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MONITORING AND EVALUATION

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WHAT IS MONITORING

- Monitoring is the routine process of collecting data to measure progress toward program objectives
  - Monitoring involves routinely looking at the way we implement programs, conduct services etc.
    - Examines efficiency

WHAT IS EVALUATION

- Evaluation is the use of research methods to systematically investigate a program's effectiveness
- Evaluation involves measurements over time
  - Need for baseline
- Sometimes requires a control or comparison group
- Evaluation involves special research studies

WHY MONITOR AND EVALUATE PROGRAMMES?

- To ensure that programs are being implemented as designed (fidelity of programme implementation)
- To ensure the delivery of quality services (continuous quality control - CQI)
- To ensure that the programmes are making a difference (outcomes)
- To ensure that programmes and funds are used appropriately and efficiently (accountability)

FIDELITY OF PROGRAMME IMPLEMENTATION

- Are projects and components of projects (i.e., specific activities) being conducted as planned and on schedule?
  - Done primarily through programme *monitoring*
    - Examine the implementation of activities relative to a planned schedule
  - Programme *monitoring* ensures that programs are administered and services are delivered in the way they were designed

CONTINUOUS QUALITY IMPROVEMENT

- Use information to modify/improve the configuration and implementation of programmes
- What was learned from implementing the programme that can be improved upon?
  - What went wrong and how can it be corrected next time?
  - What worked especially well and how can those lessons be incorporated into future activities?
  - Did the intervention work? Were the outcomes as expected?

PROGRAMME OUTCOMES

- Are the projects/interventions having the desired effect on the target populations?
  - For example, are health care providers using clinical guidelines as recommended?
- Done primarily through programme *evaluation*
  - Determine whether programme/project made a difference (e.g., does the use of guidelines result in decreased rates of complications in diabetic patients)

PROGRAMME OUTCOMES

- Usually examined through studies designed to collect data on logical outcomes from the project/intervention (e.g., periodic surveys of target groups)
  - Did the programs have the expected/desired outcomes? If no, why? Was it a function of implementation challenges or poor project design or a study design that failed to capture outcomes?
  - What are the implications for future interventions? Should they be the same or can they be improved in some way?

ACCOUNTABILITY

- Taxpayers, donor agencies and lenders need to know:
  - funds were used as intended
  - programmes made a difference
- Evaluation findings document achievements as well as what remains to be done
  - Findings can be used to demonstrate unmet needs and facilitate requests for additional funds.

BEST PRACTICES FOR M&E SYSTEMS

- funding should be proportional to programme resources
  - ideally about 7% of the program budget
- needed at all levels
  - most useful if performed in a logical sequence
  - first assessing input/process/output data (*monitoring/process evaluation*),
  - then examining behavioural or immediate *outcomes*
  - and finally assessing disease and social level *impacts*.
- minimize data collection burden and maximize limited resources
  - activities should be well coordinated
  - utilize ongoing data collection and analysis as much as possible

BEST PRACTICES FOR M&E SYSTEMS

- To increase the utilization of evaluation results, M&E design planning, analysis, and reporting should actively involve key stakeholders
  - programme managers, policy makers, community members, and programme participants
- M&E indicators should be comprehensive
  - should also measure population-based biological, behavioural, and social data to determine "collective effectiveness"

DEVELOPING/SELECTING INDICATORS

INDICATORS

- Specific measures that reflect a larger set of circumstances
- Greater emphasis on transparency globally, people want instant summary information, instant feedback
  - Indicators respond to this need

INDICATORS – THINGS TO KNOW

- only **indicate** – will never capture the richness and complexity of a system Designed to give ‘slices’ of reality
- encourage **explicitness**: they force us to be clear and explicit
- usually **rely on numbers & numerical techniques** (rates, ratios, comparisons)
- have specific measurement protocols which must be respected

SOURCES OF DATA

Primary Data Sources:

- Quantitative program data e.g. from coverage of services
- Surveys: demographic health surveys, epidemiological, behavioral and other studies
- Research and impact evaluations.
- Qualitative data from program staff, key informants and direct observation

Secondary Data Sources:

- National response documentation, expenditures reports and program review reports.
- Surveillance reports
- Routine statistics e.g. mortality, hospital admissions

RELATING PROGRAM OBJECTIVES TO INDICATORS

- Program goals and objectives may be vague or overly broad, making indicator selection difficult
  - Indicators should be clearly related to program goals and objectives
- Program objectives may have multiple indicators
  - Indicators are used at all levels of the programme implementation process
    - Process indicators
    - Outcome indicators
    - Impact indicators

TYPES OF INDICATORS

- **Impact**

  Indicators are used for national and global reporting e.g. mortality rates

- **Outcomes**

  Program indicators are used for reporting to national authorities and donors. Changes at end of intervention/program period e.g. rate of HBP control among targeted patients, hospital admissions et.

- **Outputs**

  Selected **Interventions Indicators** (such as approval of a policy, health care professionals trained) are used for programmatic decision making

- **Inputs**

  Resource allocation indicators may be included

  Financial, human, material, and technical resources

SOME CONSIDERATIONS

- How can the main focus of the objective best be measured?
- What practical constraints are there to measuring the indicator?
- Are there alternative or complementary measures that should be considered?
- What resources (human and financial) does the indicator require?
- Do standard (validated, internationally recognized) indicators exist?
- How will the results not captured by the selected indicator be measured? (Indicators are imperfect)

GENERAL CRITERIA OF GOOD INDICATORS

- Indicators should be expressed in terms of:
  - *Quantity*
  - *Quality*
  - *Population*
  - *Time*

- For example, an indicator written for the program objective of "**Improving glycemic control in diabetic patients**" might specify:
  - "Increase from 30% to 50% (*quantity*) of gylcaemic control rates (*quality*) among diabetic patients (*population*) by October 2009 (*time*)."

EXAMPLES OF INDICATORS

- # care providers trained to use clinical guidelines in the past year
- % patients with controlled diabetes in health centres
- % A&E admissions for diabetes related complications

GENERAL CRITERIA OF GOOD INDICATORS

- *Simple, clear and understandable*
- *Valid – does it measure what it is intended to measure*
- *Specific* – Should measure only the conditions or event under observation and nothing else
- *Reliable* – should produce the same result when used more than once to measure the same event

GENERAL CRITERIA OF GOOD INDICATORS

- *Relevant – related to your work*
- *Sensitive – will it measure changes over time*
- *Operational –should be measurable or quantifiable using definitions and standards*
- *Affordable – should impose reasonable measurement costs*
- *Feasible – should be able to be carried out using the existing data collection system*

SUMMARY

- To ensure that programs are being implemented as designed and funds are used appropriately and efficiently
- To ensure that the programmes are making a difference
- The selection of appropriate indicators (relative to program objectives) is critical to the success

THANK YOU