WORKSHOP

ON

HEALTH INFORMATION ARCHITECTURE:
DESIGN, IMPLEMENTATION, & EVALUATION

22-26 Mar 2011

Venue: Jamia Hamdard, New Delhi

Organizers:

- **National Health Systems Resource Centre, New Delhi**

- **Department of Management Studies, Jamia Hamdard**

- **Health Information System Programme, New Delhi**

- **Department of Business Administration and Community Health Division, BITS Pilani**
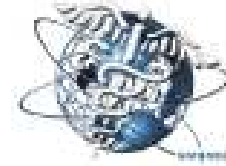
Introduction:

India has now over 15 years of building HMIS. The last five years of the NRHM has seen the most successful of these efforts, but there is still a long way to go. Also, the range of information needs has rapidly expanded. NHSRC, in coordination with the MOHFW has already developed three training modules – for Service Providers, for Health Programme Managers, and one for HMIS Managers, which together impart seven specific competencies. This workshop is positioned at a much higher level of complexity - and meant exclusively for those who lead the state HMIS team or who work as Consultants and Resource Persons in the design of health information systems. Only those who have worked with existing systems in India are invited to attend. If we have too many requests for participation, then we would shortlist and selected only 35 participants, based on those most likely to be available to guide the States on HMIS in the coming years and those who are especially interested in developing themselves as Resource Persons in Health Information Systems.

Workshop objectives: By the end of the workshop the potential resource persons are expected to be equipped with an understanding of:

a) basic concerns of HMIS and its implications for design of HMIS

b) the complexities of implementation and how to strategically address them

c) how to evaluate HMIS in an ongoing manner for optimal use of the HMIS resource

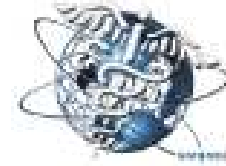d) current status of HMIS and available information systems/technology

AGENDA

Time	Topic	Description	Methodology
DAY 1 : UNDERSTANDING HMIS DESIGN			
09.30 AM	Registration		
10.00 AM	Welcome & Inaugural		
10.30-11.30 AM	Data quality issues and ways to overcome them	This is the current frontline in HMIS. Despite popular perception, most quality issues are not due to errant employees, but due to systems faults. This session describes how to identify and trouble-shoot these systemic fault-lines.	Presentation
11.30-13.00 PM	a.Developing tools on assessment of data quality & fidelity: b. Principles of primary registers development	How does one rapidly assess the data quality of a District? How do we recognize and reward truth-telling- not those who report high, but those who report truthfully? How do we analyse and incrementally improve primary registers – one of the most important contributors to poor data quality?	Group work
LUNCH			
14.00-15.00 PM	Principles of design in choice of data elements & indicators: Rationalization of data collection	Programme Officers want as many data elements as possible. HMIS Managers want as few as possible. The final decision often depends on who commands more authority. But could there be principles based on which data elements and indicators are chosen? How do we reduce the burden of data collection without loss of useful information or data quality?	Presentation
15.00-16.00 PM	Crafting and validating indicators	Some indicators "behave", some don't. How do we check the precision, sensitivity and reliability of indicators? Should all indicators be field-tested before introduction? How do we do that?	Group Work
16.00-17.00 PM	Indicator choices for specific programs	When we make District specific or State-specific programmes we need to craft new indicators. Some exercises to learn how it is done.	Group work

DAY 2 : PLANNING & EVALUATION OF HMIS DESIGN			
10.00-11.30 AM	Health Information Needs: objectives, strategy, & architecture	There are choices to be made. Do we go for a centrally defined framework, where all fields and functions are fixed and standardized at the outset. Or is architecture a verb...a bottom-up approach, where Districts define the information needs, incrementally improve and add on more and more functions, but at all times providing the information that higher level Policy makers require.	**Panel discussion.**
11.30-13.00 PM	Data Policy and Standards of HMIS	Policy frameworks from international experience. How do we construct policy that addressed issues of data security, public access, storage, retrieval, interoperability? How do we define data standards?	**presentation**
LUNCH			
14.00-15.30 PM	Software Application in HMIS: Writing requirements	How do we write software requirements? How do we avoid pitfalls in design? We exhume a few corpses of past HMIS efforts to understand the problems.	Presentation and interactions.
15.30-17.00 PM	Evaluating HMIS systems	There are many HMIS systems running. National systems for RCH, immunization, disease monitoring; State level systems etc. Why evaluate? What to evaluate? What are evaluation methodologies as relevant to health systems?	Group work with lead presentation
DAY 3 : PLANNING CAPACITY BUILDING			
10.00-12.00 PM	Use of information in District planning	Why does information use lag behind? Some exercises to understand the constraints and developing plans overcome them.	Group work
12.00-13.00 PM	Approaches to capacity building for HMIS	The needs and the approaches to capacity building. The design of competency-based training material.	Panel discussion
LUNCH			
14.00 PM	Developing training programs	Exercises on how to identify and develop training programmes. Evaluation	Field visit (1/2 day) Group work
DAY 4 : HMIS APPKICATION TO PRACTICE			
10.00-11.00 AM	Issues of Equity & Community participation in HMIS	How do we collect disaggregated data related to equity concerns? And how do we not collect it? How does community monitoring	Panel discussion

		information relate to HMIS data?	
11.00-12.00 PM	Data triangulation	What are the 3 apexes of the triangle? How do we systematically get the work done for policy and for management purposes?	Presentation and discussions
12.00-13.00 PM	GIS in HMIS	GIS systems in operation. Strengths and limitations. Getting started on GIS	Presentations from best practices.
LUNCH			
14.00-15.30 PM	HR Management systems: available systems, their strengths and limitations	What are the HR Management systems available? Relative strengths.	Presentation
15.30-15.00 PM	Developing output records for HR Management	What indicators are needed for policy, and for workforce management and performance appraisal?	Group work
DAY 5 : HMIS APPLICATION TO PRACTICE			
10.00 – 11.30 AM	Best practices in name-based tracking systems	Pregnancy and immunization tracking – appraisals and evaluations, chronic diseases, ART tracking.	Presentation of best practices
11.30-13.00 PM	Hospital Management information systems in public hospitals (Punjab-State IT Dept; TN, Gujarat-TCS, HP-HISP model, IGCMC Shimla; CDAC-Kerala)	What is the 'state-of-art' and what is suitable for public health facilities?	Presentation of case studies.
LUNCH			
14.00-15.30 PM	Examining hospital performance indicators	There are many indicators already available. A critical examination of indicators in hospital management.	Group work
15.30-17.00 PM	**M-health initiatives in India**	**The use of mobiles in health care and public health is a rapidly expanding new area. A brief introduction to all that is happening under the rubric of M-health.**	**Presentation of case studies**