



Program Evaluation I: Problem Analysis and Effectiveness-Based Program Planning

Building Capacity for Health Promotion and Chronic Disease Prevention
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Session Purpose

- To promote problem analysis and program planning based on a broad conceptualization of the determinants of population health
- To place program evaluation within the context of problem analysis and program planning
- To stimulate critical and creative thinking regarding program/intervention planning and evaluation



Session Objectives

- Define and explain the importance of 'evaluation'
- Identify characteristics of a sound evaluation
- Discuss an ecologic participatory approach to problem identification and needs assessment



Session Objectives

- Describe how to design a Logic Model
- Explain how a Logic Model:
 - Enhances program planning
 - Informs program evaluation



Health and Health Promotion

- Health: a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.
- Health Promotion: process of enabling people to increase control over and to improve their health

WHO



Determinants of Health

- The structure and organization of societies
- Levels of scientific knowledge and technological capacity
- Operating social values



Activities Promoting Health

- Policy Initiatives
- Trainings
- Communication Campaigns
- Educational Programs
- Community Mobilizations
- Direct Services



Health Programs

Set of planned organized activities grounded in theory and evidence carried out over time to accomplish specific goals and objectives.



EVALUATION: What is it?

Attempt to systematically assess the impact of programs or policies on problems they are designed to address



EVALUATION: Why?

- To generate information regarding program/policy success or failure
- To enhance management decision making
- To improve program operations
- To maximize benefits to program participants and targeted populations
- To generate an advocacy agenda



Sound Program Evaluation

Required Activities:

- Analysis of the problem
- Identification of the goals to be evaluated
- Identification of measurable objectives
- Standardization of program activities
- Measurement of change
- Identification of program costs for achieving results
- Dissemination of findings

Adapted from Suchman, 1967



Problem Analysis: What is it?

- First step in 'evaluation'
- How a problem is defined will determine proposed interventions and solutions



Problem Analysis

- Not just an exercise, a dynamic process
- Should be based on theoretical models reflecting an understanding of what influences and promotes health and creates need.



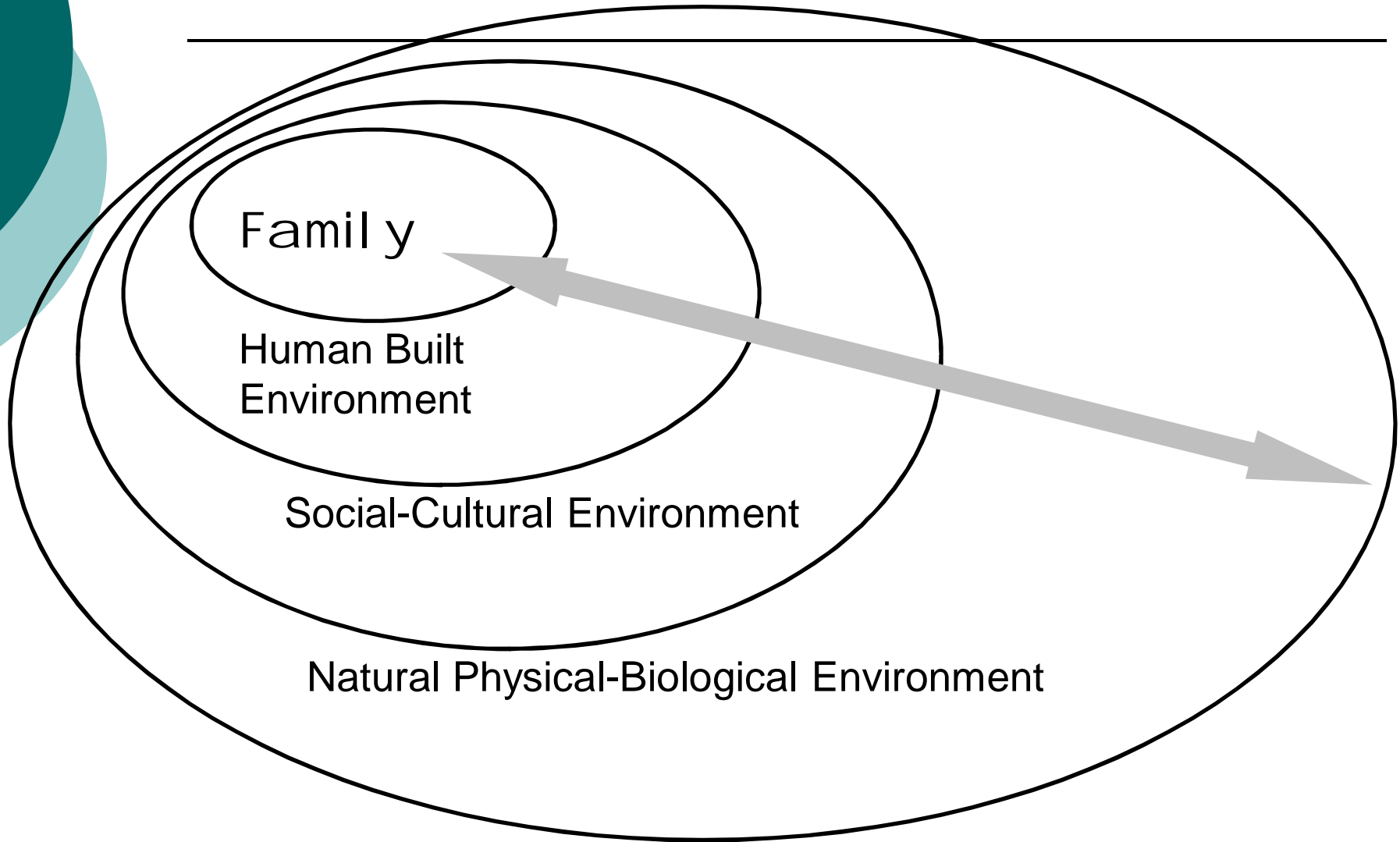
Identifying and Analyzing Public Health Problems

- The complex nature of current public health challenges require multi-level and multi-dimensional approaches
- Current evidence and theory increasingly promote an ecologic and participatory approach to problem identification, analysis, and the development of preventive and/or intervention activities



Ecologic Approach

- Study of relationships among organisms and their environments
- Seeks relevant connections and anticipates the effects
- Acknowledges dynamic interactions that continuously shape, modify, and transform populations and environment
- Not a new concept
 - Rudolf Virchow
 - Florence Nightingale
 - John Snow



Family

Human Built
Environment

Social-Cultural Environment

Natural Physical-Biological Environment



Participatory Assessment and Planning

- Active involvement of those intended to participate in or benefit from the program
- Enhances attention to and inclusion of the social, emotional, spiritual, as well as the biological dimensions of health



What does an ecologic and participatory approach mean for problem identification and analysis?



Ecologic and Participatory Approach

- Active involvement of those intended to participate in or benefit from the program
- Seek synthesis of the multilevel/multidimensional determinants of health and well-being
- Find common ground among perception or need, measurement of need, resources and feasibility



Components of an Ecologic Participatory Problem Analysis/Needs Assessment


- Social Assessment/Social Diagnosis
- Epidemiologic Assessment
- Situational Analysis



Ecologic Participatory Problem Analysis/Needs Assessment

Social Assessment/Diagnosis


- Engage the community as active partners in process
 - Identify quality of life → perceptions, problems, and priorities of community and individuals.....consider social indicators → comfort, alienation, crime, overcrowding, self-esteem, unemployment, discrimination, racism, strikes, rebellions
 - Verify through existing data or new data collection



Ecologic Participatory Problem Analysis/Needs Assessment cont'd

Social Assessment/Diagnosis Cont'd

- Assess capacities and assets of the community: experience, skills, and talents, as well as readiness to deal with health issues



Ecologic Participatory Problem Analysis/Needs Assessment cont'd

Epidemiological Assessment

- Health Status Indicators
 - Mortality, Morbidity, LE, Functional Status - Distributions, Incidence, Prevalence, Risk Factors
- Behavioral Indicators
 - Patterns of behavior and lifestyle for individuals and groups/communities: Religious Practices, Consumption Patterns – Diet and food preparation, Substance Use; Sanitary Practices, Physical Activity, Sexual Behavior, Service Utilization/Self Care, Coping and Preventive Care Activities



Ecologic Participatory Problem Analysis/Needs Assessment Cont'd

Epidemiologic assessment cont'd

- Social, Economic and Political Environment
 - Housing and recreation, education and schools, employment, occupations, transportation, food production and quality, forms of governance
- Natural Environment
 - Air quality, water resources – supply and quality, land use, soil quality, waste disposal



Ecologic Participatory Problem Analysis/Needs Assessment cont'd

Situational Analysis

- Stakeholders and Key Informants
- Potential Organizational Collaborators
- Staff/Technical Resources
 - Experience? Training? Data system resources?
- Budget
 - Planning costs? Facility space? Staff and equipment



Recognizing Need/Defining Problems

We do not see things as they are;
we see things as we are?

Anais Nin



Recognizing Need/Defining Problems

Types of 'Need'

Needs are value judgments about problems that can be solved

- Normative – expectations based on expert opinion
- Felt – expectations persons have for themselves
- Expressed – expectations indicated by utilization of services; public manifestations, work actions
- Comparative – expectations based on performance /standards of another group or area

Bradshaw 1972



Methods for Prioritizing Need

- Nominal Group Process
 - Attempts to address the dynamics of social power; group identifies and ranks problems through brainstorming and consensus building
- Delphi Method
 - Use of successive questionnaires to select group of key leaders, informants. Each one further refines and narrows range of opinions based on previous responses working toward consensus



Sources/Types of Information on Need

- Population Data
- Program Data
- Administrative/Government Agency Data
- Industry Data – exports, sales, profits
- Research Studies
- GIS

- Quantitative
- Qualitative
 - Primary Data Collection
 - Secondary Analysis



Primary Data Sources

- Surveys
- Key Informant Interviews
- Stakeholder Interviews
- Focus Groups
- Community Forums or Public Hearings



Secondary Data Sources

- Vital Records
- Population-based surveys (national, regional, local)
- Census
- Hospital data
- Registries
- Laboratories
- School Systems
- Previous Assessments
- Other???



Ins and Outs of Secondary Data

- Comparability of data definitions and collection methods
- Time periods – collection and reporting
- Purpose of data collection – influences reporting and analysis
- Data management and quality control – missing values



Ins and Outs of Secondary Data

- Prior data manipulation or massaging - aggregation, suppression, imputation
- Units of analysis – comparability?
- Sources of error with denominators
- Program versus population data



Secondary Data Source Bottom Line

Always know how and why data were collected

Determine if data sources are appropriate with respect to what it is that you are attempting to measure



What is it you want to measure?

- Begin with a question
- Identify and select indicators relevant to the question/s posed



What is it you want to measure?

Goal: relevant quality data for the questions and problems at hand, in order to generate useful information

- Data routinely available should not shape questions to be answered
- What we collect reflects what we think is important
- How we interpret and use data reflects our assumptions and beliefs



Indicators

What are indicators ?

- Measures that summarize information relevant to a particular phenomena or are reasonable proxies
- Measures that answer the questions who, what, and where
- And, provide direction as to why



Indicators

- Provide information that contribute to effective interventions at the policy and/or program level
- Can set public health agendas
- Can broaden the scope of appropriate interventions



Types of Indicators

- Single Measures- rates, percents, ratios
- Indices- cluster of variables:
Framingham Score, APNCU
- Estimated or Projected- targets, objectives



Indicator Characteristics

- Valid – provides a measure of what is intended to be measured
- Reliable – provide same answer with repeated measurement
- Sensitive – include the capacity to measure change
- Specific – only reflect changes with the issue under consideration
- Relevant – provide information on issues that are or should be of public concern



Selecting Indicators

Criteria:

- Represent health status measures known to be preventable or amenable to interventions
- Represent issues/problems considered significant by public and policy makers
- Sentinel Events
- Provide Policy implications



Selecting Indicators

Key Decision Points

- Data availability
- Data accessibility
- Data quality – accuracy and completeness
- Appropriateness for population of interest



Effectiveness-Based Program Planning

Begin with a Logic Model



What is a Logic Model?

- A systematic, visual representation of the relationships among environmental context, program resources and activities, and intended results
- A Management tool
- A framework to increase evaluation effectiveness
 - Also known as, 'theory or model of change', 'conceptual map', 'roadmap', 'blueprint'



Why Use Logic Models?

- Create a shared understanding of goals, objectives and methods → relate activities to outcomes
- Describe programs in language clear and specific enough to be understood and evaluated
- Focus attention and resources on priority program operations and results for program improvement



Why use Logic Models?

- Facilitate the development of targeted communication and marketing strategies
- Provide an organized approach to capturing, documenting, and disseminating program results → increasing likelihood of future investment in the program
- Provide the basis for successful evaluations



Logic Models

Approaches:

- Theory Models
- Outcomes Models
- Activities Models
- A blend
- Generic Program Performance Framework*

WKKellogg Foundation; E. Taylor-Powell, 1988UW*



Logic Model Development

Who should be involved?

- All key program and organizational stakeholders
 - A collaborative, inclusive, collegial process



If you don't know where you're going, how are you gonna know when you get there?

Yogi Berra



Building a Logic Model

Identify your program goals and outcomes

Outcomes should be: **SMART**

Specific

Measurable

Action-oriented

Realistic

Timed



Building a Logic Model

Have a full understanding of the relevant environment

Specify Assumptions:

How are you conceptualizing the program? What is the basis for your program's approach?

Example:

- Health is a community issue and communities will form partnerships to resolve their health problems
- Communities can influence public and market policy at the local, state, and national levels
- Sex education improves sexual health
- Partnering with youth to address youth issues is very productive and effective

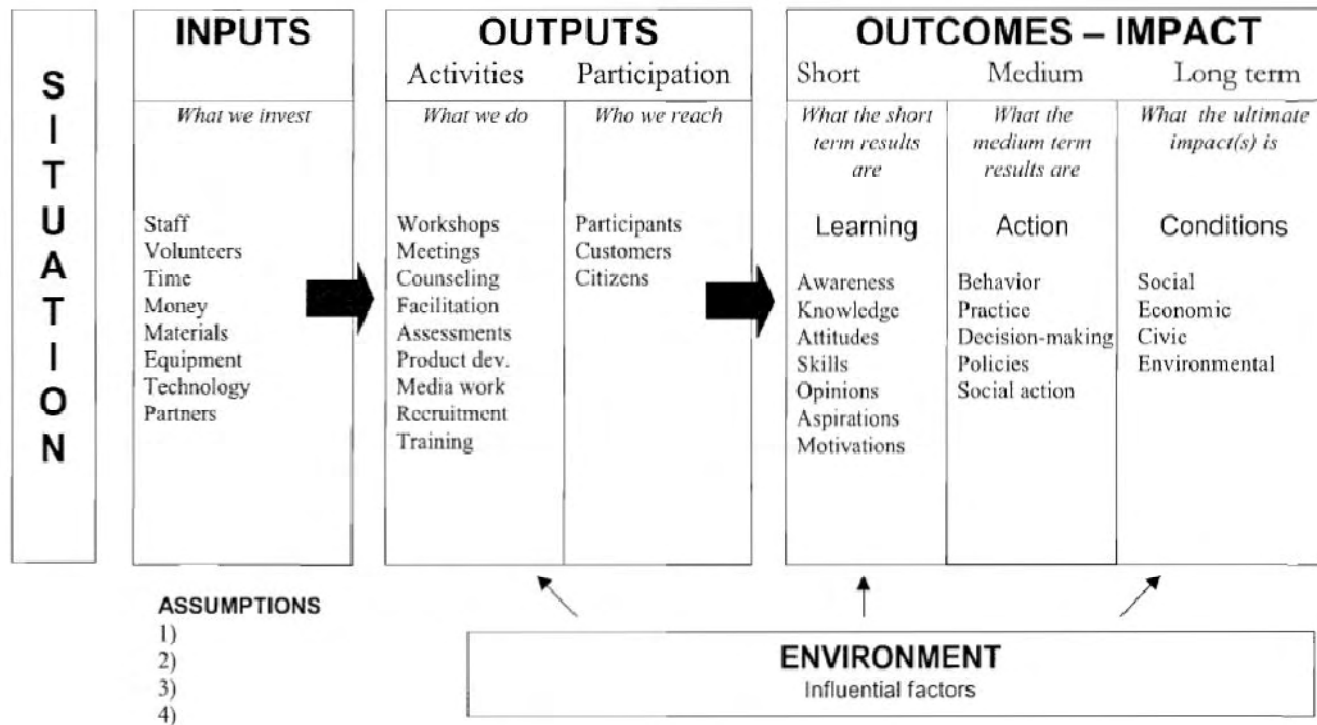


Building a Logic Model

- Develop a series of “if.....then....” statements to connect the program parts from needed resources to accomplishing required activities to achieve desired outcomes.
 - If your assumptions are true, then activities building on these should lead to the anticipated outcomes
- Add details to the inputs, outputs, and outcomes sections



LOGIC MODEL: Program Performance Framework





Logic Model Exercise



Resource

W.K. Kellogg Foundation Logic Model Examples

W.K. Kellogg Foundation Web site

<http://www.wkkf.org>

W.K. Kellogg Foundation Evaluation Handbook



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