Information System (MIS). The indicators for monitoring the programme are different, and since no routine doorstep visit is there, the options available for data collection are different. Moreover, under NIPHP, greater importance has been given to the quality of information and of services. The management information system (MIS) for NIPHP was developed and has been introduced with the objective that the system would generate information that will:

- a. Assist doctors, paramedics and field workers to identify family health needs.
- b. Support the provision of services of acceptable quality.
- c. Enable supervisors and managers to monitor programme indicators and clinic outputs.

The MIS introduced in the NGOs supported through NIPHP has the following elements:

- a. Registration card
 - for registration of the customers.
- b. Appointment card
 - for next appointment at the clinic.
- c. ESP card
 - a family-based comprehensive card containing demographic and service related information of the whole family. It also contains assessment checklists for family planning screening, antenatal checkup and assessment of children with diarrhoea or acute respiratory infections.
- d. Satellite clinic register
 - for recording services provided to customers.
- e. Daily tally sheet
 - for recording services provided to customers at fixed clinics.
- f. Monthly performance reports.

Information Needs for HPSP

Below is a matrix of service delivery at doorstep or Community Clinics and UHFWC, showing the service provider at each level and the information needs for providing services to the clientele and to monitor programme activities. The responsibilities of the field staff under the HPSP of the GoB [6] and the Report on Activities for Unified MIS for Health and Population Sector Programme (HPSP) [11] were also taken into consideration in developing this matrix.

Matrix of Service Delivery at Field and Union Levels

Service Category		Service Delivery Point	Service Provider			Information Needs	
			HA/FWA	FWV	SACMO /MA	For Service Delivery	As Programme Indicators
Family Planning							
BCC	Individual motivation	CC & Doorstep, UHFWC	✓	✓	✓	Couple identity, age, marital status, number of children, age of last child, contraceptive use status and history, side-effects	Number of contraceptive acceptors by method, CPR, method mix Number of acceptors among newly weds Percentage of acceptors among low parity couples Number of new FP acceptors Quantity of contraceptives distributed Number of contraceptive drop-outs by method Number of customers referred for FP methods Number of customers referred for side-effect management Number of cases treated for contraceptive side-effects by method
	Group Meeting	CC & Doorstep, UHFWC	✓	✓		Number of clinical/non-clinical contraceptive acceptors, drop-outs, number of newly-weds	
Screening for method	Pill, condom	CC & Doorstep	✓			Couple identity, age, menstrual history, history from the couple	
	Pill, condom, injectable, Norplant, IUD	UHFWC		✓		Couple identity, age, menstrual history, history and physical exam of the couple	
Distribution/application of methods	Pill, condom, injectable (subsequent doses)	CC & Doorstep	✓			FP method use status of the customers, result of screening for the method	
	Pill, condom, injectable, IUD	UHFWC		✓			
Follow-up of FP clients		CC & Doorstep, UHFWC	✓	✓		Couple identity, FP method use status, history and physical examination	
Managing Side-effect	Pill, injectable	CC & Doorstep	✓			Couple identity, FP method use status, history and physical examination	
	Pill, injectable, IUD, Norplant, sterilization	UHFWC		✓			
FP Referral		CC & Doorstep, UHFWC	✓	✓		History to identify FP needs	

Service Category		Service Delivery Point	Service Provider			Information Needs	
			HA/FWA	FWV	SACMO /MA	For Service Delivery	As Programme Indicators
Maternal Health							
Antenatal care	BCC	CC & Doorstep, UHFWC	✓	✓		Pregnancy status of women, Identity/list of pregnant women	Number of pregnant women registered with the community clinics Number of pregnant women received ANC services by number of ANC services (ANC1, ANC2, ANC3) Prevalence of anaemia among pregnant women Number of pregnant women referred Number of pregnant women received EOC Number of mother received postnatal services. Number of deliveries conducted by trained providers Number of maternal deaths Number of neonatal deaths
	Advice, iron folic acid distribution, referral	CC & Doorstep	✓			Pregnancy status of women, identity of pregnant women	
	Thorough examination with lab tests, advice, iron folic acid distribution, referral	UHFWC		✓		Pregnancy status of women, identity of pregnant women	
Refer high risk pregnancies		CC & Doorstep	✓			Pregnancy status of women, history to identify high risk pregnancy	
Refer high risk/complicated pregnancies for EOC		CC & UHFWC		✓		Pregnancy status of women, history/examination to identify high risk/complicated pregnancy	
Postnatal care	History taking, advice, referral	CC & Doorstep	✓			Identity of postpartum mothers	
	History, physical examination, treatment, advice, refer	CC & UHFWC		✓		Identity of postpartum mothers	
Child delivery		Home, UHFWC		✓		Identity of women requiring delivery services	

Service Category	Service Delivery Point	Service Provider			Information Needs		
		HA/FWA	FWV	SACMO /MA	For Service Delivery	As Programme Indicators	
Child Health, Immunization and Others							
EPI and VAC	Children	CC & EPI spots	✓			List of under-1 children with immunization status	Number of children immunized by antigen
	Pregnant and women of 15-49 yrs. age	CC & EPI spots	✓			List of pregnant and women 15-49 yrs age in the area, TT immunization status	Percent of children by one year fully immunized by gender Dropout rate for DPT and polio
	Vitamin A distribution	CC & Doorstep, UHFWC	✓	✓	✓	Identity of family with children under 6 yrs; age of the children	Number and percent of pregnant women received TT immunization (at least 2 doses and all 5 doses) Number and percent of children (1-5 yrs) received Vitamin A
Control of Diarrhoeal Diseases	Treatment of diarrhoea cases with ORS, refer	CC & Doorstep, UHFWC	✓	✓	✓	History and examination to identify type of diarrhoea and severity of dehydration	
	Treatment of dysentery cases with drugs and referral	CC & Doorstep UHFWC		✓	✓	Identification of cases with diarrhoea, assessment of type of diarrhoea	Number of under 5 children treated for diarrhoea Number of cases treated and referred for diarrhoea
	Diarrhoeal disease campaign	Community	✓				Number of child/adult deaths due to diarrhoea
	Treatment of diarrhoea cases with intravenous saline during epidemic	Community	✓		✓	Identification of cases with diarrhoea, assessment of degree of dehydration	Number of cases treated for dysentery Number of deaths due to dysentery
	Treatment of dysentery cases with drugs during epidemics	Community UHFWC	✓		✓	Identification of cases with diarrhoea, assessment of type of diarrhoea	Number of campaigns held, number of participants

Service Category		Service Delivery Point	Service Provider			Information Needs	
			HA/FWA	FWV	SACMO /MA	For Service Delivery	As Programme Indicators
Acute respiratory infections (ARI)	Treatment, referral	CC & Doorstep, UHFWC	✓	✓	✓	Identification of cases with ARI, assessment of ARI cases	Number of children under 5 received treatment for ARI Number of under 5 deaths due to pneumonia
Night blindness	Treatment	CC & Doorstep, UHFWC	✓	✓	✓	Identification of cases of night blindness	Number of cases of night blindness, number of night blind cases treated
Malaria programme	Blood slide collection from fever cases	CC & Doorstep	✓			History to identify presumptive malaria cases, identity of the cases	Number of malaria suspected cases registered Number of cases tested malaria positive Number of cases treated for malaria
	Presumptive treatment	CC & Doorstep	✓				
	Obtain laboratory results of blood slides	THC	✓			Identity of cases from whom blood slide collected	
	Definitive treatment after lab. diagnosis	CC & Doorstep	✓			Blood slide reports, identification of positive cases, number of positive cases	
Tuberculosis, Kala-azar, Leprosy programme	Collect list of cases	THC, RD	✓			Case identification	Number of cases
	Follow-up/treatment of cases	CC & Doorstep	✓			Identity of cases	Total number of cases, number of cases completed treatment
Treatment of RTI/STD cases		UHFWC		✓		History and physical examination	Number of cases treated, referred
Treatment of intestinal worms and scabies		CC & Doorstep	✓	✓	✓	Identification of cases	Number of cases treated
Advice, refer goiter cases		CC & Doorstep, UHFWC	✓	✓	✓		

Service Category	Service Delivery Point	Service Provider			Information Needs	
		HA/FWA	FWV	SACMO /MA	For Service Delivery	As Programme Indicators
Treatment of other illnesses	CC & Doorstep, UHFWC	✓	✓	✓	History and physical examination	Number of customers treated by type of illness
Behaviour Change Communication						
Health Education: Nutrition, breast-feeding, general illnesses, hygiene, diarrhoeal diseases, ARI, water and sanitation, environment	CC, UHFWC, community	✓	✓		Identification of target clients	Number of group meetings held, number of participants in the group meetings
School health education	School			✓	Number and location of schools	Number of sessions held; number of participants
Other activities						
ELCO registration, updating ELCO information	Community	✓			Area profile, ELCO identification	Number of ELCOs Total population, Total households Number of households having access to safe water Number of households having provision of water seal latrine Total < 1 children, < 5 children, Total 15-49 group women Number of live births, number of deaths
Household registration, GR updating	Community	✓			Area profile, household identification, water and sanitation profile	
Updating EPI register	Community	✓			Area profile, identification of households with under-1 children, with 15-49 age group women	
Birth and death registration	Community	✓			Area profile, individual information on births and deaths	

The MIS for the Future/Recommendations

Considering the above matrix and the fact that health and family planning services will be integrated and provided from Community Clinics with the cessation of doorstep delivery, the shape of the future MIS can be as following:

1. **Client/family-based information** that can help provide appropriate service to individual client and their family. A client-held card can serve that purpose and assist in identifying the family's unmet needs and thereby reduce the likelihood of missed opportunities. The client-held information can be taken to multiple service providers who can review the necessary data for providing appropriate service to the client/family.
2. **Records of service statistics** that can be used to record outputs and prepare reports on programme performance. The data can also be used to monitor the performance of the worker in delivering ESP services. A Service Register can be used for that.
3. **A list of clients/patients to be followed-up.** This can be used to keep track of clients such as pregnant women for antenatal care services and safe delivery, children under 1 year of age for immunization, injectable clients for identifying and preventing dropouts, malaria/tuberculosis/kala-azar/leprosy patients for providing them the follow-up medications. A Follow-up register with sections containing longitudinal data on clients in these categories can serve that purpose. The field level service providers can maintain these records and can use the records to prepare list of clients/patients who need follow-up visits because either they dropped-out or need special attention.
4. **An area-based data** that will provide information on the entire population and will be used mainly for planning and monitoring purposes. A system for yearly enumeration, collecting demographic, health and family planning data, can be a part of the MIS.

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Samples of Record Keeping and Reporting Formats Used by HA

1. General Register or Khata:

Sl. #	Mouza #	Mouza name	FB#	Patient name	Age	Sex	Father/Husband's name	Disease	Date of attack	ORS dist.	Blood slide collect	Remarks

*Other columns are added according to the need

2. Daily Disease (six diseases) Record Form:

Sl. #	FB #	Mouza #	Name	Age	M/F	Disease						Other diseases	Date start of symptom	Referred	Date of death	
						Diarrhoea	Dysentery	Pneumonia	Tetanus	Polio	Measles					

3. ORT Communication Campaign Form:

Sl. #	Date of regular/special meeting	Place of meeting	Attendance			Name, designation and signature of supervisor
			Male	Female	Total	

4. ARI Case Record and Referral Form:

Sl. #	Patient's name and address	Age	Diagnosis and treatment		
1.	Patient's name: Father's name: Village: Ward #: Union:		Diagnosis: Very severe disease <input type="checkbox"/> Severe pneumonia <input type="checkbox"/> Simple pneumonia <input type="checkbox"/>	Treatment: Referred <input type="checkbox"/> Treatment at home <input type="checkbox"/> None of the above <input type="checkbox"/>	No. of cotrimoxazole tablets given: Date of treatment:
2.					

There is also a referral slip to be filled when referring a patient to THC.

5. Daily PHC Activities Compilation Form:

Sl. #	Date	IU	EPI session		Malaria		Gastroenteritis										
			Planned	Held	Blood slide collection	No. of Hts	Diarrhoea		Blood dysentery		Other		ORS	TC	Metro	Water purification tab.	
							Cases	Deaths	Cases	Deaths	Cases	Deaths					

Measles		TB		Leprosy		ARI		Neonatal death	VVA distribution			
Case	Death	Total	Follow-up	Total	Follow-up	Case	Death		Night blind	Postpartum mother	Other	Total

Health Education		Data bank visit	Family planning						Births	Deaths
School	Group meet		Pill			Condom				
			ELCO		Cycles	ELCO		Pieces		
			New	Old		New	Old			

6. Birth List:

Sl. #	IU #	Mouza name	Date of registration	HH #	Name of the child	Sex	Date of birth	Father's name	Remarks

7. Death List:

Sl. #	IU #	Mouza name	Date of registration	HH #	Name of deceased	Sex	Age	Father's/Husband's name	Date of death	Cause of death

8. Daily GR Compilation Form:

Date	HFV		Houses to be visited	# of houses visited	Houses		Households/Public utility			Population			
	From	To			Household	Public utility	New	Abolished	Old	Male	Female	Total	

Age-wise distribution						Sex (m/f)	Latrine				Deaths during last year		Remarks
0-9 yrs	10-14 yrs	15-19 yrs	20-24 yrs	25+ yrs	Total		Water sealed	Sanitary	Pit	Total	0-12 months	13-24 months	

9. Advance Tour Programme:

Sl. No.	Date	Mouza name	HFV		New	Abolished	Public utility	No. of houses to be visited	Health education		HFV of data bank	Name of life person	Remarks
			From	To					Group meet	Schools name			

10. Monthly Drug Distribution Report:

Sl. No.	Name of drugs and commodities	Previous balance	Received 1st time	Date	Received once again	Date	Total	Date and activities					Total distributed	Balance at the end of the month	Remarks

11. Monthly Age-wise ORS Treatment and Result Report:

Age-wise distribution	No. of patient received ORS pkt.	No. of patient recovered	Recovered after using how many ORS pkt.	No. of patient referred to hospital	How many pkt. used before refer to hospital	No. of death	How many ORS pkt. used	Reason(s) for refer to hospital	Reason(s) for death	No. of ORS pkt. balance in hand	Remarks
<1 yr.											
1-5 yrs.											
5-15 yrs.											
> 15 yrs.											
Total											

12. Monthly Sanitation Report:

Sl. #	UL #	Mouza name	Total HH	Total popu	#HH with sanitary latrine			# HH without sanitary latrine	No. of families using sanitary latrine			Pop. using sanitary latrine			No. of pit latrine			Remarks	
					Previous month	Current month	Total		Previous month	Current month	Total	Previous month	Current month	Total	Previous month	Current month	Total		

13. Monthly EPI Report:

Sl. #	Vaccine spot/Ward/Union/Upazila/Municipality/Zone	Pregnant women					0-11 month child							Measles					
		TT					BCG	DPT			Polio								
		1	2	3	4	5		1	2	3	1	2	3						

Vitamin A drop				14-45 women		Total number of session		Attendance of the workers at vaccination spot	
TT				1	2	Target	Held	HA	FWA
1st dose	2nd dose	3rd dose	4th dose						

14. Blood Slide Collection Report:

Date	JL #	Mouza name	Para name	HIV	HIV's name	Name of the client	Age	Sex	Type of disease		
									Fever		Suspect
									During visit	Before visit	

Drug used		Slide #	Last sequential #	Result of examination						Date of examination	
Name	Number of tablet			V	F	M	Micro				Negative
							V	F	M		

Record Keeping and Reporting Formats Used by Other Staff

Assistant Health Inspector (AHI)	Advance Tour Programme EPI Performance Monitoring Format Monthly EPI Report Monthly ORT Communication Campaign Report Monthly PHC Report Monthly Birth and Death List Monthly Blood Slide Collection Report Monthly National Oral Rehydration Project Report Monthly Malaria Report
Health Inspector (HI)	Advance Tour Programme Supervisory Khata Monthly PHC Report Monthly Drug Distribution Report Monthly National Oral Rehydration Project Report Monthly Malaria Report Monthly Institution-wise Disease Profile Monthly Sanitation Report Monthly Field-based Malaria Report Yearly GR Update Report Yearly EPI Report
Sanitary Inspector (SI)	Food Sampling Counter File Prosecution Ordinance Form Birth Register Death Register Diarrhoea Attack and Death Register Monthly Food Adulteration Report Monthly Health Education Report Monthly Birth Report Monthly death Report Monthly Iodized Salt Report

EPI Technician	Stock Register Vaccine Supply and Receipt Register Thana EPI Stock Register Supply of Stock to Field Workers Register Daily Vaccine Distribution from Thana Register Thana Monthly EPI Demand Register Thana Monthly EPI Material Demand Register Monthly TT Report Monthly Compilation Report Monthly EPI Report Monthly Vaccine Demand Note Yearly EPI Report
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