Monitoring & Evaluation in Health Programs

Building Effective Frameworks for Primary Health Care

Monitoring | Evaluation | Decision Making

M&E Concepts: Definitions & Distinctions

Monitoring

Definition:

Continuous, routine data collection and analysis to track project performance

Simple Understanding:

"We are doing things, right?"

Ongoing process

Evaluation

Definition:

Systematic assessment of project**relevance, effectiveness, efficiency and impact**

Simple Understanding:

"We are doing the right things?"

Periodic assessment

Key distinction: Monitoring focuses on **process** while Evaluation focuses on **results**

Importance of M&E in Primary Health Care

Ensures Accountability

Provides accountability to communities, governments, and donors for health services

Identifies Gaps

Helps identify issues like drug shortages, staff absences, and low immunization coverage

Supports Evidence-Based Decisions

Provides data support for PHC level decision-making to improve health outcomes

Builds Trust & Transparency

Enhances trust by publicly sharing data and results with stakeholders

Real world application: Using M&E data to improve maternal health programs or dengue response

Key Components of M&E Framework

M&E framework follows a logical chain that tracks the flow from resources to results

Inputs
Resources needed

- Staff
- Medicines

Activities
What we do

- Training
- Vaccinations

Outputs
What we produce

- Consultations
- Registers

Outcomes
Changes we see

- Increased coverage
- Reduced mortality

Impact
Long-term effects

- Reduced burden
- Better health

Key point: A complete M&E framework tracks the entire chain from inputs to impact

M&E Tools & Systems

Effective M&E requires a structured approach with specialized tools to collect and analyze data

Health Information Systems

- **DHIS-2**
  District Health Information Software
- **Registers**
  Tracking individual patient data
- **Reports**
  Monthly/quarterly data summaries

Supervision Checklists

- **Service Quality**
  Ensuring standards compliance
- **Process Compliance**
  Verifying workflow adherence
- **Data Collection**
  Facility performance monitoring

Community Feedback

- **Meetings**
  Community engagement
- **Surveys**
  Quantitative feedback
- **Suggestions**
  Improvement ideas

Key insight: Effective M&E requires **integration** of multiple tools to collect, analyze and utilize data for decision-making

Types of Indicators in Health Programs

Input Indicators

Resources used in the program

Examples:

- Staff availability
- Drug availability
- Equipment availability

Process Indicators

Activities implemented

Examples:

- ANC visits
- Health education sessions
- Counseling sessions

Output Indicators

Direct results of activities

Examples:

- Immunization coverage (%)
- Number of consultations
- Training completion

Impact Indicators

Long-term effects

Examples:

- Maternal mortality rates
- Child mortality rates
- Disease burden reduction

Key point: Indicators should follow a logical flow from inputs to impact

Case Study: Immunization Program

This case study demonstrates how Monitoring & Evaluation works in a real immunization program, showing both monitoring (day-to-day operations) and evaluation (periodic assessment) components.

Monitoring

Daily Vaccine Usage

Tracking the number of vaccines used daily to ensure adequate supply and identify trends

Cold Chain Maintenance

Monitoring the temperature of vaccine storage to ensure vaccine efficacy and safety

LHW Reports

Collecting data from Lay Health Workers about vaccination coverage and community feedback

Evaluation

Annual Coverage Surveys

Systematic assessment of immunization coverage, effectiveness, and community acceptance

- Evaluates project effectiveness
- Assesses community acceptance
- Identifies areas for improvement

Sample Data Collection:

Child Registration | Vaccine Administration | Coverage Survey

Data Collection Fundamentals

Types of Health Data

Service provision data (immunization, ANC)

Resource data (staff, medicines)

Outcome data (coverage rates, mortality rates)

Data Sources

Registers

Statistical forms

Patient records

Pakistan's DHIS2 system

Good Data Quality

- **Accurate**
- **Complete**
- **Timely**
- **Reliable**

Common Data Collection Errors

Double counting

Missing entries

Delays

Data Reporting Flow

PHC
Primary Health Care

→

District
Health Facilities

→

Provincial
Regional Offices

→

National
Ministry of Health

Pakistan's Standard Tools

DHIS2
District Health Information Software

EPI Reports
Expanded Program on Immunization

LMIS
Logistics Management Information System

Key Elements for Effective Reporting

- **Regular reporting** ensures timely data availability
- **Accuracy** is critical for decision making
- **Auxiliary health personnel** play key role in data quality
- **Correct register filling** is the foundation of good data

Using Data for Decision Making

Collect — Analyze — Interpret — Act — Monitor

Data-Driven Decision Examples:

Immunization Coverage
If coverage falls below 80%, plan outreach activities in underserved villages

Medicine Stockout
If ORS shortage days are high, notify district warehouses for replenishment

Maternal Health
If complications increase, arrange emergency referral plans

Simple Data Set Example

From BHU monthly registration form:

- Children under 1 year: **100**
- Immunized children: **60**
- ORS shortage days: **12**
- Reported maternal deaths: **2**

Building a Simple M&E Framework for PHC

What is an M&E Framework? A structured way to track PHC activities from inputs to impact

1 Define Goal/Impact

Long-term health improvements (e.g., reduce maternal mortality)

2 Set Objectives

Mid-term changes (e.g., increase ANC coverage)

Identify Outputs

Direct results (e.g., completed ANC visits)

4 Plan Activities

Work to be done (e.g., outreach campaigns)

5 Determine Inputs

Resources needed (staff, drugs, funding)

6 Select Indicators

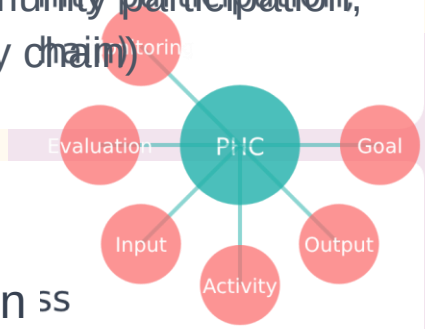
Follow SMART principles (Specific, Measurable, Achievable, Relevant, Time-bound)

7 Establish Verification

Methods to verify (registers, DHIS2, surveys)

8 Identify Assumptions

External factors (community participation, supply chain)



Implementation Tips:

- Start with a simple framework and adapt as needed
- Involve stakeholders in the design process
- Regularly review and update the framework
- Ensure indicators are practical and measurable