

# A Systematic Approach for Evaluating Health Related Programs: Adaptation for Community-based Participatory Research and Clinical Application to Reduce Cancer Health Disparities

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# Presentation

## Aim:

Define and Describe A Systematic Approach for Program Evaluation, especially for Identifying Pertinent (core) data elements and information necessary to effectively assess attainment of the objectives of Public Health Programs .

(i.e., Reduction in cancer health disparities)

# What is “Evaluation”?

*Evaluation is the systematic assessment of the operation and/or the outcomes of a program or policy, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of the program or policy.*

Source: Carol H. Weiss, “Evaluation”, 2<sup>nd</sup> Edition, Prentice-Hall, Inc, USA. 1998

“ ... systematic investigation of the merit (quality), worth (cost-effectiveness), or significance (importance) of an object.”

Source: Shadish, W.R., Cook, T.D., Leviton, L.C., “Foundations of Program Evaluation: Theories of Practice. Sage Publications, California, USA. 1991

# Background and Definition

## Healthy People 2010

-- Need for Program Evaluation

## Program:

*The object of evaluation*

-- could be *any organized public health action*

*(CNP: CBPR*

*PNRP: Clinical / RCT*

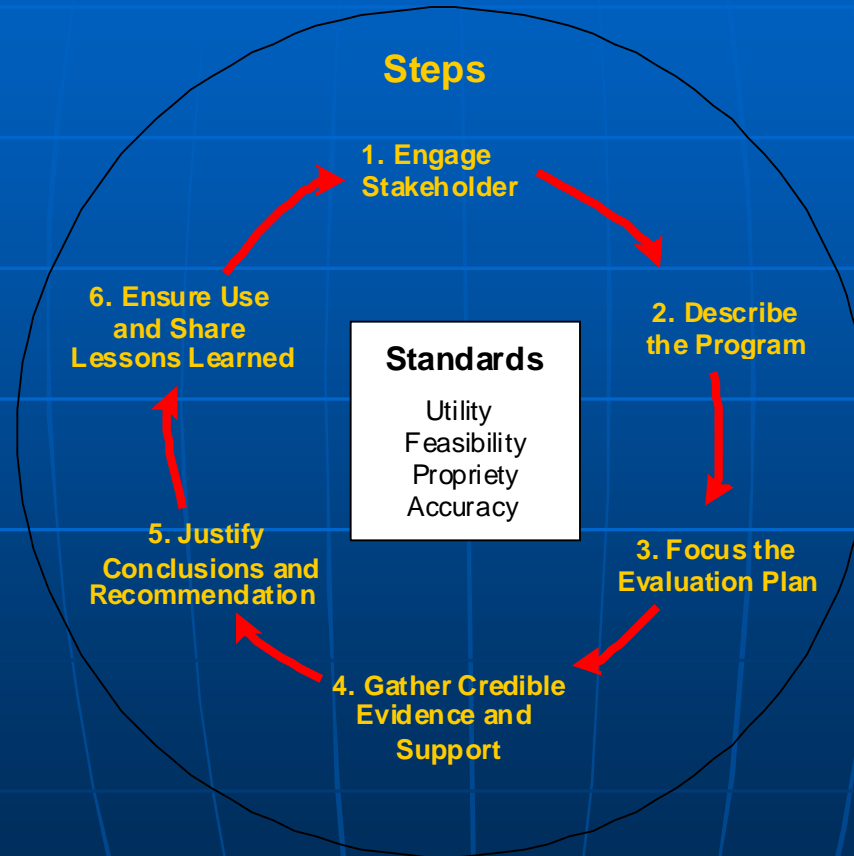
*CDRP: Clinical)*

# Six Questions that Must be answered in Planning / Implementing a Program Evaluation

- What will be evaluated? (What is the program and in what context does it exist?)
- What aspects of the program will be considered when judging program performance?
- What standards (type or level of performance) must be reached to be considered successful?
- What evidence will be used to indicate how the program has performed?
- What conclusions regarding performance are justified by comparing the available evidence to the selected standards?
- How will the lessons learned from the investigation /evaluation be used to improve public health (program) effectiveness?

# Evaluation Framework

## CDC's Framework for Program Evaluation—Adapted Steps for CNP and PNRP Evaluation Plan Development



Source: Centers for Disease Control and Prevention (CDC). 1999. "Framework for Program Evaluation in Public Health." *Morbidity and Mortality Weekly Report* 48(RR11):1-40.

# Key Features

- A **practical, nonprescriptive tool** to summarize and organize essential elements of program evaluation;
- An approach that is **integrated with routine program operations**;
- Emphasis on practical, ongoing evaluation strategies that **involve ALL program stakeholders, not just evaluation experts**; and,
- Practice of evaluation that **complements program management with information necessary for improving and accounting for program effectiveness**

# Effective Program Evaluation

A *systematic* way to *improve* and *account for* public health *actions* by involving *procedures* that are *useful, feasible, ethical, and accurate.*



# Step 1- Engage Stakeholders

- Foster input, participation, and power sharing among persons who have investment in the conduct of the evaluation and its findings (especially persons involved in or affected by the program and the primary users of the evaluation);
- Helps increase the likelihood that the evaluation will be useful, clarify roles and responsibilities, avoid real or perceived conflicts of interest, and may improve the evaluation's credibility;
- Avoid excessive stakeholder identification; and,
- Continuous coordination of stakeholder input throughout the process of evaluation design, operation, and use

## Step 2 – Describe the Program

- Identify, examine and study the features of the program being evaluated, including its stated purpose and place in the larger context;
- Describe the way the program was intended to function and the way it was actually implemented;
- Develop adequate understanding of the program – the needs it is to address; specific expectations expressed in stated goals, objectives, and criteria for success;
- Clarify why program activities are believed to lead to expected changes – review and understand the program’s conceptual framework;
- Draw explicit logic model(s) to illustrate relationships between program elements and expected changes;
- Assess program’s stage of development; and,
- Consider how the program is linked to other ongoing efforts to address the same or related needs (the larger context)

# Conceptual Framework Vs Logic Model

- Conceptual frameworks typically include a visual depiction of how the program is expected to impact change.
- A conceptual framework is generally more theoretically based and conceptual than a logic model.
- A logic model tends to be program specific and provides a more detailed description and (logical) sequence of the planned activities and outputs of a program.
- A key advantage of a conceptual framework, in the context of a multifaceted program such as the CNP/PNRP, is that it identifies the proposed interrelationships across major program phases and activities (e.g., capacity building, partnership and collaboration development) and the expected relationship between these and the program's outcomes.

# Evaluation Framework

## Logic Model

A **logic model** is a plausible model of how a program should work to solve identified problems (Bickman, 1997). It identifies the unique features of a program and recognizes the outcomes that the program hopes to achieve. The essential components of a logic model are resources (or program inputs), activities, outputs, short-, intermediate- and long-term outcomes, and external, contextual conditions as well as the data elements corresponding its evaluation.

# Step 3 – Focus the Evaluation Plan

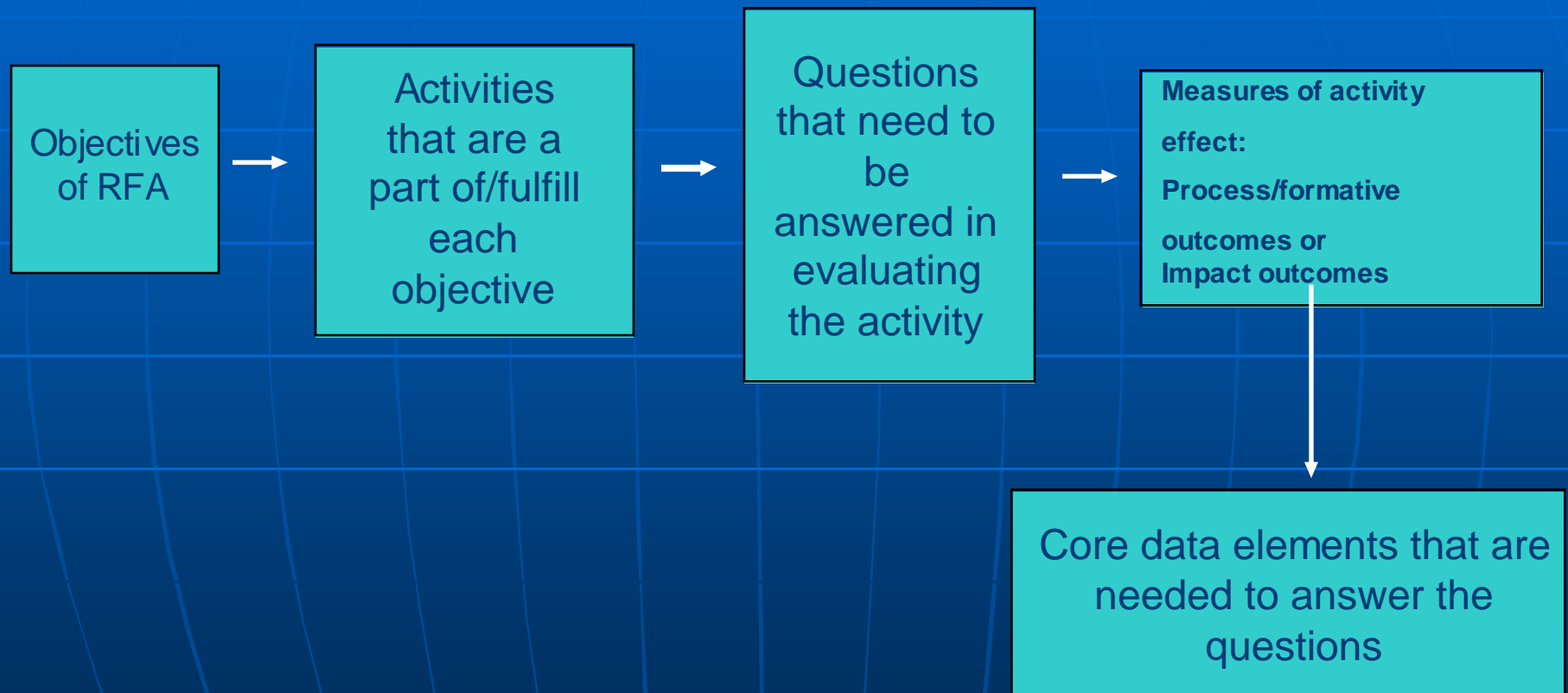
- Develop an iterative (draft) plan in advance, showing where the evaluation is headed and what steps will be taken;
- Meet with stakeholders to clarify the purpose or intent of the evaluation, and how the evaluation results are to be used;
- Orient the evaluation to meet the needs of those in position to actually use the evaluation results;
- Write explicit evaluation questions to be answered;
- Describe practical methods for the evaluation design, including methods for sampling or selection of study population, data collection, data analysis, interpretation, and judgment;
- Prepare a written protocol or agreement summarizing the evaluation procedures, with clear roles and responsibilities for stakeholders; and,
- Revise part or all of the evaluation plan when critical circumstances change

# Planning Evaluation

In Planning evaluation, answer the following questions.

- 1) What is the purpose and scope of the evaluation?
- 2) What evaluation questions are important to NCI?
- 3) What practical issues need to be addressed in planning for program evaluation (e.g., political, cultural, financial, and methodological constraints)?
- 4) What is the best evaluation approach, both philosophically and practically? For example, it is not practical to expect to see reductions in cancer morbidity and mortality within 5 years. Therefore, what is the ultimate hope for achievement through this effort?
- 5) What are the ultimate outcomes for the CNP /PNRP effort?<sup>14</sup>

# Methodology for Determining Core Data Elements for Program Evaluation



# Step 4 – Gather Credible Evidence

- Compile information that stakeholders perceive as trustworthy and relevant for answering their evaluation questions;
- Credibility depends on how the questions were posed, sources of information, conditions of data collection, reliability of measurement, validity of interpretations, and quality control measures employed;
- Define indicators or measures that meaningfully address evaluation questions;
- Such evidence can be experimental or observational, quantitative or qualitative; or a mixture of methods;
- Estimate in advance the amount of information required or establish criteria for deciding when to stop collecting data; and,
- Establish procedures to ensure confidentiality of information and information sources



# Step 5 – Analyze Data and Justify Conclusions / Recommendations

- Make claims about the program that are warranted on the basis of data that have been compared against pertinent and defensible standards of values (merit, worth, or significance)
- Use appropriate statistical methods of analysis and synthesis to summarize findings;
- Interpret significance of the results for making accurate decision about what the findings mean;
- Consider alternative methods for comparing results – comparisons with program objectives, a comparison group, national norms, past performance, or needs;
- Generate possible alternative explanations for the findings and justify rationale for such explanations;
- Recommend actions or decisions consistent with the conclusions; and,
- Delimit conclusions to situations, time periods, persons, contexts, and purposes for which findings are applicable.

Conclusions are “justified” when linked to the evidence gathered and consistent with agreed on standards of stakeholders.

# Step 6 – Ensure Use and Share/Disseminate Lessons Learned

- Ensure that stakeholders are aware of the evaluation procedures and findings;
- Ensure that stakeholders consider the evaluation findings in decisions and actions that affect the program -- use the findings;
- Ensure that those who participated in the evaluation had a beneficial experience – learned and gained from the process;
- Design the evaluation to ensure that it achieves its primary purpose (of being useful for the intended users);
- Provide continuous feedback to stakeholders regarding interim findings, provisional interpretations, and decisions that might affect utility of the findings;
- Follow up meetings with intended users to facilitate translation of evaluation conclusions into appropriate actions or decisions; and,
- Disseminate both the evaluation procedures and lessons learned to stakeholders, using appropriate communications strategies.

(Be cognizant of factors that might influence degree of use: evaluator credibility, report clarity, timeliness, change in organizational context, dissemination strategies, etc.)

**THANK YOU !!!**