

## **Annexes**

### **Slides for Module 5: Monitoring and Evaluation**

## **Module 5**


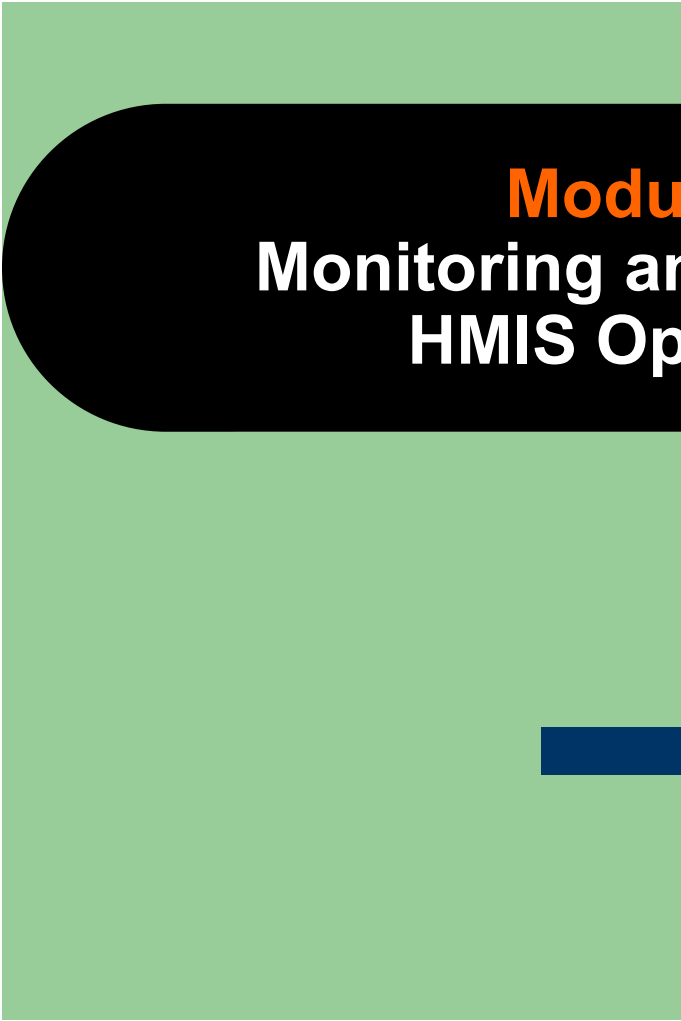
# **Monitoring and Evaluation**

**Session 4.1 Monitoring  
and Evaluation**

**Session 4.2 Monitoring Quality  
of Health Services**

## **Module 5 Objectives**

- (1) differentiate between monitoring and evaluation and identify specific area of application in their own HMIS**
- (2) identify and describe monitoring tools as to their purpose and usefulness**
- (3) describe the process in assessing quality of health services provided by HMIS**
- (4) assess adequacy of monitoring and evaluation system/tool in place in their HMIS**



## **Module 5.1**

# **Monitoring and Evaluating HMIS Operations**

## **Relevance of Monitoring and Evaluation to Your HMIS**

- an essential management tool that helps you keep track of the progress in achieving your goals and to validate if you are in the right direction
- since monitoring and evaluation is to be undertaken regularly and continuously, it enables you to act on issues and problems right away before they become worse or unsolvable
- generates information as your basis for policy formulation and in making critical decisions
- tells you ahead of time if your HMIS is financially viable or in financial crisis
- monitoring aims to make the operations of your HMIS more efficient and more effective
- enables you to make sound decision and apply more responsive measures which have been tried and tested (evidence-based)
- also fosters transparency among your members and partners

## Monitoring

- a continuous activity that consists of ensuring your HMIS program to develop and progress according to what you originally planned and designed
- it is based on a set of indicators which allow you to decide and take actions on to ensure that your HMIS is operating in the most effective and efficient way

## Evaluation

- a periodic assessment (every one or two years) of your HMIS regarding its social, economic and financial performance level
- aims to check whether your HMIS is achieving the objectives you have established and identify the reasons for the differences observed

## Types of Evaluation

- **External Evaluation**

- evaluation of HMIS in relation to its performance and environment
  - (1) involves in particular measuring whether there are differences in terms of risk perception, accessibility to care and utilization among members and non-members
  - (2) impact on the supply of care is also studied in terms of use and funding
- requires more substantial resources than in monitoring
- entails the conduct of surveys and usually requires the intervention of an external resource (e.g. local NGOs, cooperation agencies, consultancies, etc)



## Types of Evaluation

- **Self-Evaluation**

- **the evaluation** makes use of a participative technique allowing:
  - (a) HMIS members to participate in measuring the accomplishment of HMIS against its set objectives
  - (b) assess the soundness of the actions undertaken vis-à-vis the planned activities
    - totally involves the beneficiaries in the processes of analysis and decision-making
    - a favoured instrument for coordination and training
    - can be done through quarterly, semi-annual or year-end program review

### **Aspects of HMIS to be monitored**

- organization and functioning of your HMIS
- increase in your membership
- amount and regularity of your members' contributions
- financial status of your organization
- implementation status of programs/activities you intended to carry out

## Aspects of HMIS to be evaluated

- overall performance of HMIS in terms of membership and factors affecting their participation and utilization of benefits
- impact of services on the knowledge, behaviour and practices of beneficiaries and on the health status of the whole community
- adequacy and appropriateness of key processes and strategies that were employed by the HMIS
- cost-efficiency and cost-effectiveness of interventions that were adopted
- quality of health services being provided by the service providers
- effects of national policies/local policies and legislations to the overall operations of the HMIS

## Aspects to be Monitored By Methodology

Organization and Functioning : Monthly Monitoring Report (MMR)  
(meetings, activities done)      Management Chart (MC)

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Membership and Benefits      : MMR, MC

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Financial Status      : Financial Ratios Record (FFR)

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Activities Undertaken      : Program Review Based on Action  
Plan

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## Aspects to be Evaluated By Methodology

<b>Quality of Health Services Feedback</b>	<b>Quality Health Care Checklist; Client Form; Client Satisfaction Questionnaire</b>
<b>overall performance on membership, contributions and benefits</b>	<b>Program Review; Time/Trend Analysis making use of the MMR, MC and FRR</b>
<b>impact evaluation of services on the beneficiaries KAP and community's health status</b>	<b>Household Survey</b>
<b>effectiveness and efficiency of interventions</b>	<b>Pre-Post Evaluation; Cost-Efficiency and Cost-Effectiveness Study</b>
<b>impact of policies on HMIS operations and performance</b>	<b>Policy Review and Assessment</b>
<b>Capacity of Service Facility and Providers</b>	<b>Facility-Based Survey with Household Survey</b>

## **Locus of Monitoring and Evaluation**

- **Auditing Body tasked to monitor compliance to the HMIS By-Laws, Policies and IRRs**
- **separate Monitoring Committee to undertake this task in addition to the Auditing Body**
- **monitoring task can be undertaken by own staff**
- **external evaluation specially those that will employ impact studies or household surveys commissioned to external group**
- **MMR and MC as well as the FRR can be accomplished by the Administrative Officer**
- **administration of the Quality of Health Care schemes can be assigned to 1-2 of your staff or volunteer members of your HMIS.**
- **results of monitoring and evaluation must be reported to the Executive Body up to the level of the Board of Directors and the General Assembly**

## **What is the Monthly Monitoring Record for?**

- enables analysis of HMIS data on a monthly basis
- provides a monthly snapshot of certain representative quantifiable aspects of HMIS operation
- a basic reference document for monitoring HMIS and allows members of Board of Directors to obtain information necessary to ensure better decision-making
- also a reference point for controlling the management of HMIS

### **What information does the Monthly Monitoring Record contain?**

- composed of three categories of indicators which conform to the three major aspects of HMIS operations to be monitored and evaluated
  - organizing and functioning of HMIS
  - administrative
  - accounting and financial management of HMIS



## Organization and Functioning

- number of meetings held/convened by the following bodies
  - General Assembly
  - Board of Directors
  - Auditing Body
  - Executive Body
- activities undertaken by type
  - awareness-raising
  - training/teaching activities
- number of participants who participated in these meetings or activities

## Monitoring Membership and Benefits

- management of members and their contributions
  - number of members: number of men and women joining
  - number of women joining: important for assessing the involvement of women (and therefore also their needs) in the management and decision-making of HMIS
  - number of beneficiaries
  - number of beneficiaries in arrears with their contributions
  - number of beneficiaries enrolled who have not paid their contributions during the month or period

## Monitoring of Benefits

- indicate the number of benefits provided by each service provider as agreed upon (e.g. outpatient care, deliveries, hospitalizations, transports, etc.)
- examine the total number of benefits per provider and the total cost of monthly benefits per provider
- monitoring benefits availed according to sex to determine pattern in terms of health problems that can be addressed in a more pro-active way, e.g., health education seminars that seek to prevent certain ailments from happening  
(e.g. interior mountain community in Surigao Sur where a significant number of child-bearing women had goiter; organization requested local health unit to lecture on causes of goiter, and preventative and curative measures to help curb it)

## Financial Monitoring

(a) **Revenue** : membership fees, contributions, subsidies and other inflows

(b) **Expenditure**: benefits, operating costs, training costs and other outflows

- monitoring expenditure establishes the HMIS situation monthly
- comparing the amounts of forecast and the amounts achieved, allows monitoring of cash flow and budget
- monitoring revenue and expenditure examines the cash flow of HMIS, by comparing the money on hand and at the bank at the beginning and end of the month respectively
- Board of Directors can also verify whether the difference between revenue and expenditure is equal to the difference in total cash flow

## How is the Monthly Monitoring Record used?

- organization and functioning: minutes, By-Laws and Policies, Systems and Procedures
- management of admissions: Register of Beneficiaries, Register of Contributions, possibly Membership Books (if in doubt, the manager may always verify the information with the membership book)
- monitoring of benefits: Invoices, Register of Benefits, Guarantee and Certificate of Care of the Certificate of Entitlement
- financial monitoring: Record of Bank Transactions, Cash Book, supporting documents and Invoices
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## **How is Monthly Monitoring Record used?**

- (1) EB prepares MMR for the Auditing Body, which checks its content and approves it**
- (2) EB then presents the MMR to the Board of Directors**
- (3) reports or information are then discussed by the Board of Directors during their regular meetings**
- (4) Board of Directors compare the MMR data with the information from previous months and draws conclusions for management and decision-making**
- (5) after the Board of Directors has validated the information, the data in the record will be introduced into the Management Chart**
- (6) manager or treasurer files the records**

## What is the Management Chart for?

- a powerful way of monitoring the dynamics and development of the principal indicators of HMIS over a given period
- sums up the information in the MMR over a given period and completes it by utilization rate and average cost of benefits
- monitoring of these two indicators enables the contributions/benefits relationship, which constitutes the basis of the functioning of the HMIS to be updated
- helps to control the demand for care and the practice of care providers and makes it possible to identify possible slippages so as to intervene rapidly

## What does a Management Chart contain?

### Organization and Functioning

- the number of meetings held and planned by the following bodies and whether these take place in the month or period concerned
  - General Assembly
  - Board of Directors
  - Auditing Body
  - Executive Body
- number of activities undertaken like
  - awareness-raising
  - training/education activities
- Allows analysis of the operations of HMIS during a given period



## Membership and Benefits

**Membership:** management of new members and their contributions

Number of New Members : number of male and female members of the scheme  
Number of Beneficiaries : number of members and dependents  
Number of Women Joining : an important indicator of gender that indicates the participation of women in the scheme

Average Number of Beneficiaries per Member:  $\frac{\text{number and sex of beneficiaries}}{\text{number of members}}$

**Example:**

**Number of Members** = 132 (Male: 52 Female:80)

**Number of Beneficiaries** = 354 (Male:150 Female?: 204);

**Ave. No. of Beneficiaries** =  $\frac{\text{Total No. of Members}}{\text{Total No. of Beneficiaries}}$

The average number of beneficiaries per member is 2.6.

## Membership and Benefits

Number of Contributions : number and sex of beneficiaries  
in arrears enrolled whose contributions  
have not been paid

Rate of Collection =  $\frac{\text{no. of contributions received}}{\text{no. of contributions forecast}} \times 100$   
of Contributions

A rate of collection below 100% requires intervention so as  
to collect unpaid contributions or to withdraw the  
entitlements of members who are not up-to-date

## Membership and Benefits

-No. of Beneficiaries (B) = 354(M:104;F: 250)

-No. w/ Contributions in arrears (C) = 37 (M:7; F= 20)

-No. of Contributions Received (B – C) = (M:97; F: 230)

**Rate of Collection: =No of Beneficiaries –No w/  
Contribution in Arrears X 100**

**Number of Beneficiaries =  $\frac{B - C}{B} \times 100$**

**=  $\frac{(354 - 37)}{354} \times 100$**

**= .895 X 100**

**= 89.5%**

## Membership and Benefits

In the same month of May 2002, there are 354 beneficiaries (Male:104; Female:250), of whom 37 (Male:7 Female:20) have not had contributions paid on their behalf. What is the HMIS rate of collection of contributions?

- -No. of Beneficiaries (B) = 354(M:104;F: 250)
- -No. w/ Contributions in arrears (C) = 37 (M:7; F= 20)
- -No. of Contributions Received (B – C) = (M:97; F: 230)

### Rate of Collection:

- $$= \frac{\text{No of Beneficiaries} - \text{No w/ Contribution in Arrears}}{\text{Number of Beneficiaries}} \times 100$$
- $$= \frac{B - C}{B} \times 100 = \frac{354 - 37}{354} \times 100$$
- $$= .895 \times 100 = 89.5\%$$

### Conclusion:

- 89.5% of beneficiaries (% M: 93.2 % F:92.0) are therefore up-to-date in paying their contributions, while 9.5% (% M: 6.8; % F: 8.0) are in arrears

## Membership and Benefits

Rate of Penetration:  $\frac{\text{no. of beneficiaries (Male, Female)}}{\text{over target population (Male, Female)}} \times 100.$

- measures interest of men and women in the HMIS, their perception of HMIS capacity to meet their families' needs, and HMIS' accessibility and potential growth
- generally increases during the first year of implementation
- particularly worrying when it stagnates at a low level

## Monitoring of Benefits

- Annual Utilization Rate of Benefits Per Beneficiary defined as the number of treatments used by type of care over the total number of beneficiaries (Male/Female) who are actually entitled to benefits) x 100
- measures the difference between the rates expected (and used in calculating contributions) and the rates observed when implementing the system
- If rates observed are largely and/or consistently greater than the rates expected, for different reasons (e.g. underestimation of rates expected, adverse selection, over-consumption, over-prescription), it means that the HMIS risks a financial crisis.

## Average Cost of Benefits

- Total Amount of Cost of Benefits Over Total Number of Benefits  
(Note: calculation only feasible if all contributions are the same for all beneficiaries)
- involves the part of costs met solely by the HMIS. In the case of the member's contribution system (sharing of costs between HMIS and beneficiary) with a participation of 50%, for example, the cost invoiced to the HMIS represents half the total cost of a benefit

## Financial Monitoring

- involves analyzing the annual summary of total expenditure incurred and revenue received during the month
- for revenue, this involves the new members' contributions, subsidies and other inflows, while expenditure includes benefits, operating costs, training costs and other expenditures
- chart helps appreciate certain information on the HMIS Statement of Income and Expenditure
- examines cash flow, the comparison of financial resources on hand and at the bank respectively at the beginning and end of the month in accordance with the Monthly Monitoring Record
- to validate this computation, the difference between expenditure over revenue and the difference in cash flow must be equal



## How is the Management Chart used?

- not restricted to merely presenting figures and percentages
- allow comparison and development monitored over time
- useful on a multi-year basis to compare annual results, new members, benefits and activities
- on a monthly basis, update the Management Chart after the Monthly Monitoring Records are validated by the Board of Directors and Auditing Body
- curves and graphs provide better understanding of the progress of the principal indicators of the functioning of your HMIS, including rates of attendance of beneficiaries and the average cost of health services
- annual Management Chart shows similar information as in your Monthly Monitoring Chart

## What is the Financial Ratios Record for?

- includes the indicators that measure the financial health of the HMIS, namely its capacity to meet its obligations to members and service providers at any time.
- financial monitoring and evaluation indicators are presented in the form of ratios:
  - a ratio being the relationship between two countable numbers
  - ratios may be different according to the size, activities and objectives of HMIS
- basic principle: analysis must focus on a certain number of significant magnitudes, the ratios must be studied both in terms of their development over time, and their comparison with established standards or, if possible, with a set of similar schemes

## ***Ratio of Contributions/Expenditures***

- if ratio is equal to or preferably greater than 1, the contributions are sufficient to cover the expenditure of HMIS
- If not, it may be necessary to raise contributions, unless HMIS does not benefit from other reliable and constant sources of funding
- ratio may be simplified by calculating the contributions to expenditure ratio

## ***Claims Ratio (health benefits/ contributions)***

- \* measures the part of contributions redistributed to members in the form of health benefits
- \* if ratio is low, members may feel their contributions are too high in relation to the advantages they get from them
- \* if this ratio is too high, HMIS will have difficulty financing its other expenditures
- \* optimum ratio is between 75 to 90%, approximately.

## ***Operating Cost/Income Ratio***

- the reverse of the Claims Ratio
- measures the part of income devoted to the other expenditures of HMIS
- should be situated between 5 and 15%
- if it significantly exceeds this bracket, need to rationalize the operations of HMIS, which are too costly
- a simplified ratio may compare operating costs with revenue

## **Liquidity Ratio (Balance Sheet Assets Available/Short-Term Debts)**

- measures the capacity of HMIS to meet its financial commitments immediately
- always be equal to or greater than 1, which indicates HMIS capacity to pay its debts towards the care providers or other providers of services immediately

## **Solvency Ratio (Balance Sheet Assets/Debts)**

- If ratio is equal to or greater than 1, HMIS can meet all its obligations towards third parties such as providers or banks with its own resources, without using external assistance or a loan
- indicates its financial autonomy and capacity

## **Ratio of Coverage of Expenditures (Reserves/Monthly Expenditures)**

- measures the number of months of normal functioning that could be financed by HMIS reserves
- should be equal to at least 6 (six) months to ensure the stability of your system and to cope with exceptional circumstances such as epidemics
- may be simplified by replacing monthly expenditure by monthly expenses (ratio of coverage of expenditure)



## How is the Financial Ratios Record used?

- form part of the record are generally calculated at the end of the financial year, after drawing up the statement of income and expenditure and balance sheet.
- complete the data at the end of the year after drawing up the Statement of Income and Expenditure and Balance Sheet
- the first three ratios may be calculated from your Management Chart (they do not concern the balance sheet)
- either form part of the evaluation (when the latter is annual) so as to prepare the General Assembly, for example, or the monitoring
- may point to strategic guidelines to ensure that your HMIS is more financially viable.