e-Mamta: Name based Mother and Child Tracking System in Gujarat

As a major initiative, the Health and Family Welfare Department of the Government of Gujarat, has introduced a name based mother & child tracking information management system called "e-Mamta", in collaboration with NIC, Gujarat. One of the first of its kind, the system has been conceptualized and developed by NIC Gujarat and GoI has decided to replicate in all the other states of India.

Edited by **Vivek Verma**

REDUCTION of Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR) are the important public health challenges for India. Tracking of health service delivery at the individual level of children and pregnant women has been recognized as a priority area for providing effective Healthcare services to this group. This would help in knowing the left outs in essential programs like immunization, anemia, malnutrition etc, who can then be reached. This would also help the health workers in organizing their work properly through monthly work plans. Through SMS messages, beneficiaries can be reached directly and reminded of the services due to them. This in turn can have a large impact on reducing IMR and MMR.

OBJECTIVES

- To provide comprehensive and quality Maternal and Child services
- Real time reports and better analysis
- Interdepartmental coordination
- Efficient stock management
- Intra-departmental communication
- Aims towards realizing priority issues in Health, which are laid in the Millennium development goals, Swarnim Gujarat goals and the goals of NRHM i.e. reducing the MMR, IMR and the Total Fertility Rate (TFR).

Project Description

e-Mamta (http://e-mamta.guj.nic.in/) is a web based application developed in .Net technology with MS SQL 2005 database server as backend. It uses Unicode compliant Gujarati fonts for local language interface and SQL Reporting server for dissemination of data. The system covers the entire population of Gujarat with special emphasis on rural, urban slum and slum like population.

The system aims at registering individual pregnant mothers, individual children in the age group 0-6 and adolescents along with their full details to ensure complete service delivery of Ante Natal Care(ANC), Child birth, Post Natal Care(PNC), Immunization, nutrition and adolescent services and to track the left outs of these services. Through work plans, a unique concept introduced for the first time in Public Health, the left outs of maternal and child services are tracked. It also provides a management tool to the service providers at the grass root level to determine the potential recipients of the services along with their details, through comprehensive work Plans. Finally, the services are aggregated to generate Reports that are reliable and valid.

Advantages

- Complete life cycle approach i.e. Data of an individual is recorded from Birth to Death.
- Resolves the migration/transfer issues in service delivery through provision of Unique Id to individuals.
- No duplication of registration of mothers. With an Individual as unit, all pregnancies of a single

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National level workshop on e-Mamta at Bhopal in July 2010

mother are recorded together.
- SMS alerts to beneficiaries and service providers for services that are due.
- Integration with the HMIS (Health Management Information System) and automatic generation of various reports & registers through aggregation.
- Search on several parameters like Name, village name, Ration card number, mobile number, Health Id, Family Id, RSBY card number, BPL card number, UID.
- Records & details of various incentives paid to all cadres of health workers. Individual records for the benefit of JSY, BSY and CY schemes.
- Dash Board to give a brief overview of Data entry, Deliveries, Immunization services, Maternal and Infant deaths. Detail analysis of data.
- Citizen centric features like Online Immunization Records, Child Growth Charts, Pregnant woman Hb./Wt. chart etc.
- 24*7 availability as it is accessible over internet
- Unique Id (Aadhar) compatible.

Status

Currently, record of 88 lakh families covering 4.5 crore individuals which is roughly 80% of population has been captured. It includes 7.33 lakh pregnant women, 9.2 lakh children in the age group 0-6 years and is targeted to monitor 13 lakh births annually.

The application developed in January 2010 has been implemented all over Gujarat State. Government of India has appreciated and announced National replication of the software, which is underway and training to 20 states has already been provided. The source code of MCTS application (e-mamta with limited functionalities) was handed over to all NIC state health coordinators and NIC Delhi health division for further customization at their level.

For further information

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JAY NARAYAN VYAS
Health and Family Welfare Minister, Gujarat

I congratulate the members of Team Health Gujarat who have been working on the e-Mamta Software for the last one year being developed by NIC, Gujarat. Gujarat is the first State to put in place a system whereby the name based tracking of mother and child for drop out and left out of regular maternal and child health services. I am also happy to note that 98% data entry of families in rural areas is been completed and pregnant and child registration has also under progress.
I wish the e-Mamta Team all success.

ANJU SHARMA
IAS, Mission Director State Rural Health Mission, Gujarat

To reduce IMR and MMR e-Mamta provides a platform through which service providers can proactively seek the mothers through SMS ALERTS and work plans. It is one application that provides a complete continuum of service ranging from pregnancy care to Adolescent Health and Child nutrition.