



AETC

AIDS EDUCATION &
TRAINING CENTERS

Program Evaluation and Measurement

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Objectives for today...

- To define and explain concepts and terms used in program evaluation.
- To understand the role of evaluation in planning and implementing health programs.
- To explore some quantitative and qualitative methods used to collect data for program evaluations.

What is Program Evaluation?

Program evaluation is the use of social research methods to systematically investigate the effectiveness of programs in ways that are adapted to their political and organizational environments.

Key components (Rossi et al)

- Application of social research methods
- Effectiveness of social programs
- Adaptation to political and organizational context
- Informing social action to improve social conditions

Why Evaluate?

Ensure program effectiveness, appropriateness and acceptability

Demonstrate accountability

Contribute to public health knowledge base

Improve program operations and service delivery

Program Theory/Logic

- What are the important program goals?
- What are the program services offered?
- What are the implicit and explicit assumptions about how the program services will lead to the desired outcomes?
 - *Why and how* will the services provided lead to change.

Developing Program Theory

Many different techniques, but most common method is the development of a logic model.

Criteria for sound logic models:

- Practicable
 - Feasible to implement given resources.
- Plausible chain addresses causality
 - Sequence is sensible; likely to achieve goals.

Use of Logic Models

Evaluations are usually guided by logic models, which provide a brief illustration of one's "theory of change."

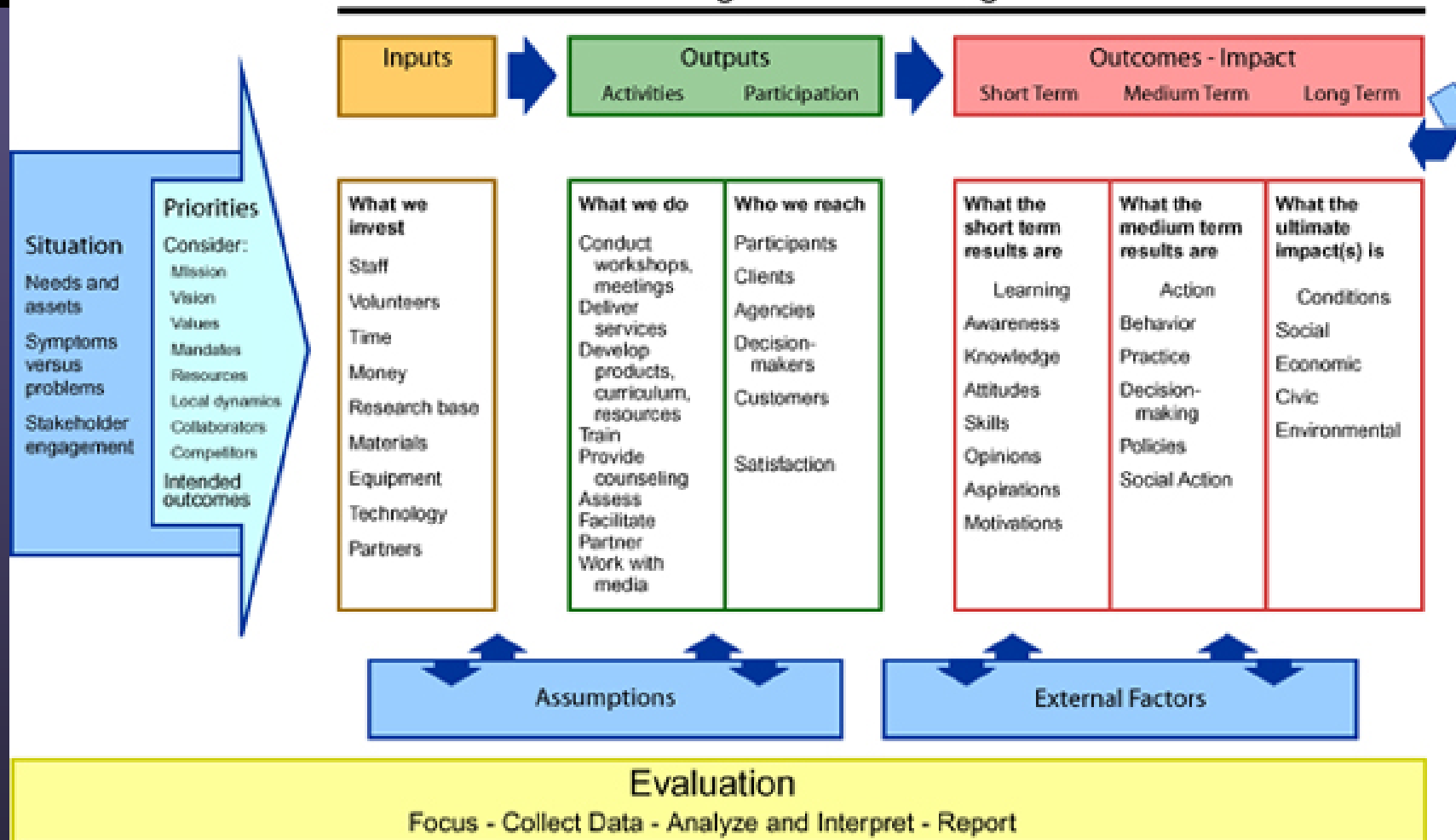
They define progress from general values to more specific strategies, to the results or goals achieved.

Useful logic models will guide all planning and development activities.

Also used to determine the design of the evaluation methodology.

<http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html>

Program Action - Logic Model



Formative
Evaluation



Process
Evaluation

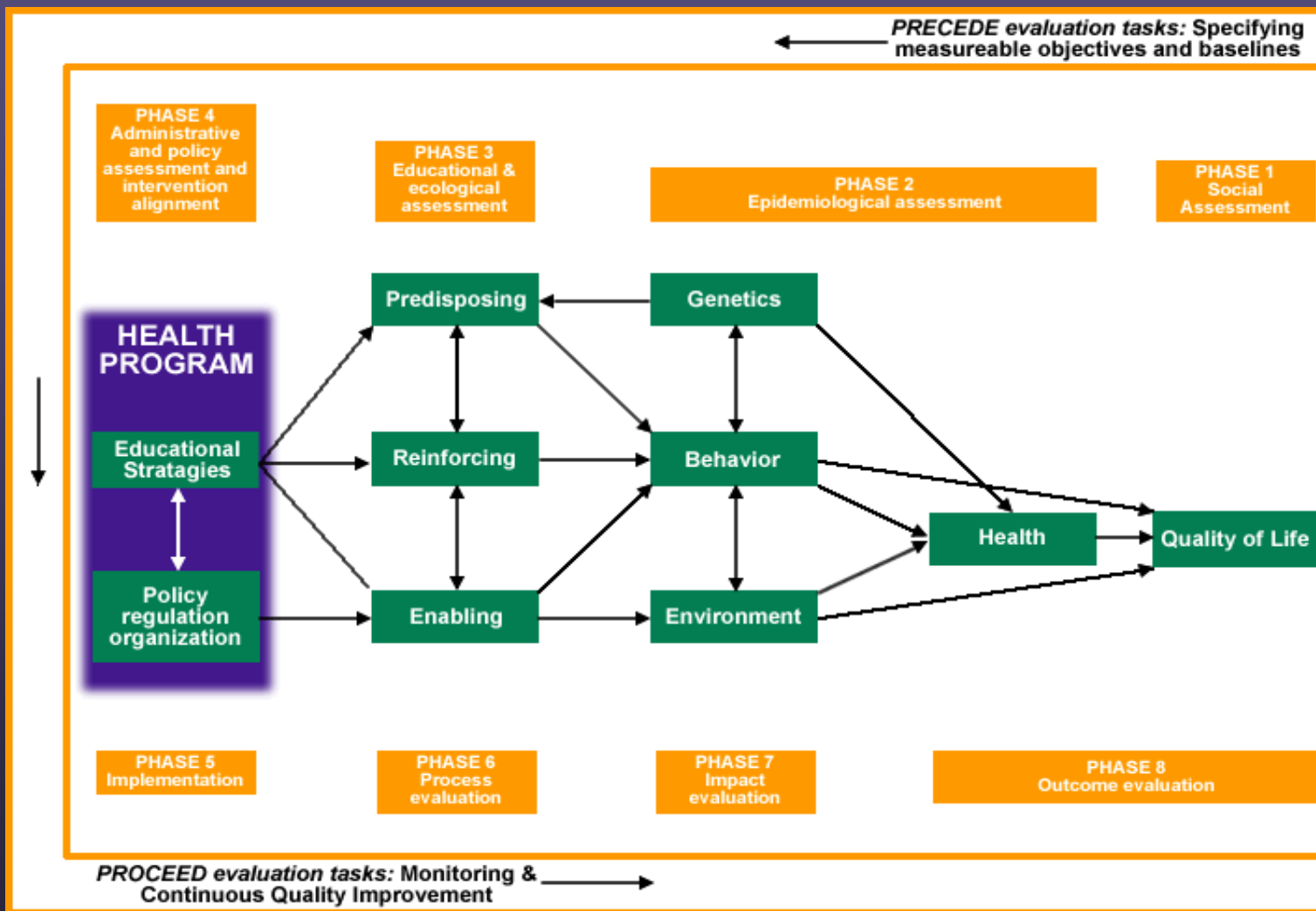


Outcome
Evaluation



Impact
Evaluation

PRECEDE – PROCEDE Program Planning Model



Components of Program Evaluation

There are 4 general components to comprehensive program evaluation:

- Formative evaluation: What's necessary to carry out the program in accord with the desired goals and objectives?
- Process evaluation: How was the program implemented?
- Outcome evaluation: Did the program meet its objectives?
- Impact evaluation: Was the ultimate goal of the program achieved?

Every program
has...

Every program
evaluation should have...

Goals



Impact Indicators

Objectives



Outcome Indicators

Activities



Process Indicators

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Process Indicators

Impact Evaluation

Impact is sometimes used to mean “outcome.”

Impact is perhaps better defined as a longer-term or collective outcome.

- For clinical training programs, impacts may be improved patient outcomes.

In global M&E, incidence or prevalence of disease.

A note about impact...

- Most program evaluations focus on measuring the process and outcomes.
- Measuring impact requires significant resources that most programs don't have.
- It's also difficult to link the more immediate effects of a program to broad, often community level, impacts.

Outcomes...

Every program
has...

Every program
evaluation should have...

Goals



Impact Indicators

Objectives



Outcome Indicators

Activities



Process Indicators

Outcome Evaluation

- Gauges the extent to which a program produces the improvements it intends
- Examines effectiveness.
- Can measure unintended outcomes.
- In simple terms, “what is different as a result of your efforts?”

Outcomes at different stages...

- Initial outcomes: The first benefits or changes experienced by participants, usually involving changes in knowledge, skills or attitudes.
- Intermediate outcomes: Occur after the initial outcomes and link them to the longer-term outcomes desired for clients. Often, they involve behavior change.
- Longer-term outcomes: Measurable results that take longer to achieve, such as changes in their conditions, clinical health status or quality of life.

Outcome Evaluation Questions

- Was the desired change(s) attained?
- To what degree did the desired change(s) occur?
- Is the program working to make a difference?

Every program
has...

Every program
evaluation should have...

Goals



Impact Indicators

Objectives



Outcome Indicators

Activities



Process Indicators

Process Evaluation

Assesses extent to which program has been implemented as planned.

Assesses participant and stakeholder experience and satisfaction with the program.

It can help to...

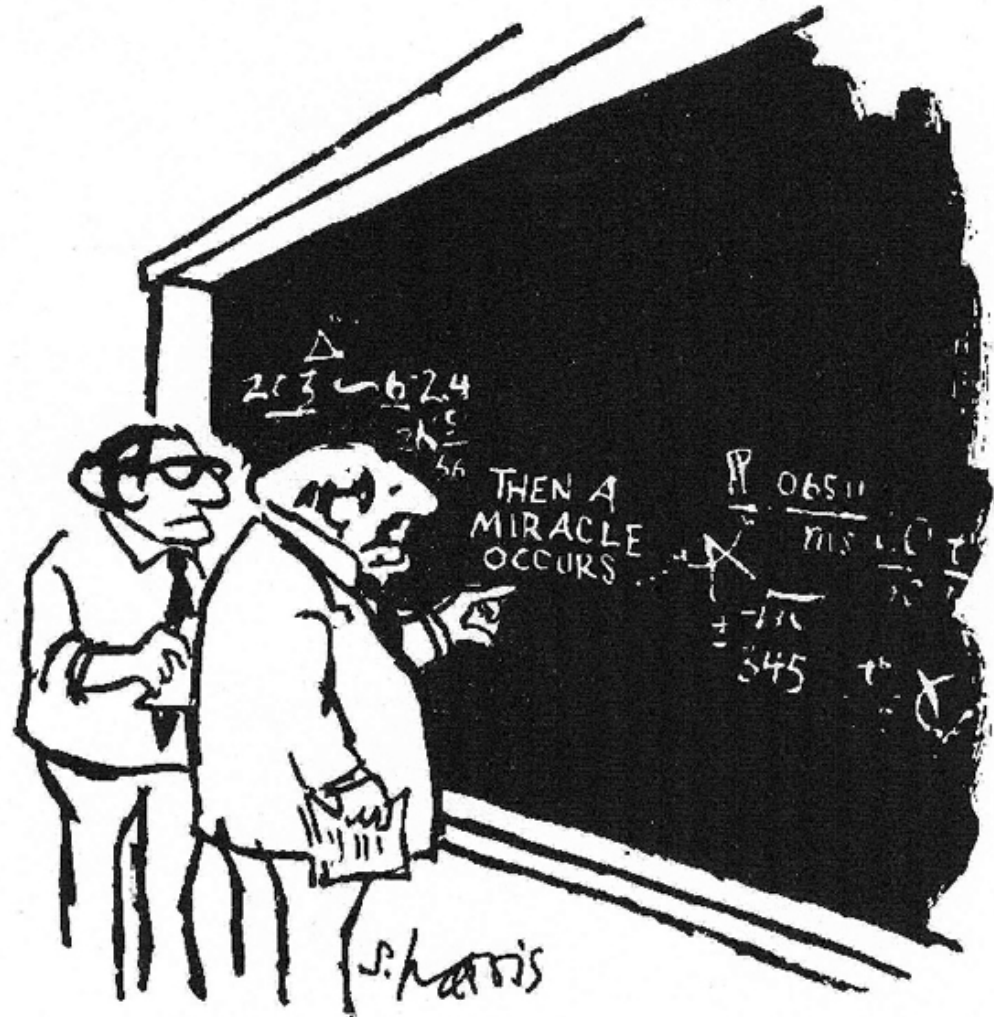
- Create a better learning environment
- Improve presentation skills
- Show accountability to funder
- Reflect the target populations
- Track service units

Process Evaluation

- Identify how a product or outcome is produced.
- Create detailed description of the program.
- Identify strengths & weaknesses of a program.

Process data are important for understanding whether the outcome is due to the intervention design or to whether the intervention was implemented as intended.

Opens the “black box” of evaluation.



"I think you should be more explicit here in step two."

Process Evaluation Questions:

Key questions in process evaluation:

- What are we doing?
- Are we doing it right?
- Are we implementing the program as planned?

Formative Evaluation

Use during the development of the project to test ideas and concepts on target population.

Or, before a new phase...provides information for improvement by identifying aspects of the existing program that are successful and areas in need of improvement.

Generally focuses on the content and design of the program, with results useful to program staff.

A note about Frameworks

Clinical settings:

- Re-AIM – Reach, Adoption, Implementation, Maintenance
- CFIR - The Consolidated framework
- FOI – Fidelity of Implementation
- PARIHS – Promoting action on research implementation in health services
- ORCA – Organizational readiness to change assessment

A note about Frameworks

Public Health settings:

- CDC Framework
- PRECEDE-PROCEED
 - Genetic/biologic, behavioral, and environmental constraints (PRE), but also
 - Policy, resource/regulation, organizational constraints (PRO)
 - (CEDE) constraints in ecosystem diagnosis and evaluation
- UNAIDS Questions approach

Conducting an Evaluation



**CDC Framework for
Program Evaluation:
Steps and Standards**

Steps in Evaluation (CDC Framework)

Engage stakeholders

Those involved, those affected, primary intended users

Describe the program

Need, expected effects, activities, resources, stage, context, logic model

Focus the evaluation design

Purpose, users, uses, questions, methods, agreements

Gather credible evidence

Indicators, sources, quality, quantity, logistics

Justify conclusions

Standards, analysis/synthesis, interpretation, judgment, recommendations

Ensure use and share lessons learned

Design, preparation, feedback, follow-up, dissemination

Standards for “Effective” Evaluation

Utility

Serve the information needs of intended users

Feasibility

Be realistic, prudent, diplomatic, and frugal

Propriety

Behave legally, ethically, and with due regard for the welfare of those involved and those affected

Accuracy

Reveal and convey technically accurate information

Designing an Evaluation (1)

Figure out your questions: What will this be used for?

Determine your resources

- **Staffing**
- **Time**
- **Materials**
- **\$\$\$**

Consider Methods

- **Quantitative vs. Qualitative**
- **In-depth or quick and dirty**

Designing an Evaluation (2)

Guided by Objectives...select Process and Outcome Indicators

- **Relevant**
- **Measurable**
- **Improvable**

Instrument/Tool Development

- **Don't reinvent the wheel!**

Analysis: Get answers to your questions

Reporting: Formal & Informal

Ways to collect Evaluation Data

Use existing documents/data

Quantitative Methods

Qualitative Methods

Some questions to ask:

- **Primary v. secondary data?**
- **Qualitative v. quantitative?**

Research Design

Qualitative methods: interviews, focus groups, observation, document analysis

Quantitative methods: surveys, medical record abstraction, pre-test, post-test

This is another course...

Analysis

Evaluation is not clinical trials research.

Analysis can be straightforward.

**Easy stats are often more useful,
depending on audience.**

An Example...Routine Testing Evaluation in CHCs

Goal: Improve access to HIV testing in community health center settings.

Objectives: By one year after initial training, offer routine testing to 100% of patients between 13 and 64; link new positives to care.

Activities: Develop test algorithm for each site; All-staff training; establish mechanism for documenting offer and receipt of testing; support implementation

Example, Routine HIV Testing Impact Evaluation

Identify appropriate impact indicator/s.

Goal: Improve access to HIV testing in
community health center settings

- Measure: Change in % of patients offered testing

Outcome Evaluation

Identify appropriate outcome indicator/s.

Obj. 1. By one year after initial training, offer routine testing to 100% of patients between 13 and 64

- Measure: % of patients tested

Obj. 2. Link new positives to care.

- Measure: % of positives linked to care

Process Evaluation:

Identify appropriate process indicator/s.

Act 1. Develop test algorithm for each site

- Measure: Algorithm developed (logic model for clinic)

Act 2. Conduct all-staff training

- Measure: Assess knowledge change and skill development

Act 3. Support implementation

- Measure: Implementation in accord with algorithm (amount of counseling, number of offers, personnel used, etc.)

Dissemination

Planning for it is important

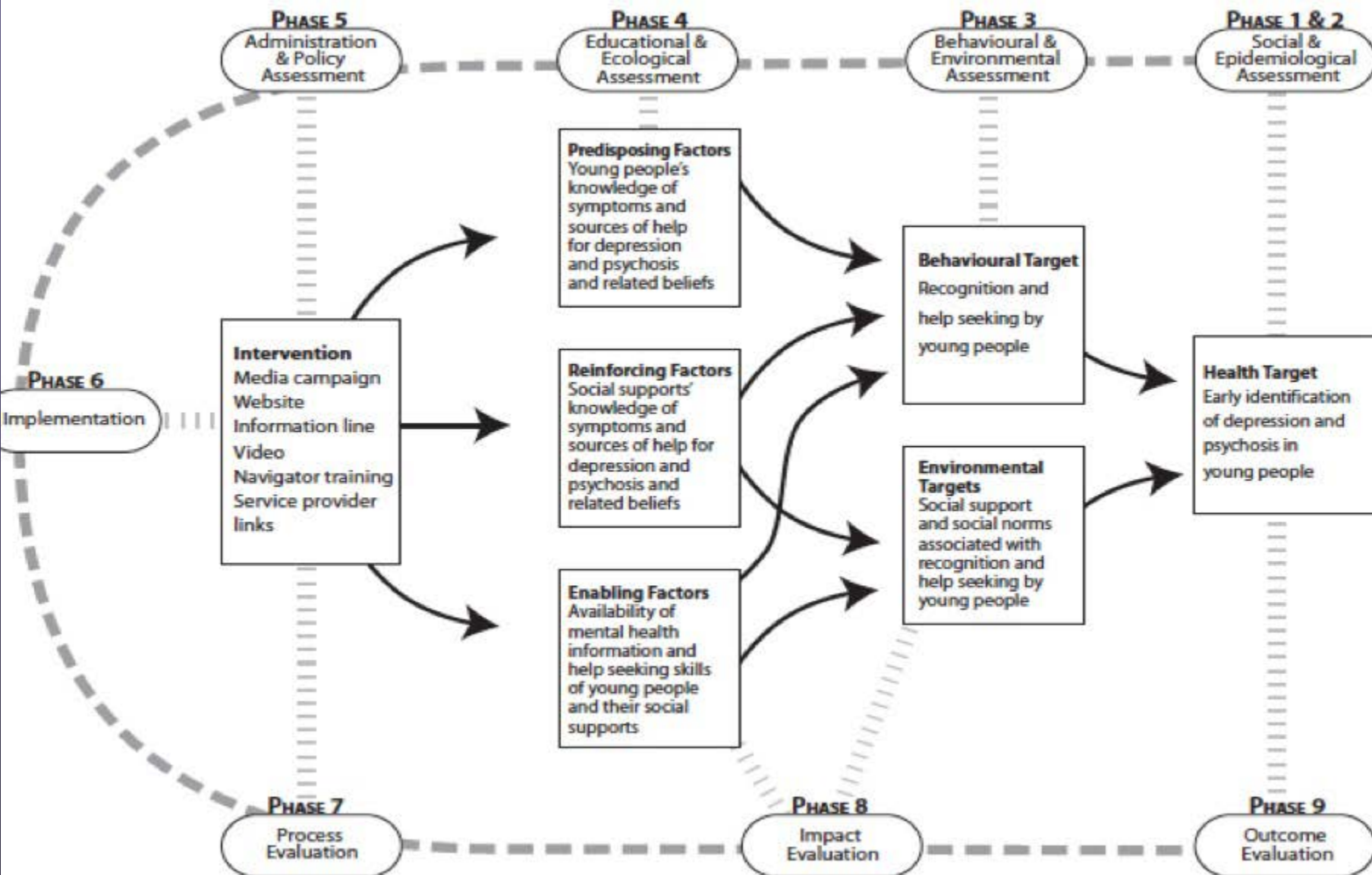
Framing is important

**Think about broad audience (consumers,
stakeholders, policymakers)**

See: www.caps.ucsf.edu/dissemination

Influence of Evaluation Findings

- *Policy change:* Achieving state funding for universal preschool
- *Program change:* Improved service delivery
- *Change in individual behavior:* Reducing consumer purchases of a certain type of seafood
- *Change in practice:* Having pediatricians add screening and provide information about childhood obesity to routine interactions with patients
- *Structural change:* Developing a strong service delivery organization where there has not been one before



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