UNIVERSITY OF KWAZULU-NATAL ™

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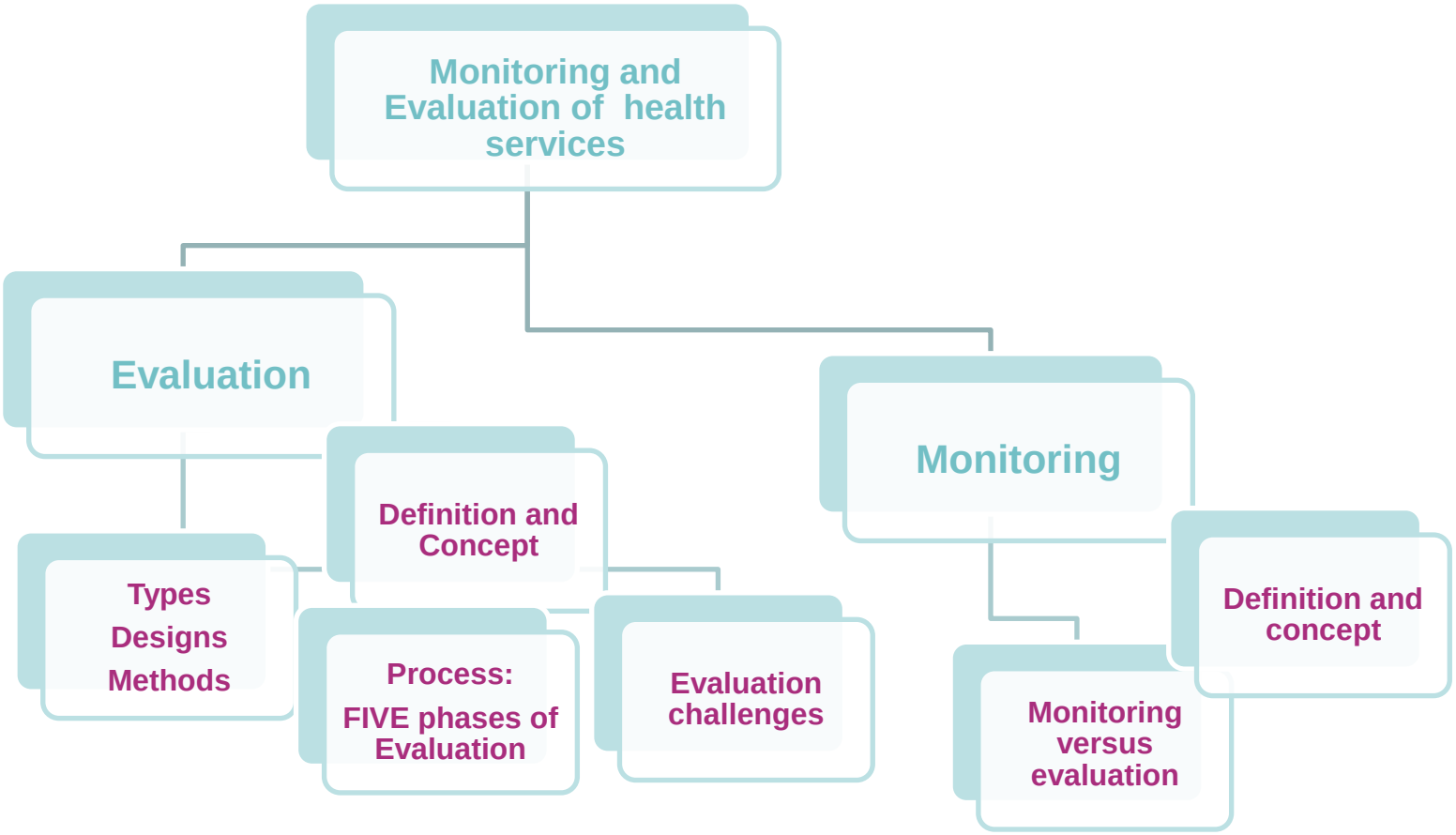
Monitoring and Evaluation

Presentation Outline



Introduction

- Monitoring and evaluation (M&E) is an essential part of any program, large or small.
- practice of M&E can contribute to sound governance in several ways:
  - improved evidence-based policy making (including budget decision making),
  - policy development,
  - management, and accountability

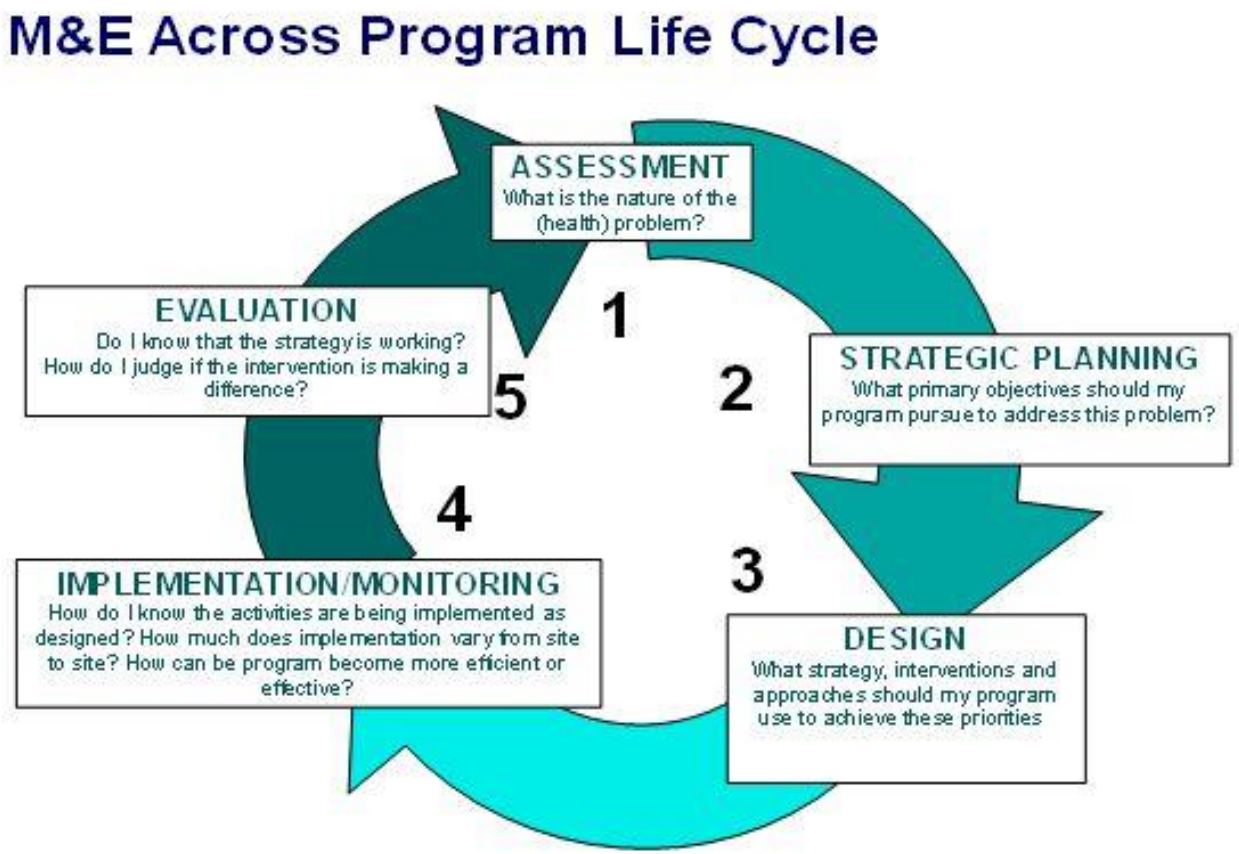
The Power of Measuring Results:

- If you do not measure results, you cannot tell success from failure
- If you can not see success, you cannot reward it
- If you cannot reward success, you are probably rewarding failure
- If you cannot see success, you cannot learn from it
- If you cannot recognise failure, you cannot correct it
- If you can demonstrate results, you can win public support

Introduction

- Can tell us whether a program is making a difference and for whom;
- it can identify program areas that are on target or aspects of a program that need to be adjusted or replaced.
- Can lead to better decisions about program investments.
- Can demonstrate to program implementers and funders that their investments are paying off

Where does M&E fit?



[Caro 2009, Adapted from Measure Evaluation]

M&E frameworks

- Frameworks or models are often used to communicate the rationale and underlying principles of M&E
- Provide a foundation for organizing the array of M&E activities that need to be undertaken as part of the national M&E system

Monitoring

- **Monitoring** is the systematic collection and analysis of information as a project progresses.
- an integral part of day-to-day operational management to assess progress against objectives.
- It is aimed at improving the efficiency and effectiveness of a project or organisation.
- It is based on targets set and activities planned during the planning phases of work.

Monitoring

- It helps to keep the work on track and can let management know when things are going wrong.
- If done properly, it is an invaluable tool for good management, and it provides a useful base for evaluation.
- It enables you to determine whether the resources you have available are sufficient and are being well used, whether the capacity you have is sufficient and appropriate, and whether you are doing what you planned to do

Monitoring

- The aim of monitoring is to support effective management through reports on actual performance against what was planned or expected.
- Based on information collected before and during the operations.
- Precedes, leads up to and forms the basis for evaluation
- Findings from monitoring may be used as part of evaluation

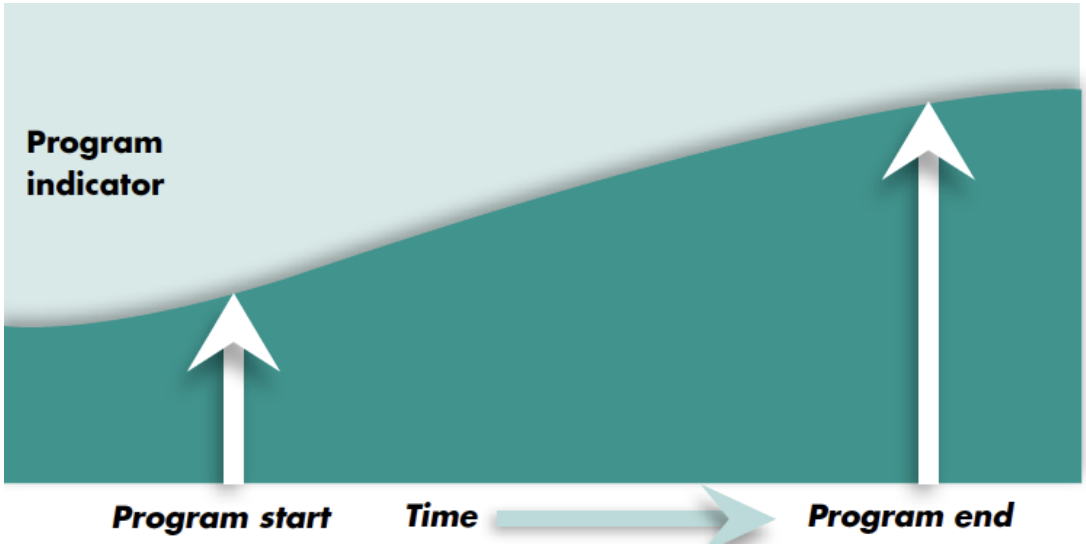
Monitoring

- Monitoring usually precedes, leads up to and forms the basis for evaluation
- Findings from monitoring may be used as part of evaluation, but evaluation tools may also be used for monitoring

Monitoring

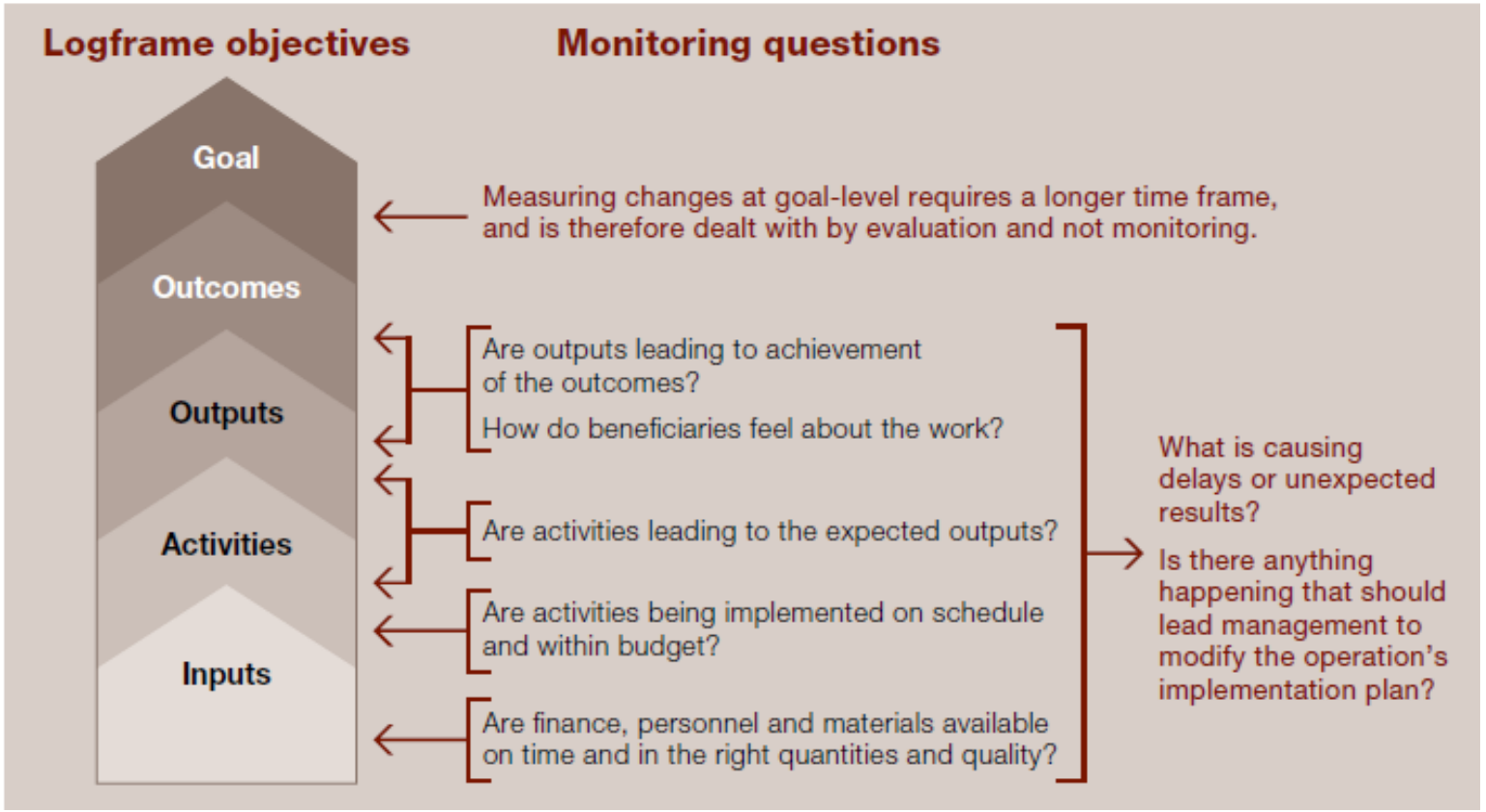
- Is an ongoing, continuous process
- Requires the collection of data at multiple points throughout the program cycle, including at the beginning, to provide a baseline
- Can be used to determine if activities need adjustment during the intervention to improve desired outcomes

Monitoring



Examples of program elements that can be monitored are:

- *Supply inventories*
- *Number of vaccine doses administered monthly*
- *Quality of service*
- *Service coverage*
- *Patient outcomes (changes in behaviour, morbidity, etc.)*


Logframe objectives
Monitoring questions
Goal
Outcomes
Outputs
Activities
Inputs
Measuring changes at goal-level requires a longer time frame, and is therefore dealt with by evaluation and not monitoring.
Are outputs leading to achievement of the outcomes?
How do beneficiaries feel about the work?
Are activities leading to the expected outputs?
Are activities being implemented on schedule and within budget?
Are finance, personnel and materials available on time and in the right quantities and quality?
What is causing delays or unexpected results?
Is there anything happening that should lead management to modify the operation's implementation plan?

Steps in conducting monitoring

- Develop monitoring instruments.
- Conduct monitoring activities.
- Analyse monitoring data.
- Write a report.
- Make recommendations.
- Implement recommendations.
- Identify new indicators based on the recommendations.
- Modify the monitoring system if necessary.
- Continue to monitor.

Evaluation

- Evaluation is a systematic assessment of the strengths and weaknesses of the design, implementation and the results of completed or ongoing interventions.
- Evaluation is the systematic collection of information about the activities, characteristics and outcomes of a specific program to determine its merit or worth.

Evaluation

- **Evaluation** is the comparison of actual project impacts against the agreed strategic plans.
- It looks at what you set out to do, at what you have accomplished, and how you accomplished it.

Evaluation

- Evaluations require:
  - Data collection at the start of a program (to provide a baseline) and again at the end, rather than at repeated intervals during program implementation
  - A control or comparison group, in order to measure whether the changes in outcomes can be attributed to the program
  - A well-planned study design

Evaluation

- Provides credible information for
- improving programs,
- identifying lessons learned,
- and informing decisions about future resource allocation.

Comparison between monitoring & evaluation

Monitoring	Evaluation
Conducted: Ongoing	Conducted: Periodic
Focus: Tracking performance	Focus: Judgement, learning, merit
Conducted internally	Conducted externally or internally, often by another unit within the organisation
Answers the question: "*What* is going on?"	Answers the question: "*Why* do we have the results indicated by the monitoring data?"

Comparison between Monitoring and Evaluation

Attribute	Monitoring	Evaluation
Main focus	Collecting data on progress	Assessing data t critical stages of the process
Sense of completion	Sense of progress	Sense of Achievement
Time focus	Present	Past – Future
Main question	What needs to happen now to reach our goal?	Have we achieved our goal?
How can we do better next time?		
Attention level	Details	Big picture
Inspires	Motivation	Creativity
Periodicity	Continuous throughout the whole process	Intermittent; at the beginning or end of significant milestones
Supports	Implementation of a plan	Designing the next planning cycle
Skills required	Management	Leadership
Output processing	Progress indicators needs to be closely monitored by a few people	Evaluation results need to be discussed, processed and interpreted by all stakeholders

Complementary Roles of M& E

Monitoring	Evaluation
Clarifies program objectives	Analyzes why intended results were or were not achieved
Links activities and their resources to objectives	Assesses specific casual contributions of activities to results
Transelates objectives into performance indicators and set target	Explores implementation process
Routinely collects data on these indicators, compares actual results with targets	Explores unintended results
Reports progress to managers, policy-makers and/or donors and alerts them to problems	Highlights accomplishments or program potential; provides lessons learned; offers recommendations for improvement

Efficiency

- **Efficiency** tells you that the input into the work is appropriate in terms of the output.
- This could be input in terms of money, time, staff, equipment and so on.
- When you run a project and are concerned about its replicability or about going to scale, then it is very important to get the efficiency element right.

Evaluation can focus on:

Projects

normally consist of a set of activities undertaken **to achieve specific objectives within a given budget and time period.**

Programs

are organized sets of projects or services **concerned with a particular sector or geographic region**

Services

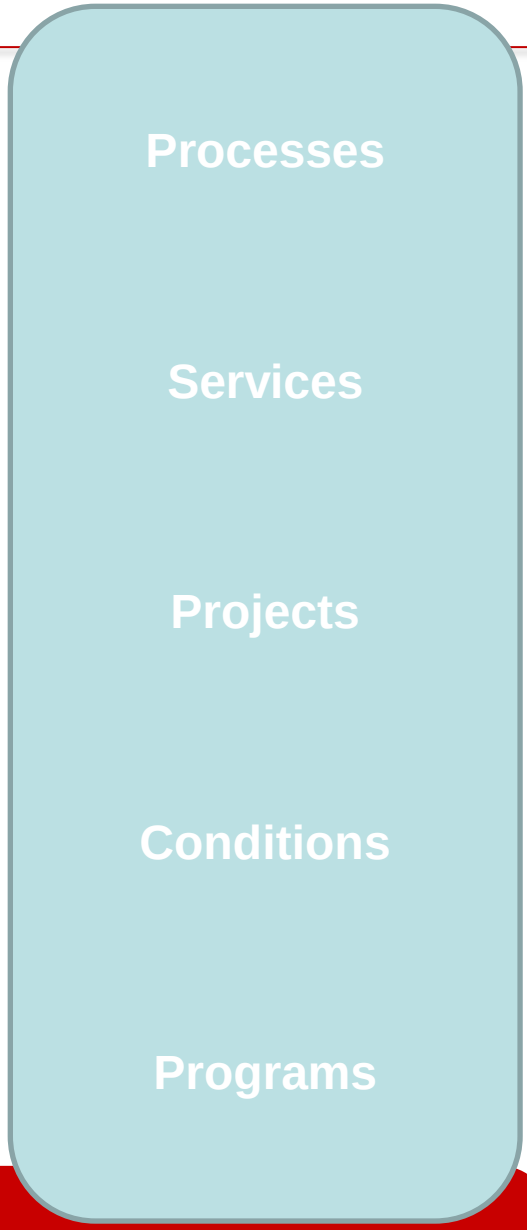
are based on a permanent structure, and, have **the goal of becoming, national in coverage, e.g. Health services, whereas programmes are usually limited in time or area.**

Processes

are organizational operations of a continuous **and supporting nature (e.g. personnel procedures, administrative support for projects, distribution systems, information systems, management operations).**

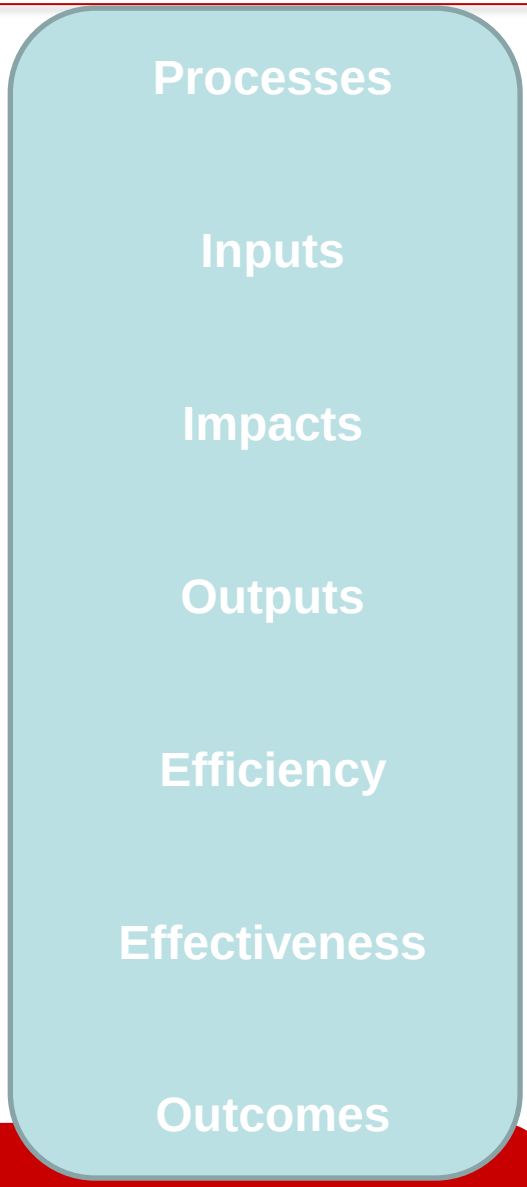
Conditions

are particular characteristics or states of **being of persons or things (e.g. disease, nutritional status, literacy, income level).**



Evaluation may focus on different aspects of a service or program:

- ***Inputs***
  are resources provided for an activity, and include cash, supplies, personnel, equipment and training.
- ***Processes***
  transform inputs into outputs.
- ***Outputs***
  are the specific products or services, that an activity is expected to deliver as a result of receiving the inputs.
- A service is ***effective*** *if*
  it "works", i.e. it delivers outputs in accordance with its objectives.
- A service is ***efficient*** *or cost-effective if*
  effectiveness is achieved at the lowest practical cost.
- ***Outcomes***
  refer to peoples' responses to a programme and how they are doing things differently as a result of it. They are short-term effects related to objectives.
- ***Impacts***
  are the effects of the service on the people and their surroundings. These may be economic, social, organizational, health, environmental, or other intended or unintended results of the programme. Impacts are long-term effects.



Effectiveness

- **Effectiveness** is a measure of the extent to which a development programme or project achieves the specific objectives it set.
- If, for example, we set out to improve the qualifications of all the high school teachers in a particular area, did we succeed?

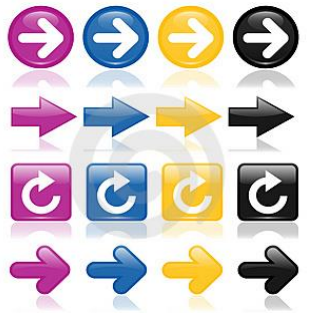
Impact

- **Impact** tells you whether or not what you did made a difference to the problem situation you were trying to address. In other words, was your strategy useful?
- Did ensuring that teachers were better qualified improve the pass rate in the final year of school?

So what do you think?

- When is evaluation desirable?

When Is Evaluation Desirable



- Program evaluation is often used when programs have been functioning for some time. This is called **Retrospective Evaluation.**

- However, evaluation should also be conducted when a new program within a service is being introduced. These are called **Prospective Evaluations.**

- **A prospective evaluation** identifies ways to increase the impact of a program on clients; it examines and describes a program's attributes; and, it identifies how to improve delivery mechanisms to be more effective.

Evaluation Matrix

The broadest and most common classification of evaluation identifies two kinds of evaluation:

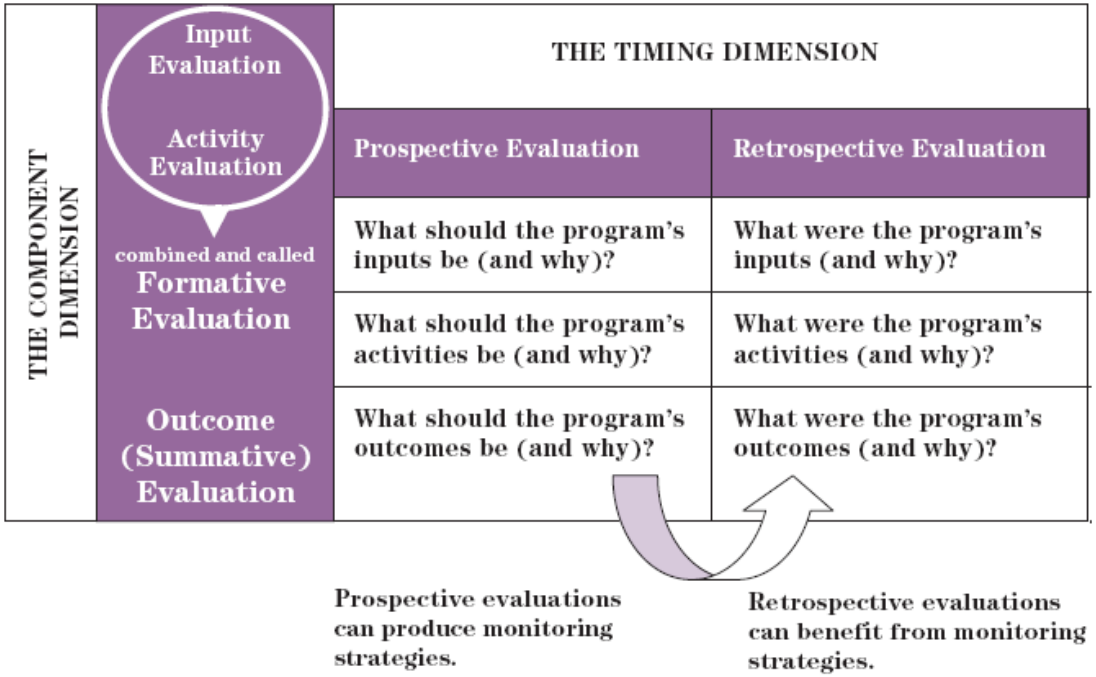
Formative evaluation.

Evaluation of components and activities of a program other than their outcomes. (Structure and Process Evaluation)

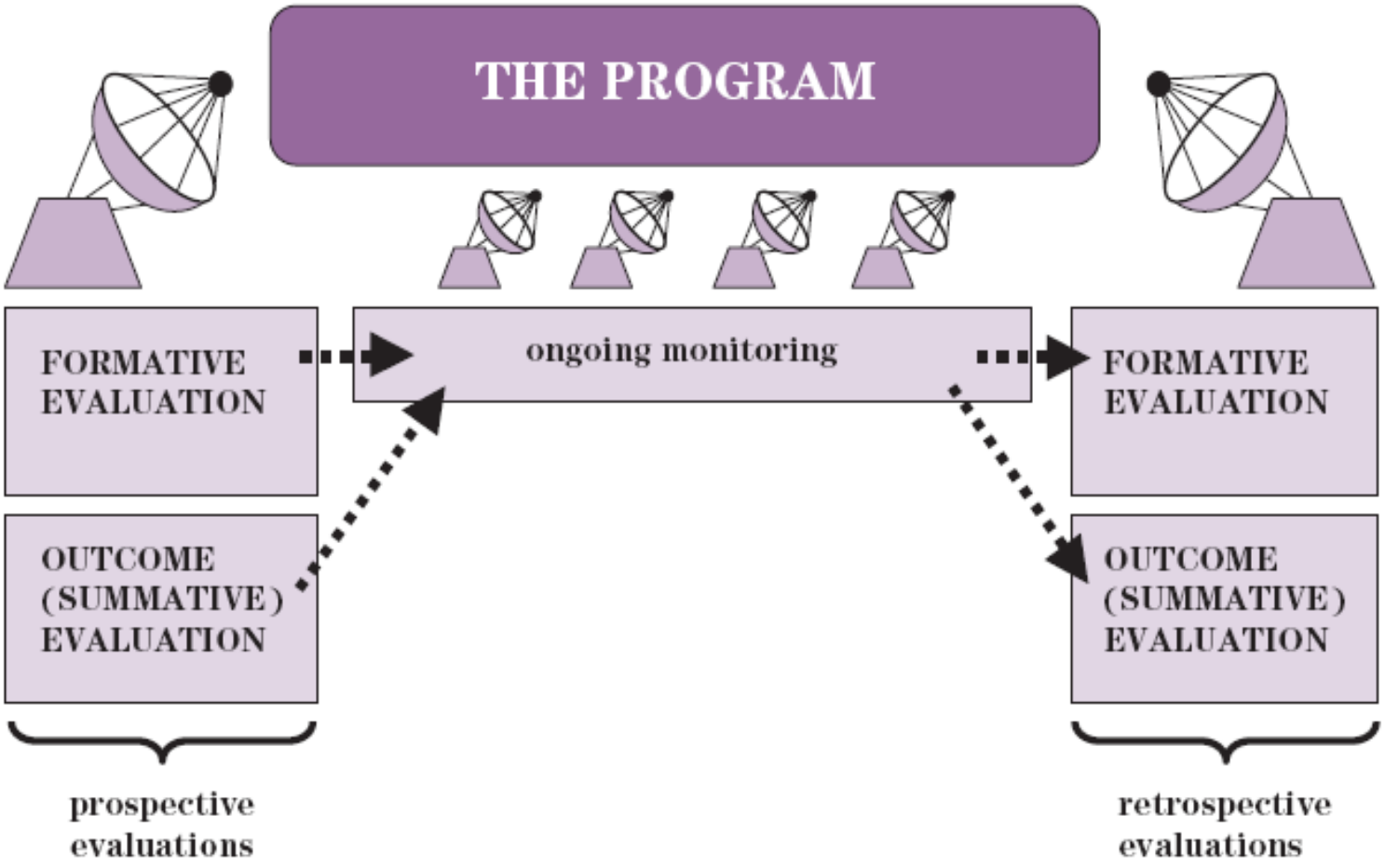
Summative evaluation.

Evaluation of the degree to which a program has achieved its desired outcomes, and the degree to which any other outcomes (positive or negative) have resulted from the program.

Evaluation Matrix



Components of Comprehensive Evaluation



Who conducts evaluation?

- **Internal evaluation** (self evaluation), in which people within a program sponsor, conduct and control the evaluation.

- **External evaluation,** in which someone from beyond the program acts as the evaluator and controls the evaluation.

Tradeoffs between External and Internal Evaluation

Someone associated with the programme	
Advantages	**Disadvantages**
▪ Knows the implementing organization, its programme and operations. ▪ Understands and can interpret behavior and attitudes of members of the organization. ▪ May posses important informal information. ▪ Is known to staff, so may pose less threat of ▪ anxiety or disruption. ▪ Can more easily accept and promote use of evaluation results. ▪ Is often less costly. ▪ Doesn't require time-consuming recruitment negotiations. ▪ Contributes to strengthening national evaluation capability.	▪ May lack objectivity and thus reduce credibility of findings. ▪ Tends to accept the position of the organization. ▪ Is usually too busy to participate fully. ▪ Is part of the authority structure and may be constrained by organizational role conflict. ▪ May not be sufficiently knowledgeable or experienced to design and implement an evaluation. ▪ May not have special subject matter expertise.

Tradeoffs between External and Internal Evaluation

Someone not associated with the programme	
Advantages	**Disadvantages**
▪ May be more objective and find it easier to formulate recommendations. ▪ May be free from organizational bias. ▪ May offer new perspective and additional insights. ▪ May have greater evaluation skills and expertise in conducting an evaluation. ▪ May provide greater technical expertise. ▪ Able to dedicate him/herself full time to the evaluation. ▪ Can serve as an arbitrator or facilitator ▪ between parties. ▪ Can bring the organization into contact with ▪ additional technical resources.	▪ May not know the organization, its policies, procedures, and personalities. ▪ May be ignorant of constraints affecting feasibility of recommendations. ▪ May be unfamiliar with the local political, cultural and economic environment. ▪ May tend to produce overly theoretical evaluation results (if an academic institution is contracted). ▪ May be perceived as an adversary arousing unnecessary anxiety. ▪ May be costly. ▪ Requires more time for contract. negotiations, orientation, and monitoring.

Source: Adapted from UNICEF Guide for Monitoring and Evaluation, 1991.

M& E Plans

- Introduction
- A program description and **framework**
- Detailed description of the plan **indicators** data collection plan
- Plan for monitoring
- Plan for evaluation
- Plan for the utilization of the information gained
- Mechanism for updating the plan

Program Evaluation

- **Implementation:** Were your program's activities put into place as originally intended?
- **Effectiveness:** Is your program achieving the goals and objectives it was intended to accomplish?
- **Efficiency:** Are your program's activities being produced with appropriate use of resources such as budget and staff time?
- **Cost-Effectiveness:** Does the value or benefit of achieving your program's goals and objectives exceed the cost of producing them?
- **Attribution:** Can progress on goals and objectives be shown to be related to your program, as opposed to other things that are going on at the same time?

Research versus Evaluation

Concept	Research Principles	Program Evaluation Principles
Planning	**Scientific method** ▪ State hypothesis. ▪ Collect data. ▪ Analyze data. ▪ Draw conclusions.	**Framework for program evaluation** ▪ Engage stakeholders. ▪ Describe the program. ▪ Focus the evaluation design. ▪ Gather credible evidence. ▪ Justify conclusions. ▪ Ensure use and share lessons learned.
Decision Making	**Investigator-controlled** ▪ Authoritative.	**Stakeholder-controlled** ▪ Collaborative.
Standards	**Validity** ▪ Internal (accuracy, precision). ▪ External (generalizability).	**Repeatability program evaluation standards** ▪ Utility. ▪ Feasibility. ▪ Propriety. ▪ Accuracy.
Questions	**Facts** ▪ Descriptions. ▪ Associations. ▪ Effects.	**Values** ▪ Merit (i.e., quality). ▪ Worth (i.e., value). ▪ Significance (i.e., importance).

Research versus Evaluation

Concept	Research Principles	Program Evaluation Principles
Design	**Isolate changes and control circumstances** ▪ Narrow experimental influences. ▪ Ensure stability over time. ▪ Minimize context dependence. ▪ Treat contextual factors as confounding (e.g., randomization, adjustment, statistical control). ▪ Understand that comparison groups are a necessity.	**Incorporate changes and account for circumstances** ▪ Expand to see all domains of influence. ▪ Encourage flexibility and improvement. ▪ Maximize context sensitivity. ▪ Treat contextual factors as essential information (e.g., system diagrams, logic models, hierarchical or ecological modeling). ▪ Understand that comparison groups are optional (and sometimes harmful).
Data Collection	**Sources** ▪ Limited number (accuracy preferred). ▪ Sampling strategies are critical. ▪ Concern for protecting human subjects. **Indicators/Measures** ▪ Quantitative. ▪ Qualitative.	**Sources** ▪ Multiple (triangulation preferred). ▪ Sampling strategies are critical. ▪ Concern for protecting human subjects, organizations, and communities. **Indicators/Measures** ▪ Mixed methods (qualitative, quantitative, and integrated).
Analysis & Synthesis	**Timing** ▪ One-time (at the end). **Scope** ▪ Focus on specific variables.	**Timing** ▪ Ongoing (formative and summative). **Scope** ▪ Integrate all data.
Judgments	**Implicit** ▪ Attempt to remain value-free.	**Explicit** ▪ Examine agreement on values. ▪ State precisely whose values are used.
Conclusions	**Attribution** ▪ Establish time sequence. ▪ Demonstrate plausible mechanisms. ▪ Control for confounding. ▪ Replicate findings.	**Attribution and contribution** ▪ Establish time sequence. ▪ Demonstrate plausible mechanisms. ▪ Account for alternative explanations. ▪ Show similar effects in similar contexts.
Uses	**Disseminate to interested audiences** ▪ Content and format varies to maximize comprehension.	**Feedback to stakeholders** ▪ Focus on intended uses by intended users. ▪ Build capacity. **Disseminate to interested audiences** ▪ Content and format varies to maximize comprehension. ▪ Emphasis on full disclosure. ▪ Requirement for balanced assessment.

CDC- Evaluation Frameworks

Figure 1.1
Evaluation Framework

Important Standards

Utility: Who needs the evaluation results? Will the evaluation provide relevant information in a timely manner for them?

Feasibility: Are the planned evaluation activities realistic given the time, resources, and expertise at hand?

Propriety: Does the evaluation protect the rights of individuals and protect the welfare of those involved? Does it engage those most directly affected by the program and changes in the program, such as participants or the surrounding community?

Accuracy: Will the evaluation produce findings that are valid and reliable, given the needs of those who will use the results?

Engage Stakeholders

- Stakeholders are people or organizations invested in the program, interested in the results of the evaluation, and/or with a stake in what will be done with the results of the evaluation.
- Representing their needs and interests throughout the process is fundamental to good program evaluation.

Stakeholders in Public Health

- Those involved in *program operations*: Management, program staff, partners, funding agencies, and coalition members.
- Those *served or affected* by the program: Patients or clients, advocacy groups, community members, and elected officials.
- Those who are intended *users* of the evaluation findings:
  - Persons in a position to make decisions about the program, such as partners, funding agencies, coalition members, and the general public or taxpayers.

Importance of Stakeholders

- Stakeholders can help (or hinder) an evaluation *before* it is conducted, *while* it is being conducted, and *after* the results are collected and ready for use.
- stakeholders take on particular importance in ensuring that the right evaluation questions are identified and that evaluation results will be used to make a difference.
- Stakeholders are much more likely to support the evaluation and act on the results and recommendations if they are involved in the evaluation process.
- Conversely, without stakeholder support, your evaluation may be criticised, ignored or resisted or sabotaged

Stakeholders to give priority

- Can increase the *credibility* of your efforts or your evaluation
- Are responsible for day-to-day *implementation* of the activities that are part of the program
- Will *advocate* for or *authorize changes* to the program that the evaluation may recommend
- Will *fund* or *authorize the continuation or expansion* of the program.

Role of Stakeholders

- Stakeholder perspectives may influence every step of the CDC Framework.
- Stakeholder input in “describing the program” ensures a clear and consensual understanding of the program’s activities and outcomes.
- This is an important backdrop for even more valuable stakeholder input in “focusing the evaluation design” to ensure that the key questions of most importance will be included.
- Stakeholders may also have insights or preferences on the most effective and appropriate ways to collect data from target respondents.

Role of Stakeholders

- In “justifying conclusions perspectives and values that stakeholders bring to the project are explicitly acknowledged and honoured in making judgments about evidence gathered
- Finally, the considerable time and effort spent in engaging and building consensus among stakeholders pays off in the last step, “ensuring use,” because stakeholder engagement has created a market for the evaluation results.

Describe the Problem

- A comprehensive program description includes the following components:
  - **Need.** What is the big public health problem you aim to address with your program?
  - **Targets.** Which groups or organizations need to change or take action to ensure progress on the public health problem?
  - **Outcomes.** How and in what way do these targets need to change? What action specifically do they need to take?
  - **Activities.** What will your program and its staff do to move these target groups to change/take action?

Describe the Problem

- **Outputs.** What tangible capacities or products will be produced by your program's activities?
- **Resources/Inputs.** What is needed from the larger environment in order for the activities to be mounted successfully?
- **Relationship of Activities and Outcomes.** Which activities are being implemented to produce progress on which outcomes?
- **Stage of Development.** Is the program just getting started, is it in the implementation stage, or has it been underway for a significant period of time?
- **Context.** What factors and trends in the larger environment may influence program success or failure?

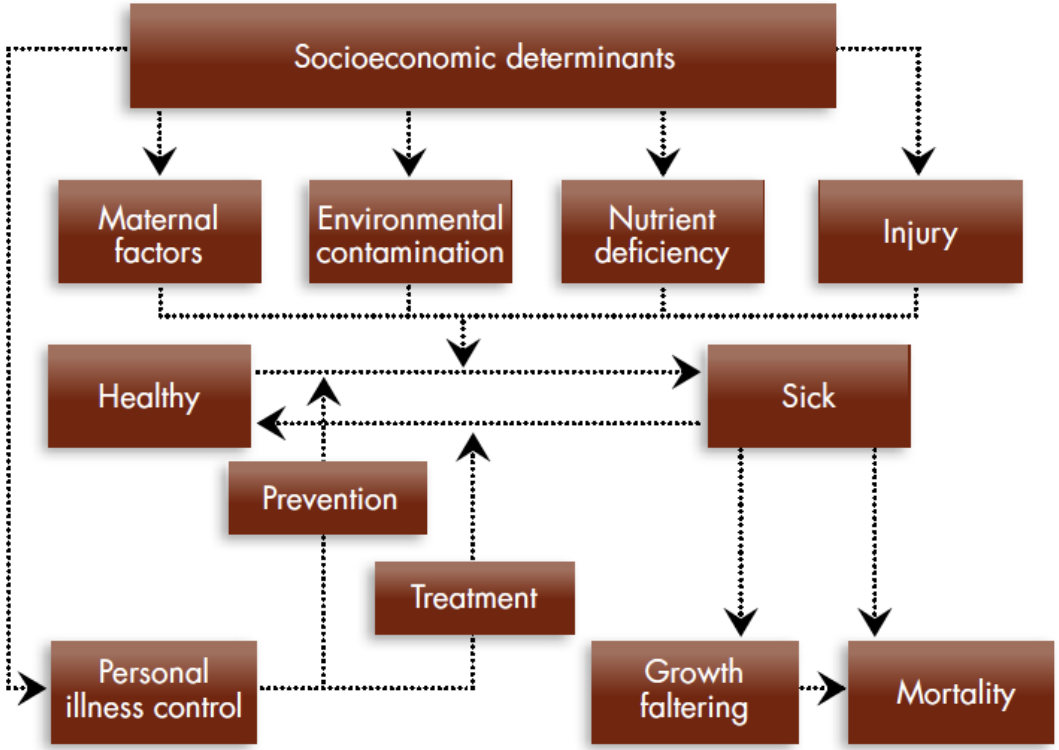
Relating Activities to outcomes

- Frameworks are key elements of M&E plans that depict the components of a project and the sequence of steps needed to achieve the desired outcomes.
- They help increase understanding of the program's goals and objectives, define the relationships between factors key to implementation, and delineate the internal and external elements that could affect its success.
- They are crucial for understanding and analyzing how a program is supposed to work
  - *Conceptual framework*
  - *Results framework*
  - *Logic model*

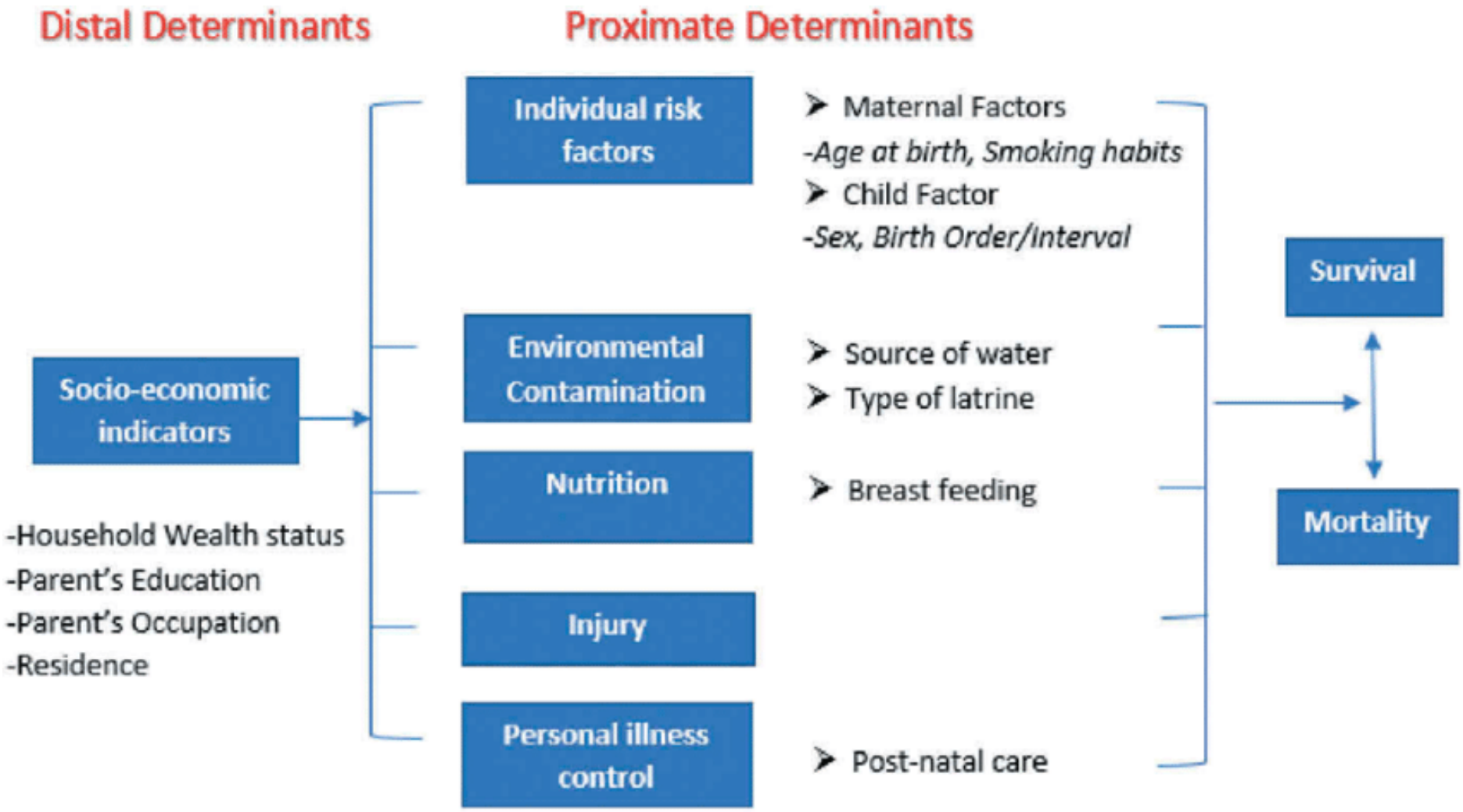
Conceptual Framework

- A conceptual framework—sometimes called a “research framework”— is useful for identifying and illustrating the factors and relationships that influence the outcome of a program or intervention
- Conceptual frameworks are typically shown as diagrams illustrating causal linkages between the key components of a program and the outcomes of interest.

Example of Conceptual Framework



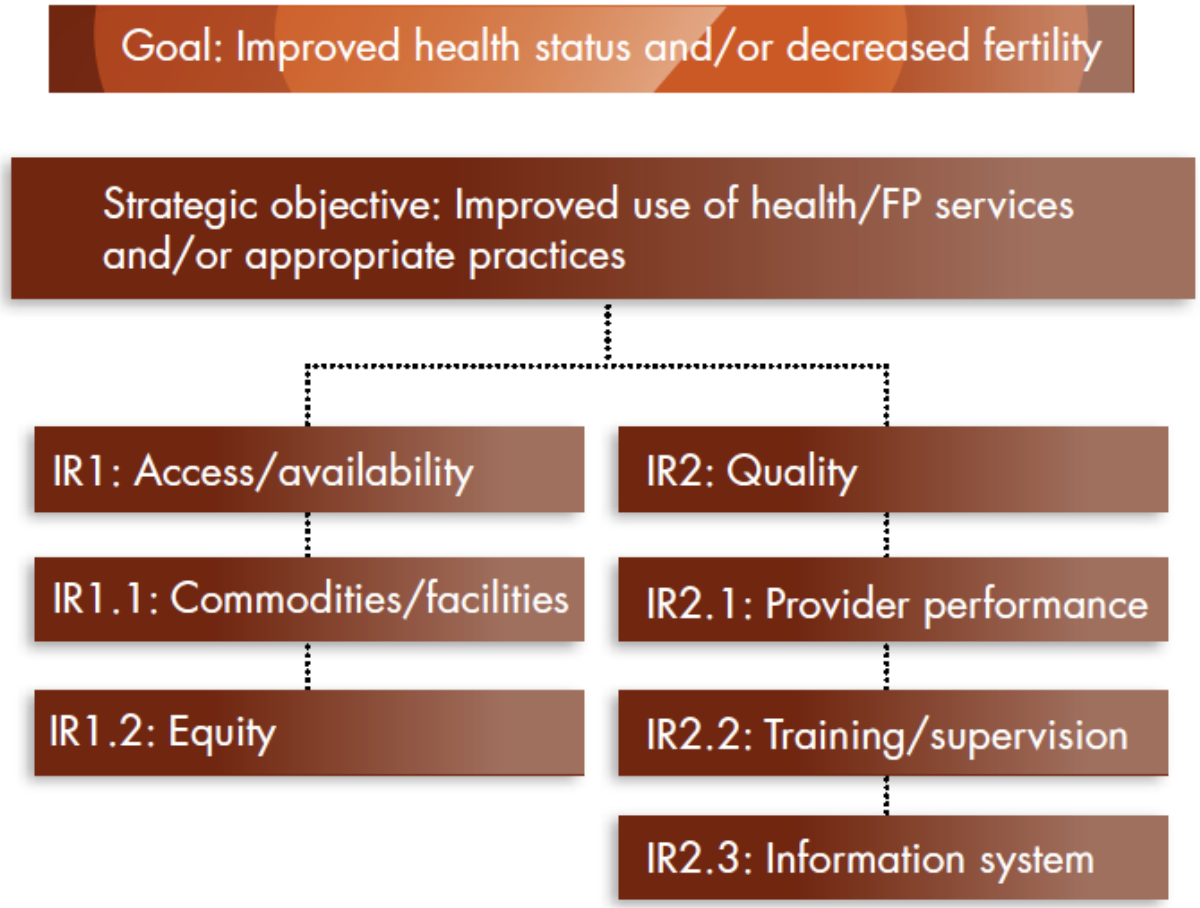
Conceptual Framework



Results Based Framework

- Results frameworks—sometimes called “strategic frameworks”—diagram the direct causal relationships between the incremental results of the key activities all the way up to the overall objective and goal of the intervention.
- This clarifies the points in an intervention at which results can be monitored and evaluated.
- The goal and strategic objective appear at the top of the
- framework.
- Before achieving this broader strategic objective, a set of “lower level” intermediate results must first be reached.
- Under each IR are subordinate intermediate results, or sub-IRs, that relate directly to the intermediate results.

RBM Framework

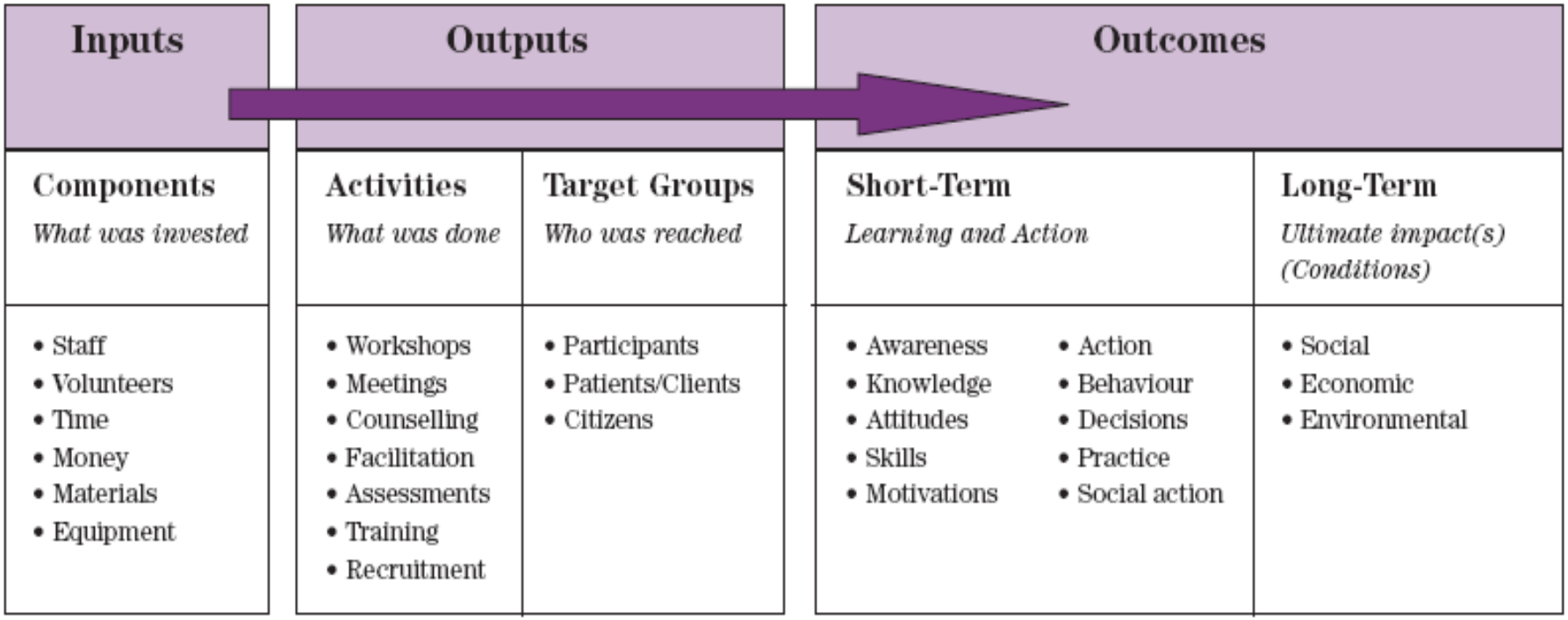


Logic Model

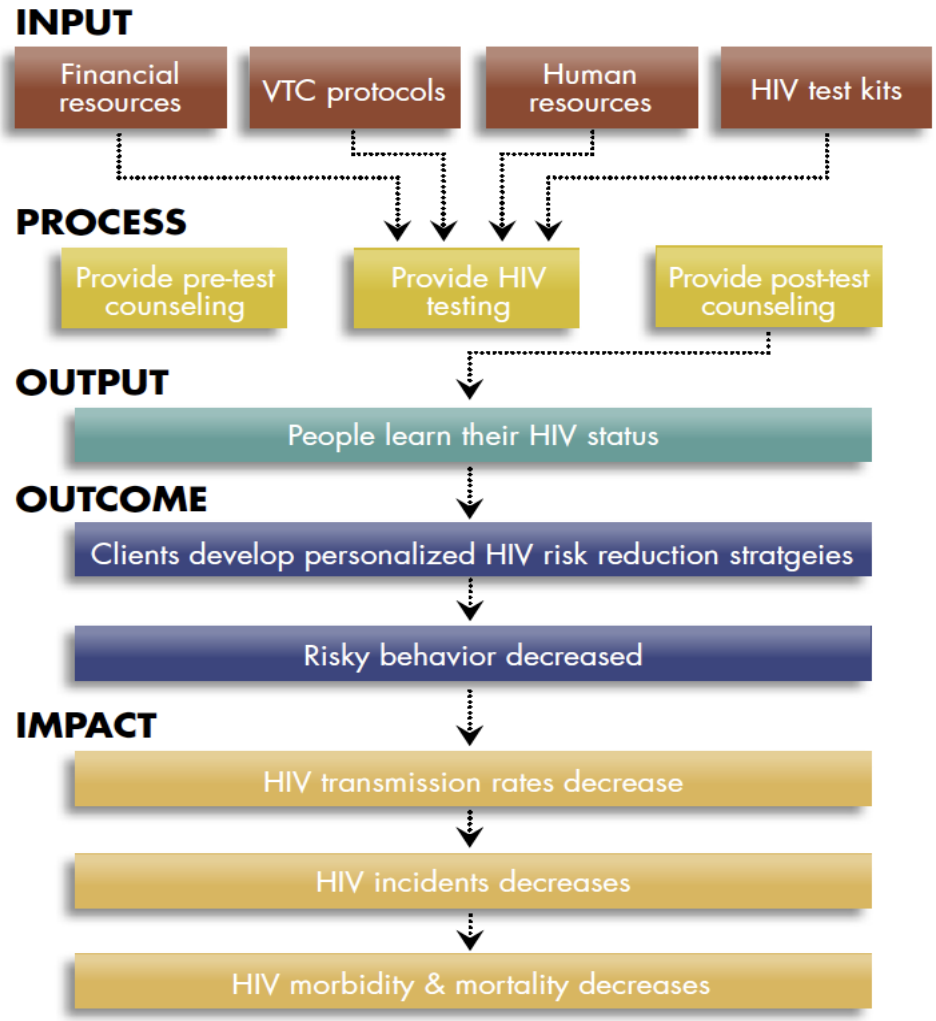
- Logic models have five essential components:
- Inputs: The resources invested in a program—for example, technical assistance, computers, condoms, or training
- Processes: The activities carried out to achieve the program's objectives
- Outputs: The immediate results achieved at the program level through the execution of activities
- Outcomes: The set of short-term or intermediate results at the population level achieved by the program through the execution of activities
- Impacts: The long-term effects, or end results, of the program—for example, changes in health status.

Development of a frame logical model

A program logic model provides a framework for an evaluation. It is a flow chart that shows the program's components, the relationships between components and the sequencing of events.



Logic Model and Conceptual Framework



Focus the Evaluation Design

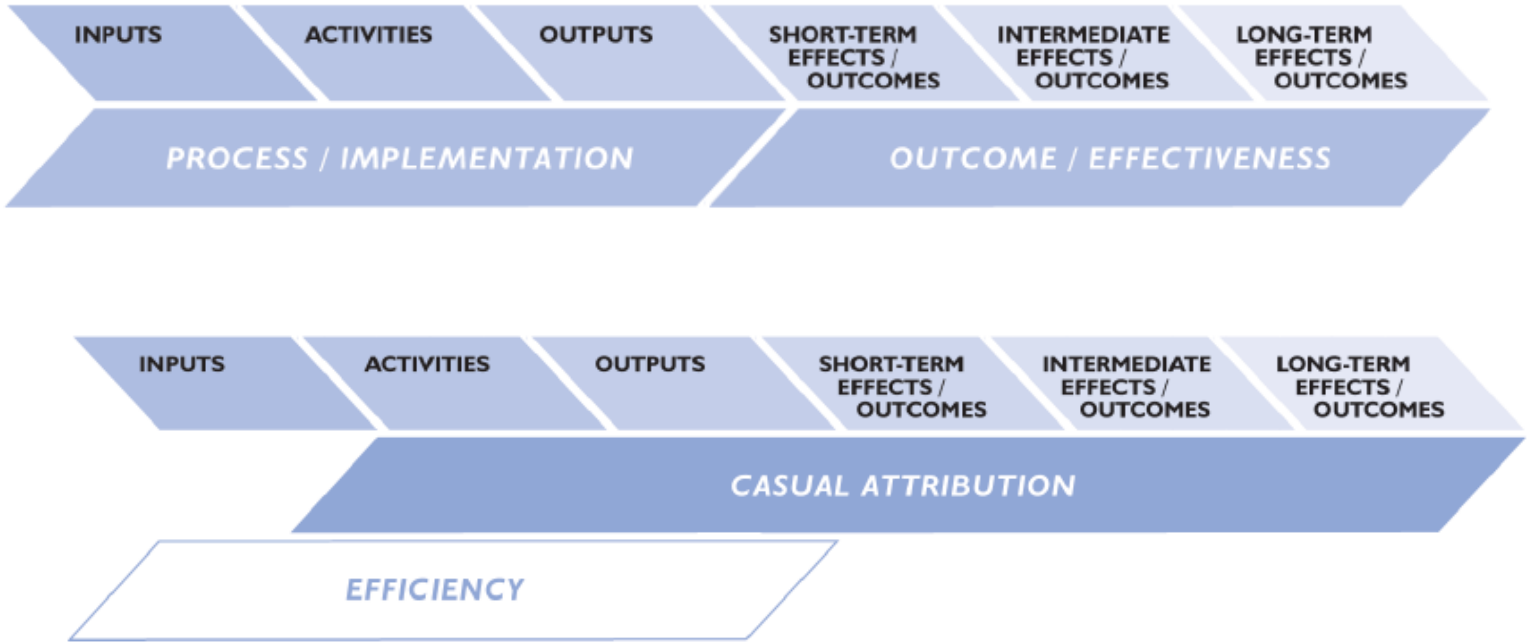
- Implementation evaluations (process evaluations) document whether a program has been implemented as intended—and why or why not?
- In process evaluations, you might examine whether the activities are taking place, who is conducting the activities, who is reached through the activities, and whether sufficient inputs have been allocated or mobilized

Outcome Evaluation

- Outcome evaluations assess progress on the sequence of outcomes the program is to address.
- Programs often describe this sequence using terms like short-term, intermediate, and long-term outcomes, or proximal (close to the intervention) or distal (distant from the intervention).
- Outcome evaluations may include any or all of the outcomes in the sequence, including
  - Changes in people's attitudes and beliefs
  - Changes in risk or protective behaviours
  - Changes in the environment, including public and private policies, formal and informal enforcement of regulations, and influence of social norms and other societal forces
  - Changes in trends in morbidity and mortality

Other Evaluation types

- **Efficiency:** Are your program's activities being produced with minimal use of resources such as budget and staff time? What is the volume of outputs produced by the resources devoted to your program?
- **Cost-Effectiveness:** Does the value or benefit of your program's outcomes exceed the cost of producing them?
- **Attribution:** Can the outcomes be related to your program, as opposed to other things going on at the same time?


INPUTS
ACTIVITIES
OUTPUTS
SHORT-TERM EFFECTS / OUTCOMES
INTERMEDIATE EFFECTS / OUTCOMES
LONG-TERM EFFECTS / OUTCOMES
PROCESS / IMPLEMENTATION
OUTCOME / EFFECTIVENESS
INPUTS
ACTIVITIES
OUTPUTS
SHORT-TERM EFFECTS / OUTCOMES
INTERMEDIATE EFFECTS / OUTCOMES
LONG-TERM EFFECTS / OUTCOMES
CASUAL ATTRIBUTION
EFFICIENCY

Focus Evaluation Design

- **Defining specific evaluation question-** convert the components of your focus into specific questions, i.e., implementation, effectiveness, efficiency, and attribution.
- **Deciding Evaluation Design** in choosing the evaluation design is whether you are being asked to monitor progress on outcomes or whether you are also asked to show attribution—that progress on outcomes is related to your program efforts.
- Attribution questions may more appropriately be viewed as research as opposed to program evaluation, depending on the level of scrutiny with which they are being asked.
- Three general types of research designs are commonly recognized: experimental, quasi-experimental, and non-experimental/observational.

Gather Credible Evidence

- Evidence gathering must include consideration of each of the following:
  - Indicators
  - Sources of evidence/methods of data collection
  - Quality
  - Quantity
  - Logistics

ndicators..... What are they?

An indicator is a standardized, objective measure that allows—

- A comparison among health facilities
- A comparison among countries
- A comparison between different time periods
- A measure of the progress toward achieving program goals

Characteristics of Indicators

- Clarity: easily understandable by everybody
- Useful: represent all the important dimensions of performance
- Measurable
  - Quantitative: rates, proportions, percentage, common denominator (e.g., population)
  - Qualitative: “yes” or “no”
- Reliability: can be collected consistently by different data collectors
- Validity: measure what we mean to measure

Which Indicators?

The following questions can help determine measurable indicators:

- How will I know if an objective has been accomplished?
- What would be considered effective?
- What would be a success?
- What change is expected?

Evaluation Area (Formative assessment)	Evaluation Question	Examples of Specific Measurable Indicators
Staff Supply	Is staff supply sufficient?	Staff-to-client ratios
Service Utilization	What are the program's usage levels?	Percentage of utilization
Accessibility of Services	How do members of the target population perceive service availability?	• Percentage of target population who are aware of the program in their area • Percentage of the "aware" target population who know how to access the service
Client Satisfaction	How satisfied are clients?	Percentage of clients who report being satisfied with the service received

Evaluation Area (Summative Assessment)	Evaluation question	Examples of specific measurable indicators
Changes in Behaviour	Have risk factors for cardiac disease have changed?	Compare proportion of respondents who reported increased physical activity
Morbidity/Mortality	• Has lung cancer mortality decreased by 10%? • Has there been a reduction in the rate of low birth weight babies?	• Age-standardized lung cancer mortality rates for males and females •Compare annual rates of low-birth weight babies over five years period

100 Core Health Indicators by results chain

Inputs and processes → **Output** → **Outcome** → **Impact**

Health financing
- Total current expenditure on health (% of gross domestic product)
- Current expenditure on health by general government and compulsory schemes (% of current expenditure on health)
- Externally sourced funding (% of current expenditure on health)
- Total capital expenditure on health (% current + capital expenditure on health)
- Out-of-pocket payment for health (% of current expenditure on health)

Health workforce
- Health worker density and distribution
- Output training institutions

Health infrastructure
- Health service access
- Hospital bed density

Health information
- Birth registration coverage
- Death registration coverage
- Completeness of reporting by facilities

Service access and availability
- Service utilization
- Service-specific availability and readiness
- Availability of essential medicines and commodities

Service quality and safety
- Perioperative mortality rate
- Obstetric and gynaecological admissions owing to abortion
- Institutional maternal mortality ratio
- Maternal death reviews
- ART retention rate
- TB treatment success rate

Health security
- International Health Regulations (IHR) core capacity index

Coverage of interventions
- Demand for family planning satisfied with modern methods
- Contraceptive prevalence rate
- Antenatal care coverage
- Births attended by skilled health personnel
- Postpartum care coverage
- Care-seeking for symptoms of pneumonia
- Children with diarrhoea receiving oral rehydration solution (ORS)
- Vitamin A supplementation coverage
- Immunization coverage rate by vaccine for each vaccine in the national schedule
- People living with HIV who have been diagnosed
- Prevention of mother-to-child transmission
- HIV care coverage
- Antiretroviral therapy (ART) coverage
- HIV viral load suppression
- TB preventive therapy for HIV-positive people newly enrolled in HIV care
- HIV test results for registered new and relapse TB patients
- HIV-positive new and relapse TB patients on ART during TB treatment
- TB patients with results for drug susceptibility testing
- TB case detection rate
- Second-line treatment coverage among multidrug-resistant tuberculosis (MDR-TB) cases
- Intermittent preventive therapy for malaria during pregnancy (IPTp)
- Use of insecticide treated nets (ITNs)
- Treatment of confirmed malaria cases
- Indoor residual spraying (IRS) coverage
- Coverage of preventive chemotherapy for selected neglected tropical diseases
- Cervical cancer screening
- Coverage of services for severe mental health disorders

Risk factors and behaviours
- Exclusive breastfeeding rate 0–5 months of age
- Early initiation of breastfeeding
- Incidence of low birth weight among newborns
- Children under 5 years who are stunted
- Children under 5 years who are wasted
- Anaemia prevalence in children
- Anaemia prevalence in women of reproductive age
- Condom use at last sex with high-risk partner
- Population using safely managed drinking-water services
- Population using safely managed sanitation services
- Population using modern fuels for cooking/heating/lighting
- Air pollution level in cities
- Total alcohol per capita (age 15+ years) consumption
- Tobacco use among persons aged 18+ years
- Children aged under 5 years who are overweight
- Overweight and obesity in adults *(Also: adolescents)*
- Raised blood pressure among adults
- Raised blood glucose/diabetes among adults
- Salt intake
- Insufficient physical activity in adults *(Also: adolescents)*
- Intimate partner violence prevalence

Health status
- Life expectancy at birth
- Adult mortality rate between 15 and 60 years of age
- Under-five mortality rate
- Infant mortality rate
- Neonatal mortality rate
- Stillbirth rate
- Maternal mortality ratio
- TB mortality rate
- AIDS-related mortality rate
- Malaria mortality rate
- Mortality between 30 and 70 years of age from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
- Suicide rate
- Mortality rate from road traffic injuries
- Adolescent fertility rate
- Total fertility rate
- New cases of vaccine-preventable diseases
- New cases of IHR-notifiable diseases and other notifiable diseases
- HIV incidence rate
- HIV prevalence rate
- Hepatitis B surface antigen prevalence
- Sexually transmitted infections (STIs) incidence rate
- TB incidence rate
- TB notification rate
- TB prevalence rate
- Malaria parasite prevalence among children aged 6–59 months
- Malaria incidence rate
- Cancer incidence, by type of cancer

Finanical risk protection
- Headcount ratio of catastrophic health expenditure
- Headcount ratio of impoverishing health expenditure

Data Sources

- Data sources are the resources used to obtain data for M&E activities.
- Routine data sources provide data that are collected on a continuous basis, such as information that clinics collect on the patients utilizing their services.
- Although these data are collected continuously, processing them and reporting on them usually occur only periodically—for instance, aggregated monthly and reported quarterly

Data Sources

- Nonroutine data sources provide data that are collected on a periodic basis, usually annually or less frequently.
- Depending on the source, nonroutine data can avoid the problem of incorrectly estimating the target population when calculating coverage indicators.
- Nonroutine data have two main limitations:
  - collecting them is often expensive, and so it is done on an irregular basis.
  - In order to make informed program decisions, program managers usually need to receive data at more frequent intervals than nonroutine data can accommodate.

Data Collection methods

- Primary data collection methods also fall into several broad categories. Among the most common are:
- Surveys, including personal interviews, telephone interviews, and instruments completed by respondent, received through the mail or e-mail
- Group discussions/focus groups
- Observation
- Document review, such as medical records, but also diaries, logs, minutes of meetings, etc.

Gathering of Qualitative and Quantitative Information: Instruments

Qualitative tools:

There are five frequently used data collection processes in qualitative evaluation (more than one method can be used):

1. **Unobtrusive seeing,** involving an observer who is not seen by those who are observed;
2. **Participant observation,** involving an observer who does not take part in an activity but is seen by the activity's participants.
3. **Interviewing,** involving a more active role for the evaluator because she /he poses questions to the respondent, usually on a one-on-one basis
4. **Group-based data collection processes** such as focus groups; and
5. **Content analysis,** which involves reviewing documents and transcripts to identify patterns within the material

Quantitative tools:

- *"Quantitative, or numeric information, is obtained from various databases and can be expressed using statistics."*

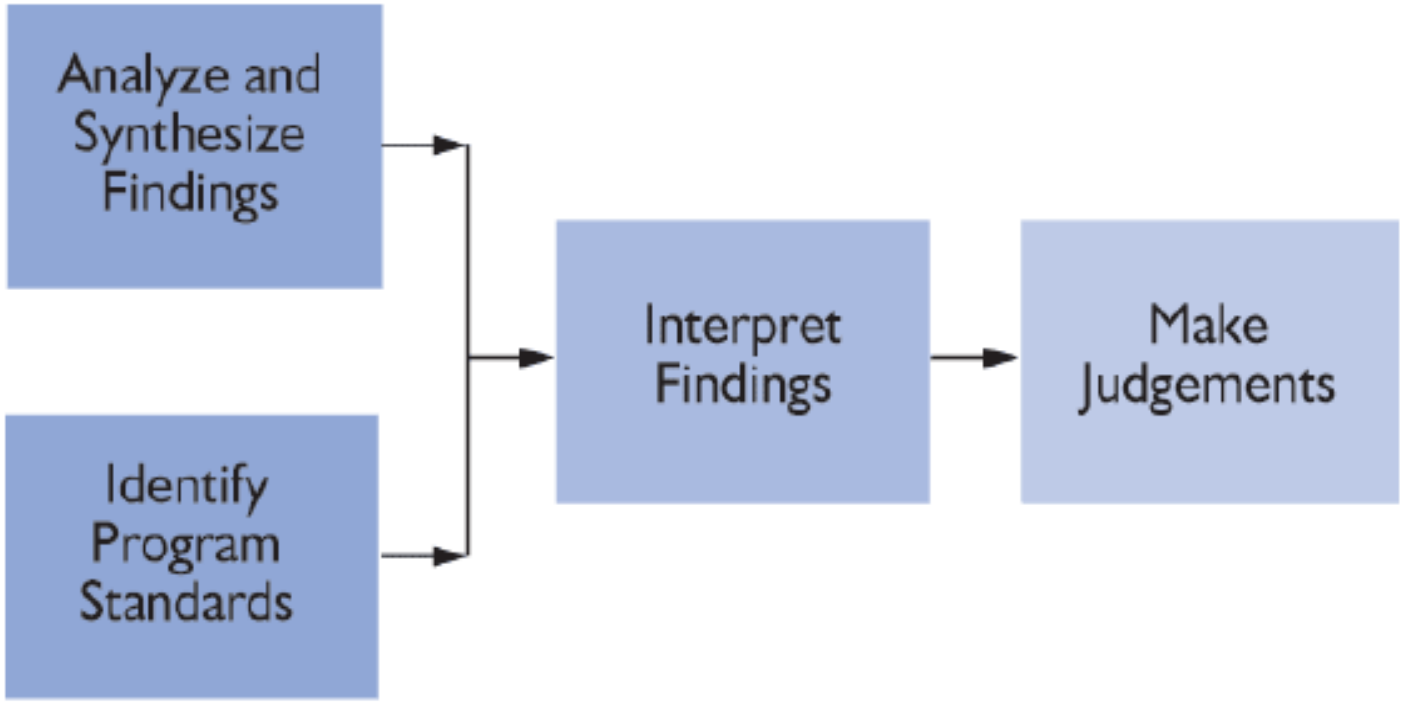
  - Surveys/questionnaires;
  - Registries
  - Activity logs;
  - Administrative records;
  - Patient/client charts;
  - Registration forms;
  - Case studies;
  - Attendance sheets.

Quality of Data

- **Design of the data collection instrument and how questions are worded**
  - Data collection procedures
  - Training of data collectors
  - Selection of data sources
  - How the data are coded
  - Data management
  - Routine error checking as part of data quality control

Justify Conclusions

- Conclusions become justified when analysed and synthesized findings (“the evidence”) are interpreted through the prism of values (standards that stakeholders bring, and then judged accordingly.
- Justification of conclusions is fundamental to utilization-focused evaluation.
- When agencies, communities, and other stakeholders agree that the conclusions are justified, they will be more inclined to use the evaluation results for program improvement.


Analyze and Synthesize Findings
Identify Program Standards
Interpret Findings
Make Judgements

Use of Evaluation and Lessons Learned

- The evaluation results can be used to demonstrate the effectiveness of your program, identify ways to improve your program, modify program planning, demonstrate accountability, and justify funding.
  - Recommendations
  - Preparation
  - Feedback
  - Follow-up
  - Dissemination
  - Making Recommendations

Phase D: Reporting Findings

- Write the evaluation report.
- Decide on the method of sharing the evaluation results and on communication strategies.
- Share the draft report with stakeholders and revise as needed to be followed by follow up.
- Disseminate evaluation report.

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