

Topic 5. How to organise a Health Management Information System

A hand out from the project on “Integrated management of public health programmes at district level”

This project was developed by incorporating ideas, suggestions and contribution from an interactive participatory process of dialogue and consultation involving public health and multidisciplinary resource network drawn primarily from mainstream institutions and the civil society network in India.

A draft manual evolved covering concepts and values Roles, Skills and Challenges and an Integrated Paradigm for the Public Health Management at District level. It also elaborates on, making a district diagnosis; organizing a health management information system; evolving a district plan; organizing an epidemiological surveillance system; responding to an epidemic and managing an outbreak; managing health programmes; managing human resources; organizing materials management; monitoring and evaluation; leading and building a health team; promoting, communicating and advocating for health; promoting and sustaining community partnerships; and building and sustaining partnerships with the educational sector; civil society, private sector and promoting an inter-sectoral collaboration.



**Developed by
Centre for Public Health and Equity, and its
associates, for the Society for Community
Health Awareness Research and Action,
Bangalore.**

[A later edited version of this document has been included in a manual submitted to the WHO Regional Office in South East Asia, towards the fulfillment of grant for the same - 2010]

Facilitating Team
COORDINATOR AND KEY
FACILITATOR

Dr. Ravi Narayan

Community Health Advisor
Centre for Public Health and
Equity (CPHE) – Society for
Community Health
Awareness, Research and
Action (SOCHARA)-
Bangalore

RESEARCH FELLOWS

Dr. Deepak Kumaraswamy

CPHE/SOCHARA- Bangalore

Dr. T.N. Satyanarayana

Indian Institute of Public
Health- (IIPH) Hyderabad-
Public Health Foundation of
India (PHFI)

Dr. N.S. Prashanth

Karuna Trust/ Institute of
Public Health- Bangalore

Dr. Giridhara R Babu

- IIPH, Hyderabad/PHFI

Acknowledgements

Prof. L.M. Nath (VHAI) and
Dr. Thelma Narayan
(SOCHARA) for going
through all the chapters and
suggesting very useful
changes and additions.

Preface

This document is intended to serve as an evolving conceptual **framework for district level public health managers** in the health systems of the South East Asian countries. These managers, their knowledge, skills, attitudes, and openness to new challenges and new paradigms will remain one of the key determinants of the success of countries in reaching the **“Health For All”(HFA) vision** and the **Millennium Development Goals(MDG’s)**.

This document is a practical do it yourself workbook that draws upon some of the wealth of experience and resources in the past and present and tries to help district level managers address the complexities of today’s challenging global, national and local health situation and the emergence of new challenges and reemergence of older ones.

Readers are advised not to treat this document as a comprehensive manual but as **an evolving compilation of concepts in public health management**. This conceptual framework contains suggestions to tackle some of the problems, that the district level public health managers meet in their daily life as they lead, assess, respond, evaluate and learn from numerous health systems challenges. Where possible and feasible it directs the managers to other resources and materials that will provide them additional perspective and details (**see CD accompanying the manual**)

The authors/ facilitators have extensively worked in the community and have had decades of experience in supporting capacity building for public health/ community health in the main stream and civil society linked alternatives sector. They have also tried to draw upon the experience and the field-oriented perspectives of a network of public health capacity builders and trainers from the mainstream public health institutions and civil society training centers (**see list of contributors**).

This is **a work in progress**. The conceptual framework will, we expect, evolve into a guidebook that gets used and adapted by district level public health managers, trainers and supervisors of district level public health programmes. The document is expected to continue to evolve with the feedback from users making it more relevant, responsive, context specific and focused.

We see this document as the beginning of a new journey - **a journey of strengthening district level public health management**.

Dr Ravi Narayan
SOCHARA-SOPHEA

5. How to Organise a Health Management Information System (HMIS)?¹

5.1. What is an HMIS?

A System of systems that allows for the collection, storage, compilation, transmission, analysis and usage of health data that assist decision makers and stakeholders manage and plan resources at every level of health service.

5.2. Why HMIS?

For effective management of health and resources, government at all levels must have interest in supporting and ensuring that health data and information are available as a public good for all stakeholders to utilize.

HMIS will provide reliable, relevant and timely information to health system's policy makers, managers, professionals, and to the other sectors.

5.3. What are the objective of an HMIS ?

- Collecting health data on a regular basis and ensuring its quality.
- Strengthening the ability to analyze the data
- Strengthening the use of the data to make informed and cohesive decisions.
- Assessing the state of the health of the population
- Identifying major health problems
- Setting priorities at all levels

Availability of accurate, reliable, timely and relevant health information is the most fundamental step towards informed public health action. This requires a good HMIS.

5.4. Some Challenges for an HMIS at district level

- Lot of health events at the community level remain poorly recorded and or collected as data. These include births, deaths, and morbidity,
- Health care from Traditional healers, Traditional Birth Attendants, village health workers, patent medicine vendors and others at primary health care level are also not recorded or captured in most HMIS.
- Data from government health facilities is also often inadequate, incomplete, untimely and very little of the total events are captured as data
- Information is hardly available on utilization of facilities, and various components of primary health care

- Data is often collected, compiled and collated, along pre determined formats but analysis for local use is often rarely done.
- Provision for data storage is a common challenge at the lower levels of health care often worsened by the absence or low level of information technology for data processing

5.5 How to organise and or improve a Health Management Information System?

All district managers will usually inherit an existing HMIS that may have evolved gradually over a long period of time in stages and due to the requirements and exigencies of different health programmes. In order to make the HMIS relevant to the district managers efforts to strengthen programme management the following practical steps are suggested. These steps may result in practical modification in the use of the HMIS at the district level or provide feed back to those at the district level or above who are responsible for evolving the HMIS.

Step one:

Review the existing HMIS so as to understand and identify the present weaknesses in the context of:

- Delayed Information
- Inaccurate Information
- Insufficient Information
- Scattered Information.

Reflect with your team how to tackle the reasons for the same and how to overcome them.

Step two:

Identify the essential information needed with indicators appropriate to the district and sub district settings so as to :

- Investigate and contain outbreaks of disease
- Help predict possible outbreaks
- Provide evidence for programme performance
- Identify area with poor programme performance for corrective actions.

Step three:

Use forms prescribed for surveillance according to the national/ state level accepted format and ensure through constant review:

- Training of health workers to fill the forms in a standardised way.
- Make it easy to use
- Avoid or standardise ambiguous text
- Ensure the addition of crucial instructions

- Review from time to time the problems encountered by health workers in using the forms and provide feed back to those who have palnned the HIMS

Step four:

Facilitate the analysis of data at each level it is collected either using computers or manually. Quality of data improves when those who collect it also use it for planning at their own level.

Step five:

Disseminate analyzed report to both higher and lower levels. Highlight deviation from the normal occurrence while reporting to the next higher level.

Step six:

Validate the data received from various units periodically as a part of the quality control of data.

Step seven:

Co-ordinate with other health sectors for enhancing the coverage of information e.g.

- Private Practitioners
- Voluntary Agencies
- Private Dispensaries/Nursing Homes
- Government Health Institutions
- Railway Hospitals
- Armed Forces Hospitals

Step eight:

Communicate analyzed data and over findings into the public domain (both media and internet) to strengthen public awareness and encourage public suport and action.

Use of Computers in strengthening HIMS

With the growth of Information technology on the region the use of computers is becoming more common in strengthening HIMS. Factors such as cost, local expertise, available software and hardware, and local technical support, will determine the nature and extent of computerization in a specific district level setting. The role of a district manager in enhancing the use of computers in strengthening will include the following.

- Seeking competence at personal level in the use of available technology for HMIS
- Facilitate training of health workers at all levels in use of computers and relevant software and tools prescribed as part of District HIMS
- Increasing quality and efficiency of operation at all levels including expedient recording.

- Enhancing communication of data between members of health team and between levels of the district health system.
- Enhancing use of data for local and team planning which in turn enhance the motivation of the health team to strengthen the health team.

References:

1. WHO -SEARO, *Guidelines for implementation of Roll Back Malaria at district level*, SEA MAL-230 Draft, World Health Organization- Regional office for South East Asia, 2003

Further reading

1. WHO -SEARO, *How to Organise HMIS Guidelines for implementation of Roll Back Malaria at district level*, SEA MAL-230 Draft, World Health Organization- Regional office for South East Asia, 2003