



## CONTEMPORARY RECORDS MANAGEMENT IN GUJARAT HEALTH DEPARTMENT: MEN TO MACHINE

### Hotel Management

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### ABSTRACT

As we all that know what is the situation of record management. In Gujarat the only best Hospital Management and Healthcare Management Information System is existing in Gujarat Health department which is facility based only in Public Healthcare Sector in India. But unfortunately there are very less number of Indian states who really utilized optimum financial resources through NRHM scheme in best way. Only Gujarat Government in health department made it possible. Now we all will observe that Gujarat Government has brought huge amount of money resources and tried to implement the records Quality Management in Government Healthcare System.

### KEYWORDS

#### INTRODUCTION OF NATIONAL RURAL HEALTH MISSION

The Govt. of India has understood the significance of Wellbeing and in the advancement of the nation. Remembering this view, the Govt. had propelled the National Provincial wellbeing Mission (NRHM) in 2005. Its underlying time allotment was 2005-12. The primary point was to enhance the essential structure and conveyance of Medicinal services benefits particularly in rustic parts of the nation. Extraordinary concentration and thought has been given to states with weakness pointers/foundation. This Mission has a reasonable vision of enhancing the wellbeing through the enhancement in huge wellbeing Pointers.

#### Composition of SHM & SHS

At the nationalized stage, the NHM has a Mission Steering Group (MSG) directed by the Union Minister for Health & Family Welfare and an Empowered Programme Committee (EPC) led by the Union Secretary for Health & FW. The EPC will execute the Mission in the complete direction of the MSG.

At the State level, the Mission would work under the whole leadership of the State Health Mission headed by the Chief Minister of the State. The tasks under the Mission would be performed through the State Health & Family Welfare Society. The formations of the Mission and Society and their connections are pointed out in the following sections in chat 1.

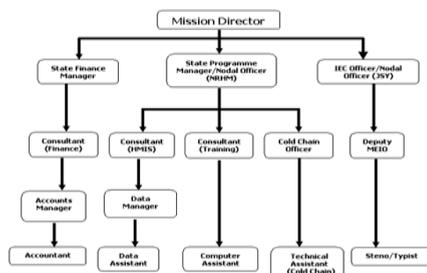


Chart: 1 Hierarchy of SPMU-NRHM at State Level

Source: <http://nrhmarunachal.gov.in/SPMU.html>

#### Hospital Management Information System, 21<sup>st</sup> Century in Gujarat

On the establishment of controlling hypothesis, distinctive states like Maharashtra, Delhi, and Gujarat and so on have built up their different particular IT based answer for make increasingly proficient healing facility the board. Here the point of the analyst to contemplate the Gujarat model of sorting out healing facility data and investigated the effect of this model on the ordinary execution of area clinics in Gujarat, further the difficulties which looked by this new customized framework. The Health and family welfare Branch of the Legislature of Gujarat propelled the Doctor's facility the executives Data Framework (HMIS) in 2006, toward the path to show signs of improvement the conveyance of value wellbeing administrations in Gujarat.

#### Project Current Status:

Total Doctor's facility associated 6 noteworthy Hospital Management Information System (Medicinal School), 24 Minor Hospital Management Information System

- HMIS module utilization in the state 71.33%
- OPD Enrollment more than 146.08 lakhs
- IPD Enrollment more than 17.77 lakhs
- Plan to broaden this in 2 Dental Universities and 2 Mental Doctor's facilities

#### Brief overview of HMIS

##### Condition prior to Project:

For the healing facility directors it was convoluted or we can say that they didn't get the data of every division, asset booking, online patient clinical Information, and patient's statistic subtleties online to a specific degree. A great deal of time and labor was squandered for gathering the accessible data.

Before this venture, the administration got the data from all healing facility toward the month's end which was the measurements of a month ago and for the following month. The central issue that heads confront was that it was hard to think about the execution of the healing center, number of conveyances occurred, number of births and passings and in addition the episode of a pandemic on its time inside the month.

#### Major Concerns:

The real Concerns/issues worried in getting HMIS venture to current stage were as per the following:

- Conquer Starting Therapeutic Staff showdown
- Aware and prepared to all concerned Restorative Staff
- Master Information Gathering
- Having a segment astute structure for inconvenience free support
- Flexibilities in necessities
- Wide Spread Territory
- Making certain availability of compulsory framework involving PC equipment and network for all Hospital Management Information System
- Data duplication to Focal Server

#### Requirements (Components & Technology) For HMIS

HMIS is developed on Microsoft NET technology with SQL server 2005 as the data store. The HMIS solution is three tier circulated structural design available over internet. Crystal reports & SQL reporting services are used for reporting functions.

#### Hardware Essentials:

- Xeon Based Database server
- Xeon Based Application server

#### Software Essentials:

- Microsoft SQL Server 2005
- Microsoft Windows 2003 Enterprise server
- Microsoft NET Framework

**Standards of Management:**

- HMIS looks after ICDS standards for diseases & CPT coding techniques of WHO standards.
- HMIS has act in accordance with the Quality Council of India for NABH (National Accreditation Board for Hospitals & Healthcare Providers).
- Business continuity measure included Firewalls, Antivirus, IDS and automated backups etc.
- Blood bank is attached with food and drugs Controls.

**Extensive Features:****Graphical User Interface**

A decent Graphical UI (GUI) assists customers discover the path with level run. HMIS Graphical UI builds up all the easy to understand qualities of the framework. The point and snap qualities of the mouse decrease outrageous routine with regards to the console, thus making most errands simple to-do and bother free. With the assistance of this element, time can be spared and data can without much of a stretch be put away and additionally access with prerequisite.

**User Friendliness**

HMIS is anything but difficult to utilize as a result of the wide help offered utilizing modify capable examples. The product is Menu-driven and help is offered for screens.

**Security**

Known as real worry of most Hospital Management Information System is mystery of reports and records. HMIS offers different phases of security and secrecy in the product with the goal that information got from different elements of the healing facility stay secret. A job based assess control strategy is composed for confining/grants the shape level information get too.

**Incorporated System**

The user interface & screen layouts in all the sections have the parallel look & feel which make it an applicable which is acceptable. The HMIS also maintains exchange of data incorporation with other important biomedical equipments as well as appliances.

**Online Help & User Instruction Manual**

When we talk about online help and guidance manuals the principal thing comes in our brain is an A-Z rundown of simple to do steps. HMIS exploits this office by giving an orderly and finish bilingual (English and Gujarati) online help which is identified with Substance, File and inquiry and give its outcome stuck in an unfortunate situation free understanding and routine with regards to the framework. In this manner, it isn't basic that one ought to have great PC learning to utilize HMIS

**HMIS setup in Gujarat Health and Family Welfare Department**

The Health and family welfare Branch of the Administration of Gujarat, India perceived that a consolidated and productive device was imperative for the suitable screening of administrations and for wellbeing associated arrangement making. It subsequently conceptualized a Wellbeing The board and Data Framework (HMIS) to make certain enhanced quality and administering of medicinal services administrations through Data Correspondence and Technology (ICT) as a facilitator to offer reliable clinical and analytic back roads, at the State level, healing facility activity organization and combination of the executives data.

**Points and Targets towards Usage of HMIS in Gujarat:**

1. Provide quality medicinal services to patients in a fitting and financially savvy approach to build up the redemption of value wellbeing administrations in the state.
2. The HMIS has been envisioned to help wellbeing overseers have better regulating and command over the execution of government Hospital Management Information System from corner to corner the state by utilizing choice help markers, auxiliary specialists and therapeutic staff in conveyance upgrade of wellbeing administrations with promptly reference tolerant records.
3. A stream of work permitted less-paper depending process and to produce a skilled and fitting patient treatment cycle with the assistance of programmed cautions.
4. Develop patient consideration and record the executives.
5. Rationalize techniques and recoup hierarchical and control assignment.
6. Make simple perky directing of value wellbeing administration

markers.

7. Present an included state-level all encompassing perception of asset usage.

**HMIS of Gujarat Govt. as follows as holistic approach:**

1. Project Concept: HMIS project was conceptualized by the department of health and family welfare to make certain the quality health care by Information technology appliance in this type of mode so has to supply the typical clinical and diagnostic protocol charges, hospital management tools and combination of management information at the state level so as to guarantee online evaluation and supervising.

**2. Project Vision, Stakeholders, Objectives and Services Vision**

- Access to quality health care services for all
- With the help of Information Communication Technology.
- Throughout successful clinical and administrative procedures
- By providing better patient care

**Stakeholders**

- General public (patients and their relatives)
- Government hospitals
- Science and Technology department, Govt. of Gujarat
- Total solution provider (Tata Consultancy Services Ltd.)
- Health and Family Welfare and Medical Education Dept., Medical, Govt. of Gujarat.
- Commissionerate of Health, Medical Services, Medical Education and Research

**Hospital Administration**

- Hospital administration
- MIS Reports
- Financial accounting
- Human resource
- Purchase
- Stores/Inventory
- Payroll
- EIS Reports
- Transportation
- Complaints and redresses

**Clinical Services**

- Clinical/EMR (general medicine, ophthalmic, orthopedic, ENT, gastro medicine, nephrology, gynecology, pediatric, skin, surgery, urology, etc.)
- Laboratory (pathology, radiology, microbiology, biochemistry.)
- Blood transfusion services
- Imaging services

**Services**

The variety of services provided in the course of HMIS is as given below.

**Patient Care Services**

- Registration
- Billing
- Pharmacy
- Wards
- Patient education, Information kiosk, nursing care

**Ancillary Services**

- National programs
- Resource scheduling
- Equipment maintenance
- Linen management
- Application security
- Biomedical waste
- Special camp and training

**1. Necessity & Requirements of HMIS****HMIS Project was required for the following grounds:**

- Requirement for efficient tool for health policy making.
- Trouble in getting actual time information about the outburst of epidemics.
- Complexity in assimilation of patient records and hospital activities exaggerated quality of health care services harmfully.
- Lack of appropriate information consequential in incompetent use

of resource.

- Implementation of quality standards for procedures such as NABH, NABL and ICD 10 for diseases, death causes, etc
- Requirement for an incorporated tool for well-timed supervising of services.

**2. Project Plan**

**Necessities of Process re-engineering and legal Structure:**

- Procedure of registration re-engineered so that to form the foundation for e-database, workflow and work catalog.
- Terms of number of financial, technical, managerial and policy tools to help to take right decisions at right time.
- Human Resource Development (HRD) management through allotment of work list, workflow resulted in to best resource utilization through tracking crash and protection of equipments and efficient practice of ambulance services.
- Administrative layouts are standardized to cut down on recurring work which effected in time saving for administrative staff, doctors and nurses.
- Integrated management of inpatient throughout connecting surgeries, nursing care, ward management, laboratory, radiology and blood bank
- Templated Clinical cure procedures.
- Investigative process simplify through single sample collection.
- Online store management: procurement and issue of medicines, consumables, and other housekeeping materials is re-engineered so as to recognize the fast moving stuff.
- Union of uniform Biomedical Waste Management, death causes, NABL, NABH compliance and Codification of Diseases (ICD) with HMIS.

**3. Public Private Partnership:**

HMIS project is not put into practice on public private partnership (PPP) model. The full project has been financed by the State Government (Gujarat).

**Technology Architecture**

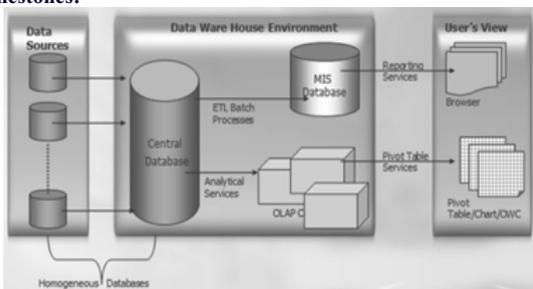
HMIS has been built up on NET technology with SQL Server 2005 as backend. Following we are going to discuss the technology architecture for HMIS project:

**Tier 1 (Presentation logic):** comprise plain controls and user input confirmation

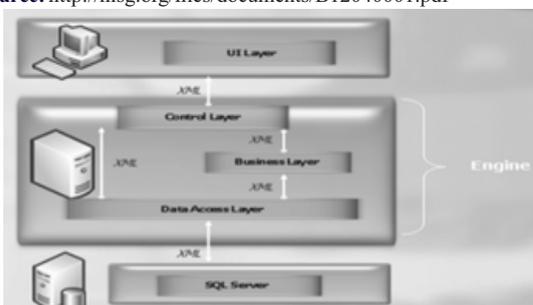
**Tier 2 (Application server):** contains business procedures logic and the data access

**Tier 3 (Data server):** Provides business data

**Milestones:**



**Fig. 1**  
Source: <http://nisg.org/files/documents/B12040001.pdf>



**Fig. 2**  
Source: <http://nisg.org/files/documents/B12040001.pdf>

**1. Project Management Structure**

**State level**

- Central monitoring committee evaluates accomplishment after every two weeks
- Technical committees to propose and grant separate module
- Visits of field by Joint Secretary and Regional Deputy Director to make sure execution according to program

**Hospital level**

- Technical team to supply hold and organize squash on the site
- Constant screening by Civil Surgeons and Hospital administrators

**2. Capacity Building & Governance**

Government of Gujarat has place lot of importance on capacity building for victorious execution of HMIS project:

- Comprehensive guidebook for each section have been geared up and issued to all the hospitals
- All the users have been given the basic computer training beside with the HMIS specific training and practical training
- Help to all the users has been offered throughout a technological team of total solution provider and concerned hospital
- Timely orientation and refresher training conveyed to all the users



**Fig. 3 Governance Structure**

Source: <http://nisg.org/files/documents/B12040001.pdf>

**8. Status and Results**

Present Status:

- HMIS has came into force in all Government Hospitals & Medical colleges
- More than 3,400 users of 40 hospitals have been given training

9. Specific Achievements during the Year 2006–07

All the 12 hospitals have revived during 2006–07.

**CONCLUSION:**

As we all know now a day's every one wish quality in healthcare especially when we are talking and discussing about patients who seek healthcare facilities either in govt. or private setup. So this study refers very clearly that Gujarat Govt. not only implemented NABH/NABL national level projects in Govt. Healthcare system but also rely upon new HMIS system and implemented successfully and got fantastic results from implementation of HMIS such as better management of record keeping, provide hassle free services to patients through HMIS, better decision making through HMIS, Up to date information, paper free environment etc.

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