

# Logic Models as a Platform for Program Evaluation Planning, Implementation, and Use of Findings

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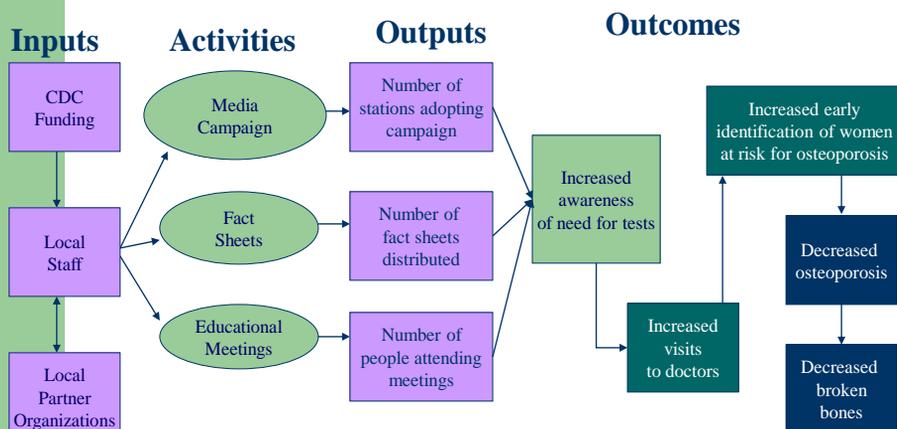
## Workshop Objectives

- Demystify and define the logic model as a starting point for everyday evaluation practice
- Identify the components of a well-constructed logic model
- Explain how logic models support a program theory approach to evaluation
- Discuss the use of logic models at different stages of an evaluation

## Logic Models:

- Provide a visual depiction of how a program is supposed to work
- Describe the inputs, activities and outcomes of a program
- Visually connect program inputs with short-term and long-term outcomes
- Specify how the program activities relate to the ultimate outcomes of the program
- Provide causal links between the operations of the program to short-term and long-term outcomes
- Clarify the relationship between the program and the problem (and its determinants)

## Logic Model for Osteoporosis Prevention Campaign



Adapted from Frechtling (2007)

## Logic Model Components

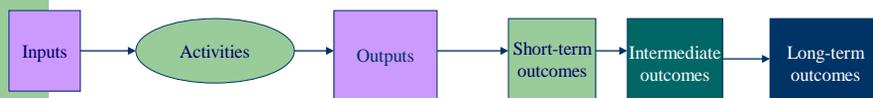
**Inputs:** Resources that go into a program

**Activities:** Actual events or actions

**Outputs:** Direct results of program activities

**Outcomes:** Sequence of changes triggered by the program

**Goal:** Overall mission or purpose of the program



## Outcomes: Sequence of changes triggered by program

Typically categorized as:

**Short-term:** precursors to change in behavior or environment

**Intermediate:** change in behavior or environment

**Long-term:** change in health status/condition

## Constructing Logic Models

- Examine program descriptions
- Working with stakeholders, brainstorm a list of activities and intended outcomes
- Construct a series of “*if-then*” statements
- Start with activities and ask “*so what*” to identify expected outcomes
- Start with outcomes and ask “*but how*” to identify needed activities

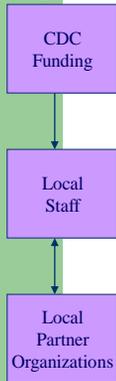
## Osteoporosis Prevention Campaign

- CDC project to increase awareness of need for annual bone density tests
- Goal: Reduce number of broken bones in women over 55

Adapted from Frechtling (2007)

# Inputs: Resources that go into a program

## Inputs

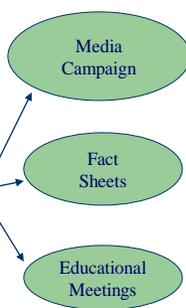


# Activities: Actual events or actions

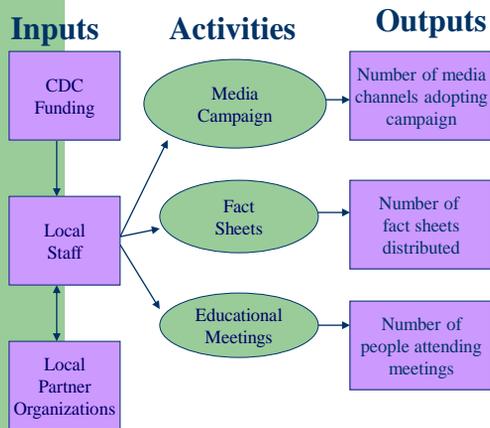
## Inputs



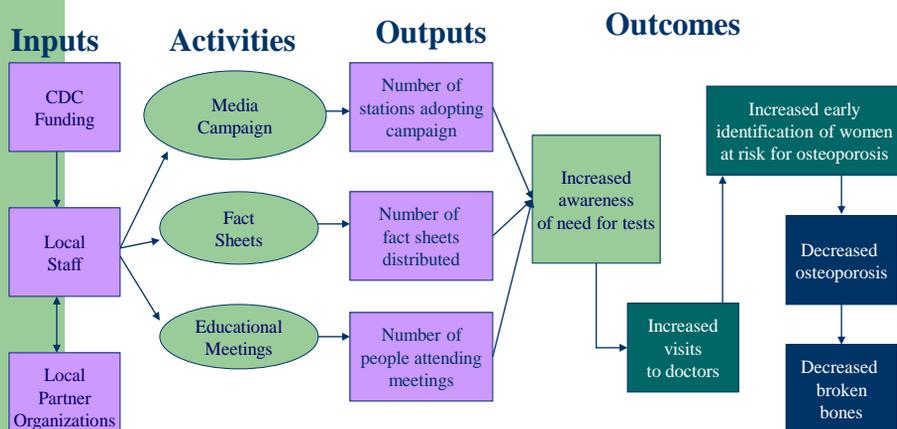
## Activities



## Outputs: Direct results of program activities



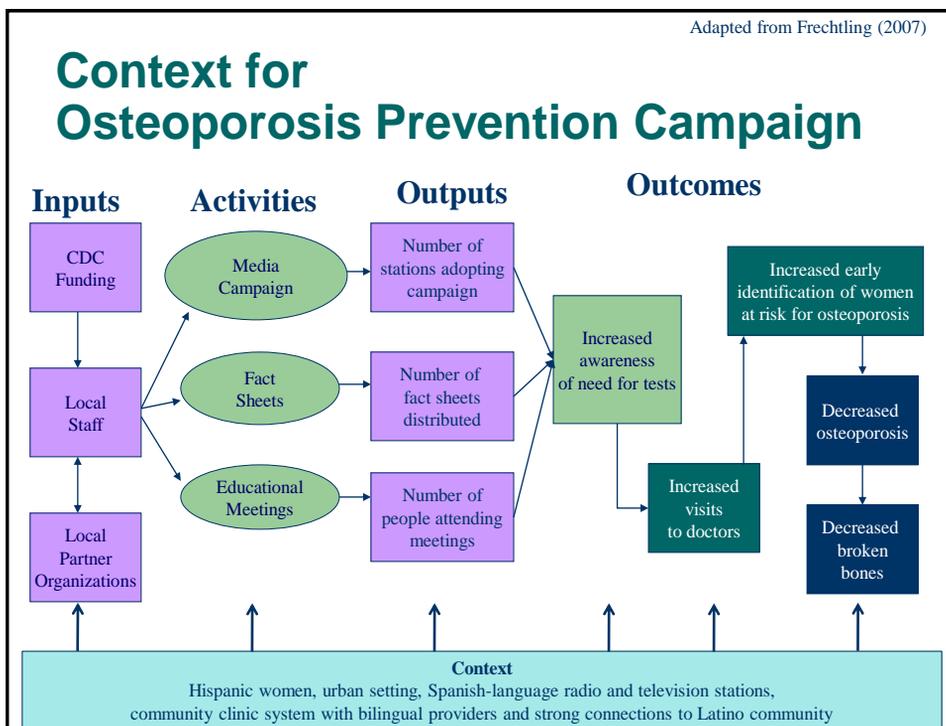
## Outcomes: Sequence of changes triggered by program



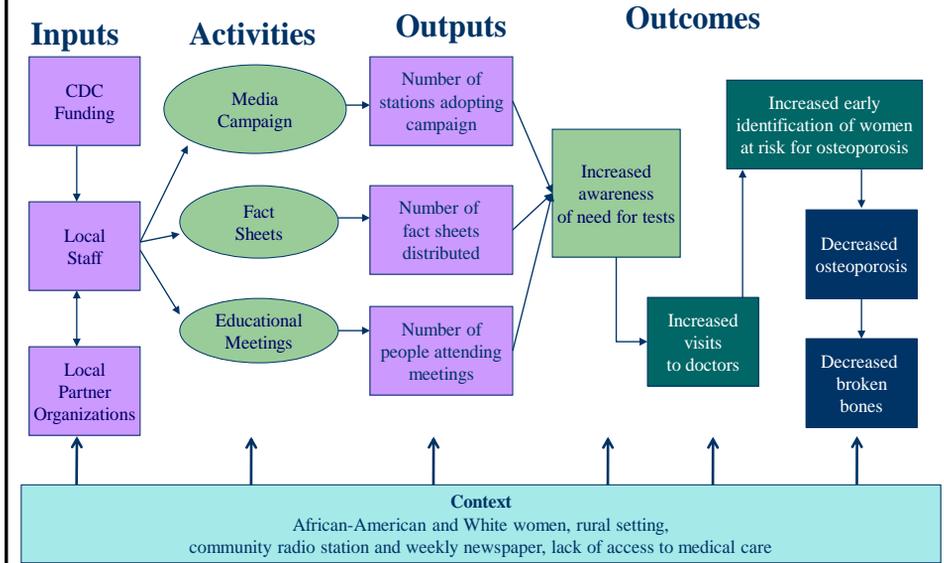
Adapted from Frechtling (2007)

## Logic Model Components: Context

- Describe environment for program implementation
  - Relevance of findings in other settings
  - Implications for implementation
- Focus on factors that may influence implementation or outcomes
  - Factors outside program's control or beyond its scope



## Context for Osteoporosis Prevention Campaign



## Program Theory

- Every program has an underlying theory or logic.
  - May be implicit
- Program theory approach to evaluation: identify and assess the underlying theory of change.

## Program Theory and Logic Models

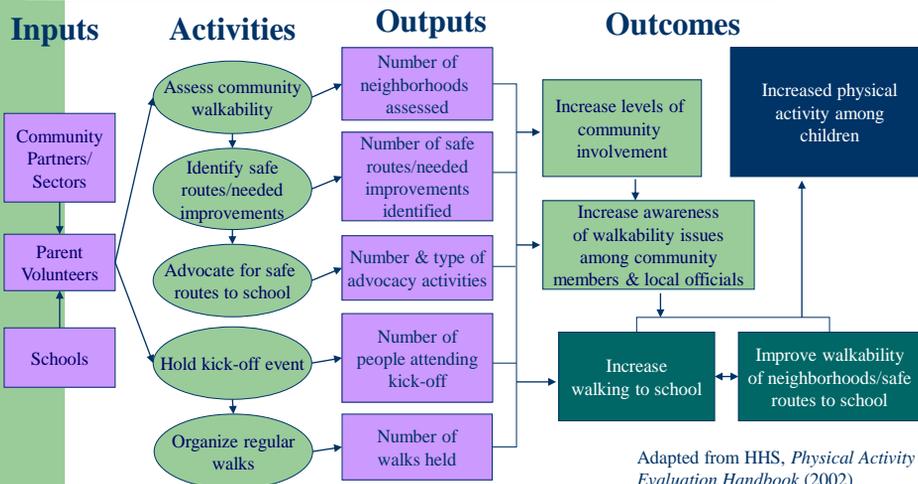
- Assist practitioners in making explicit assumptions about how program works
  - Links between inputs, activities, outputs, intermediate outcomes and long-term outcomes or goals
- Help to identify beliefs about cause-effect relationships that can be tested in an evaluation.
- Identify gaps in the program theory that may help focus the evaluation and/or intervention.

## Developing a Logic Model from Program Objectives

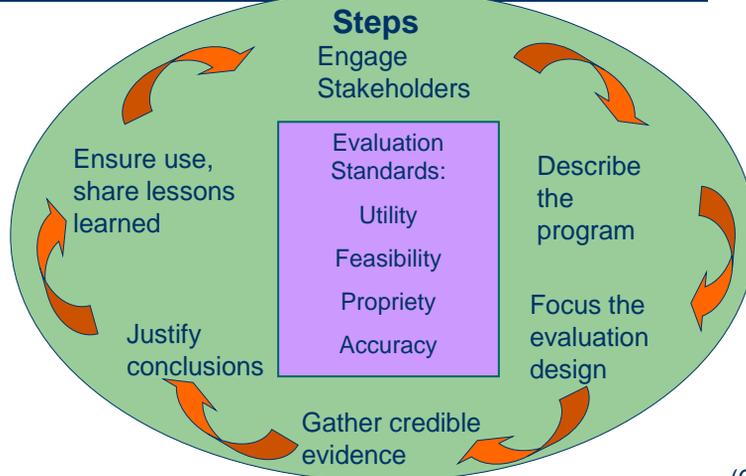
## Group Activity: Create a Logic Model

- Read case study
- Identify key inputs, activities, outputs and outcomes for the program
- Create a logic model that shows the connections between program components
- Identify key questions for program stakeholders

## Logic Model for KidsWalk-to-School



## CDC Framework for Program Evaluation in Public Health Practice



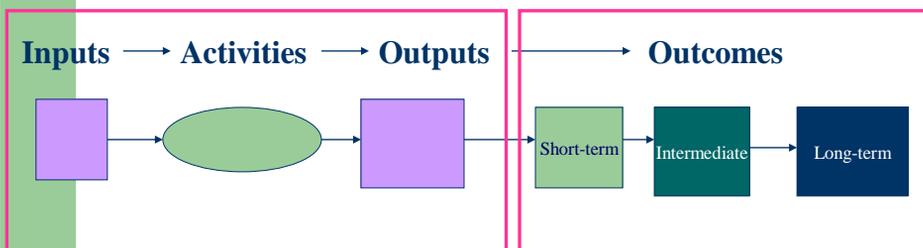
## Using Logic Models: Activity

- Identify at least one way to use logic models at different stages:
  - Engage stakeholders
  - Focus the evaluation design
  - Gather credible evidence
  - Justify conclusions
  - Ensure use, share lessons learned
  - Program development

## Uses of Logic Models

- Identify short-term, intermediate and long-term outcomes
- Enhance communication about program with staff and stakeholders
- Check program logic for gaps and trigger improvement
- Develop evaluation questions
- Select indicators to measure in evaluation
- Help understand evaluation findings
- Explain to decision-makers why it may take time before demonstrating long-term outcomes

## Logic Model Components: Process and Outcome



Process Evaluation    Outcome Evaluation

## Process Evaluation

- Focus on inputs, activities, or outputs
- Describe program
- Provide timely data for program improvement
- Account for program resources
- Understand *how* program works (or doesn't work)
- Identify essential program elements
- May be more feasible than outcome evaluation

## Typical Process Evaluation Questions

- Who participated in the program?
- To what extent was the program implemented as intended?
- How many materials were distributed?
- How satisfied are clients with the program?
- How were participants recruited?
- How many sessions were conducted?

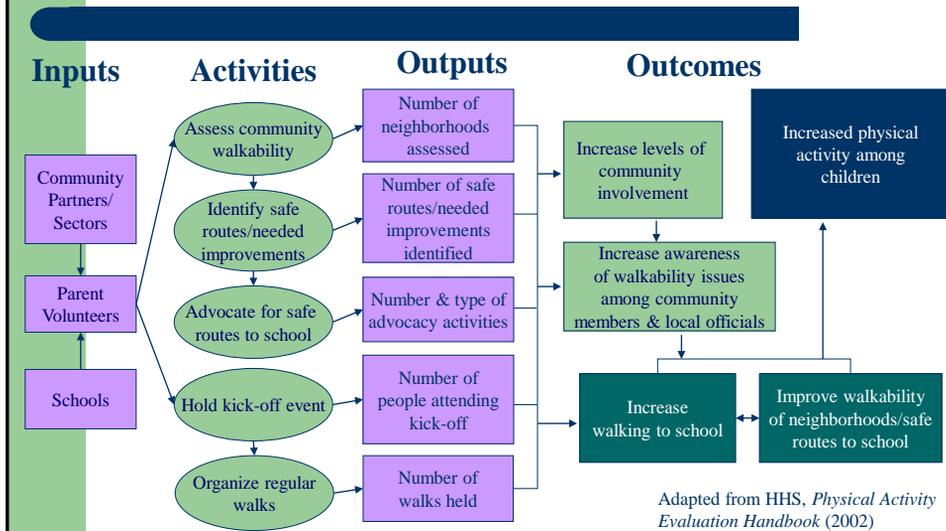
## Outcome Evaluation

- Focuses on short-term, intermediate, or long-term outcomes
- Determine whether or not program goals/outcome objectives were met
- To justify the need for further funding
- To ensure that only effective programs are continued

## Typical Outcome Evaluation Questions

- Did program activities lead to the desired change?
- What changes occurred as a result of the program?
- Did the program increase positive behaviors?
- Did the program lead to policy/environmental changes?

## Using a Logic Model to Identify Evaluation Questions



## Additional Resources

- *Enhancing Program Performance with Logic Models*, Univ. of Wisconsin Extension (free online course)  
<http://www.uwex.edu/ces/lmcourse/>
- *Community Toolbox: Developing a Logic Model or Theory of Change*, Univ. of Kansas  
[http://ctb.ku.edu/tools//section\\_1877.htm](http://ctb.ku.edu/tools//section_1877.htm)
- *W.K. Kellogg Foundation Logic Model Development Guide*  
<http://www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf>
- *CDC Evaluation Working Group Resources*  
<http://www.cdc.gov/eval/resources.htm>

## References

- CDC. Framework for Evaluation in Public Health. *MMWR*, September 17, 1999; 48(No. RR-11):1-40.
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## Questions?

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