Introduction to Program Evaluation—*Using CDC's Evaluation Framework*

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Today…

- CDC Evaluation Framework steps and standards
- Central role of "program description" and "evaluation focus" steps
- Create/use simple logic model(s) in evaluation
- Know/make informed decisions about design and data collection

Intro to Program Evaluation

Defining Terms

Defining Evaluation

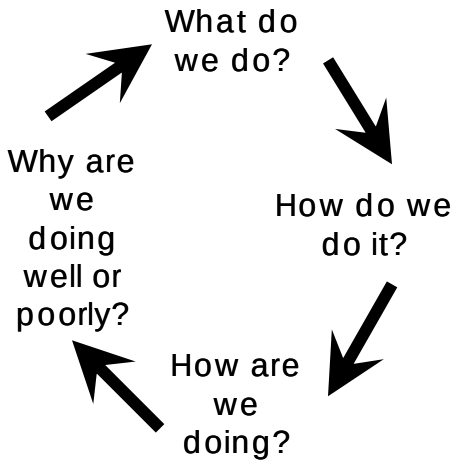
- ***Evaluation*** is the systematic investigation of the merit, worth, or significance of any *"object"*

  Michael Scriven

- ***Program*** is any organized public health action/activity implemented to achieve some result

These must be integrated…

- Continuous Quality Improvement (CQI) cycle.
  - **Planning**—*What* actions will best reach our goals and objectives.
  - **Performance measurement**— How are we doing?
  - **Evaluation**—W*hy* are we doing well or poorly?



Research is…

- ***Systematic*** investigation, including research development, testing and evaluation, designed to develop or contribute to ***generalizable*** knowledge

"Non-Research" Attributes

- *Intent:* Identify and control a PH problem or improve a PH program/service
- *Intended beneficiary*: Participants or the participants' community
- *Data use*: Improve the program, the health of the participants, or the participants' community
- *Knowledge applicability*: Not generalizable beyond project

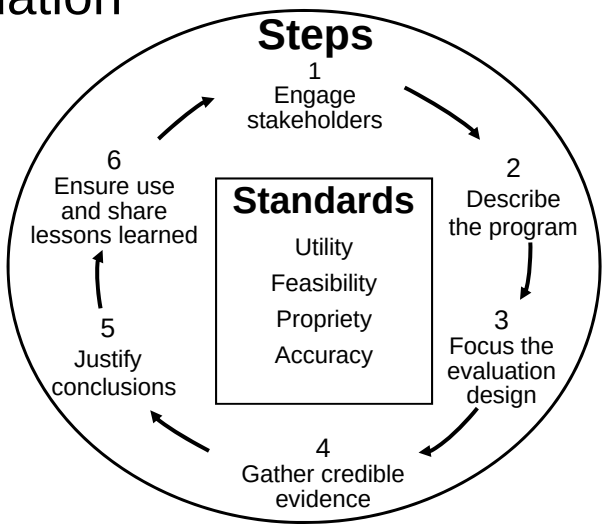
- "Research seeks to ***prove***, evaluation seeks to ***improve***…"

M.Q. Patton

Intro to Program Evaluation

CDC's Evaluation Framework

CDC's Framework for Program Evaluation



Source: Centers for Disease Control and Prevention. Framework for Program Evaluation in Public Health. MMWR1999; 48 (No. RR-11).

Underlying Logic of Steps

- ***No eval is good unless***… results are ***used*** to make a difference
- ***No results are used unless***… a ***market*** has been created prior to creating the product
- ***No market is created unless***…. the eval is ***well-focused***, including most relevant and useful questions
- ***And…***

Establishing the Best Focus Means…

- ***Framework Step 1:*** Identifying who cares about our program besides us? Do they define program and "success" as we do?"
- ***Framework Step 2:*** What are milestones and markers on the roadmap to my main PH outcomes?

Step-by-Step

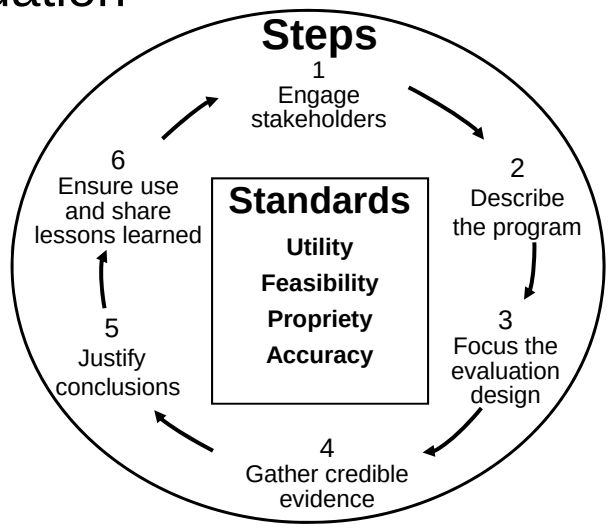
1. ***Engage stakeholders***: Decide who needs to be part of the design and implementation of the evaluation for it to make a difference.
2. ***Describe the program***: Draw a "soup to nuts" picture of the program—activities and all intended outcomes.
3. ***Focus the evaluation***: Decide which evaluation questions are the key ones

Step-by-Step

Seeds of Steps 1-3 harvested later:

4. ***Gather credible evidence***: Write indicators and choose and implement data collection sources and methods
5. ***Justify conclusions***: Review and interpret data/evidence to determine success of failure
6. ***Use lessons learned***: Use evaluation results in a meaningful way.

CDC's Framework for Program Evaluation



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The Four Standards

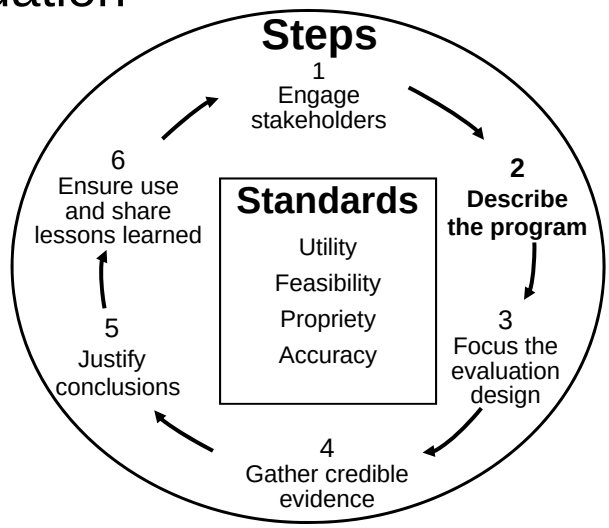
No one "right" evaluation. Instead, best choice at each step is options that maximize:

- ***Utility***: Who needs the info from this evaluation and what info do they need?
- ***Feasibility***: How much money, time, and effort can we put into this?
- ***Propriety:*** Who needs to be involved in the evaluation to be ethical?
- ***Accuracy:*** What design will lead to accurate information?

Intro to Program Evaluation

Step 2. Describing the Program

CDC's Framework for Program Evaluation



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You Don't ***Ever*** Need a Logic Model, BUT, You ***Always*** Need a Program Description

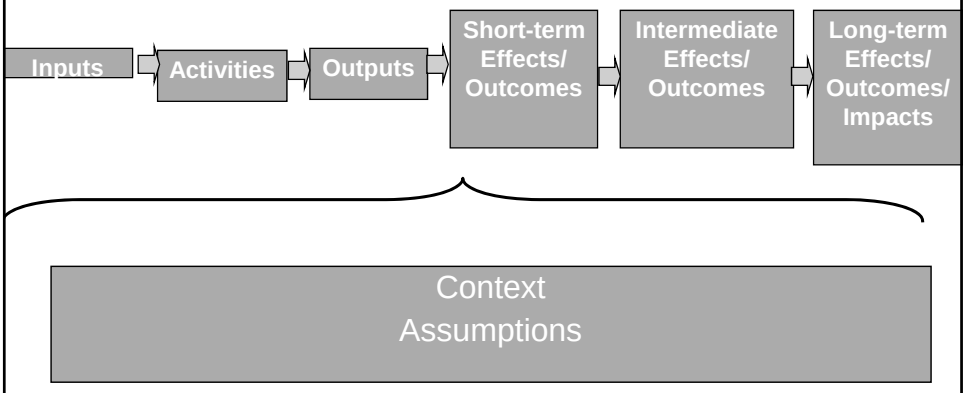
Don't jump into planning or eval without clarity on:

- The big ***"need"*** your program is to address
- The key ***target group(s)*** who need to take action
- The kinds of actions they need to take (your intended ***outcomes*** or objectives)
- ***Activities*** needed to meet those outcomes
- "Causal" ***relationships*** between activities and outcomes

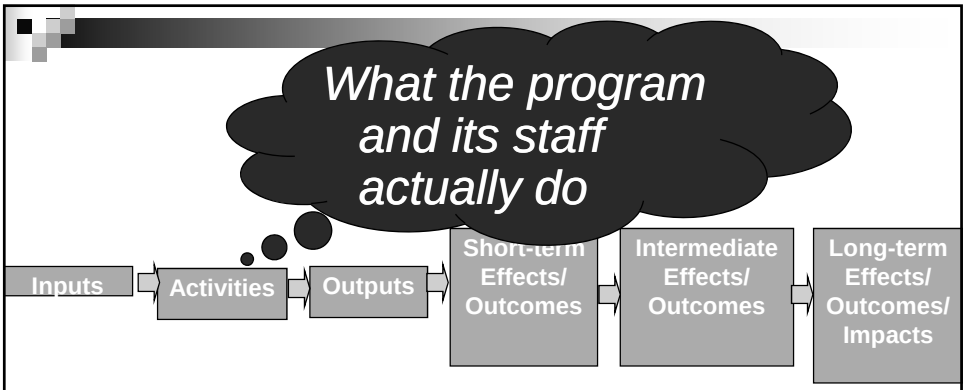
Logic Models and Program Description

- ***Logic Models :*** *Graphic depictions of the* ***relationship*** *between your program's activities and its* ***intended*** *effects*

Step 2: Describing the Program: Complete Logic Model



Context
Assumptions



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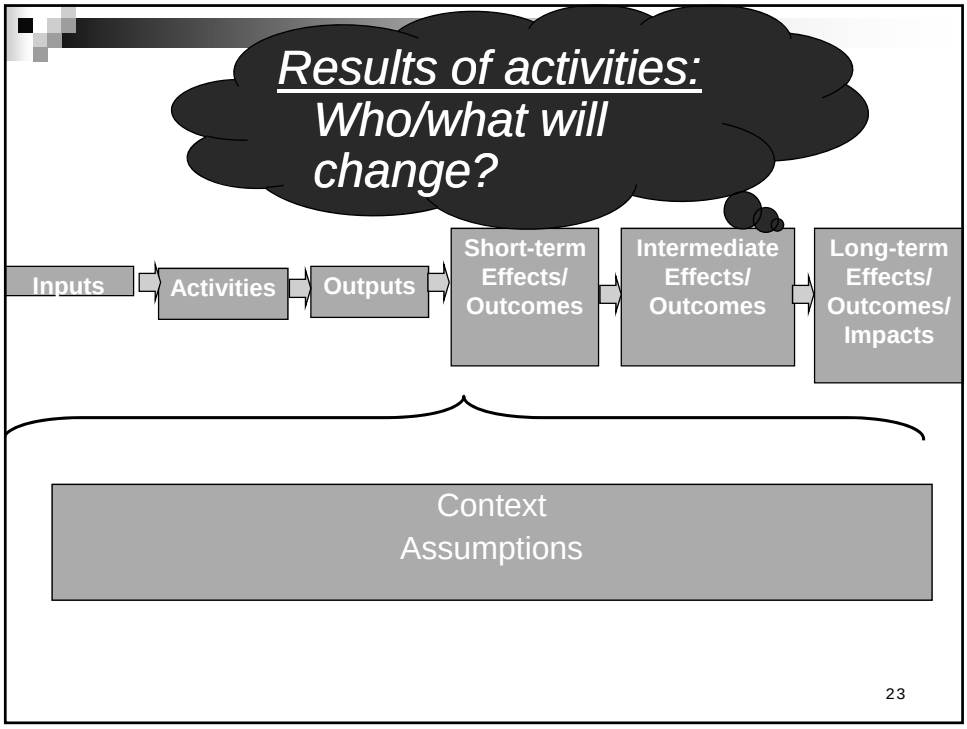
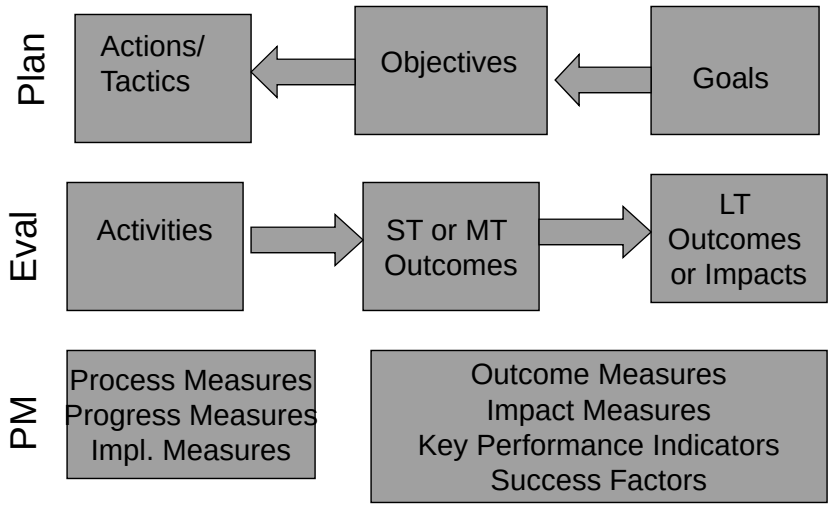


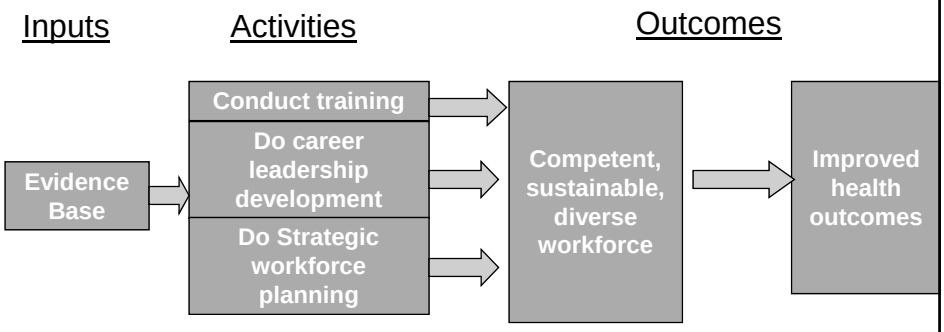
Finding Activities and Outcomes



Finding Activities and Outcomes—OWCD Mission

- To improve health outcomes by developing a competent, sustainable and diverse public health workforce through evidence-based training, career and leadership development, and strategic workforce planning.

Implicit Logic Model



Intro to Program Evaluation

Constructing Simple Logic Models

Constructing Logic Models: *Identify Activities and Outcomes by….*

1. Examining program descriptions, MISSIONS, VISIONS, PLANS, ETC and extracting these from the narrative, ***OR***
2. ***Reverse mapping***—Starting with outcomes, ask "how to" in order to generate the activities which produce them, ***OR***
3. ***Forward mapping***—Starting with activities, ask "so what" in order to generate the outcomes that are expected to result

Then…Do Some Sequencing…

- Divide the ***activities*** into 2 or more columns based on their ***logical*** sequence. *Which activities have to occur before other activities can occur?*
- Do same with the ***outcomes***. *Which outcomes have to occur before other outcomes can occur?*

Listing Activities and Outcomes: Lead Poisoning

- Activities
  - Outreach
  - Screening
  - Case management
  - ***Referral*** for medical tx
  - Identification of kids with elevated lead (EBLL)
  - Environmental assessment
  - ***Referral*** for env clean-up
  - Family training
- Effects/Outcomes
  - Lead source identified
  - ***Families*** adopt in-home techniques
  - ***Providers*** treats EBLL kids
  - ***Housing Authority*** eliminates lead source
  - *EBLL reduced*
  - *Developmental "slide" stopped*
  - *Q of L improved*

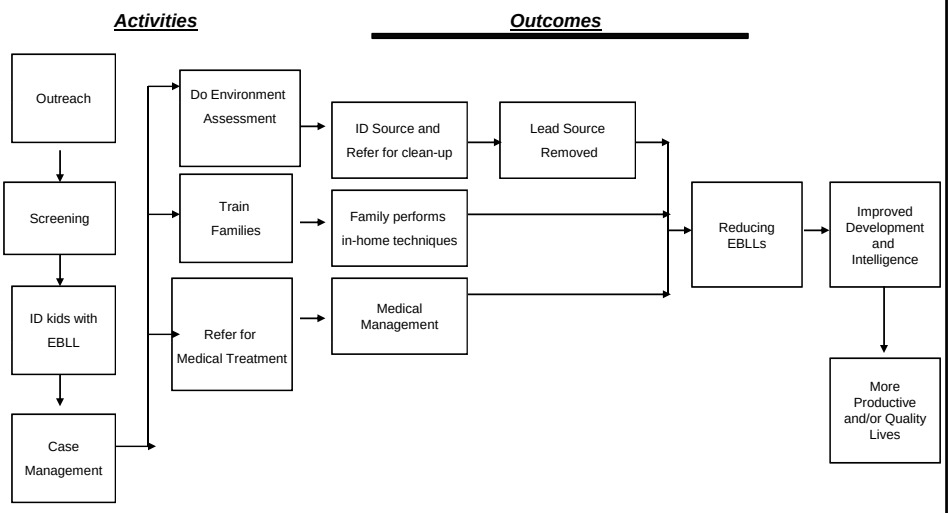
Global Logic Model: Childhood Lead Poisoning Program

Early Activities	Later Activities	Early Outcomes	Later Outcomes
If we do…	***And we do…***	***Then….***	***And then…***
Outreach	Case mgmt of EBLL kids		
Screening	Refer EBLL kids for medical treatment	EBLL kids get medical treatment	EBLL reduced
ID of elevated kids	Train family in in-home techniques	Family performs in-home techniques	Develop'l slide stopped
	Assess environment of EBLL child	Lead source identified	Quality of life improves
	Refer environment for clean-up	Environment gets cleaned up	
		Lead source removed	

For Planning and Evaluation "Causal" Arrows Can Help

- ***Not*** a different logic model, but same elements in different format
- Arrows can go from:
  - ***Activities to other activities:*** ***Which*** activities feed ***which*** other activities?
  - ***Activities to outcomes***: ***Which*** activities produce ***which*** intended outcomes?
  - ***Early effects/outcomes to later ones***: ***Which*** early outcomes produce ***which*** later outcomes

Lead Poisoning: "Causal" Roadmap



Group Exercise: *Constructing Simple Program Logic Model*

- Review list of activities and outcomes for your assigned case
- Tweak as needed and put each activity and outcome on a Post-It note.
- Place Post-it notes on flip chart paper
- Arrange, as needed, to depict logical sequencing
- Draw lines to show causal connections

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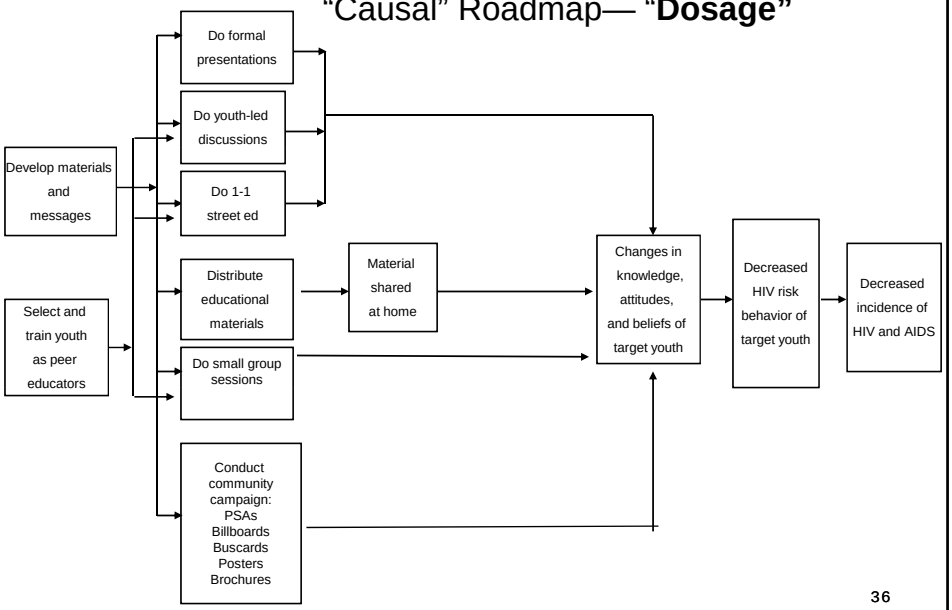
Global Logic Model: Eastside HIV/AIDS Prevention

Early Activities	Later Activities	Early Outcomes	Later Outcomes
If we …	***And we…***	***Then….***	***And then…***
Develop materials and messages	Do formal presentations	Educational materials are brought home and shared	Reduced HIV risk behavior
Select and train youth as peer educators	Do small group discussions	Changes in knowledge, attitudes and beliefs	Reduced incidence of HIV
	Distribute educational material		
	Do youth-led community ed		
	Do 1-1 street ed		
	Conduct community campaign: Buscards/billboards Posters/brochures		

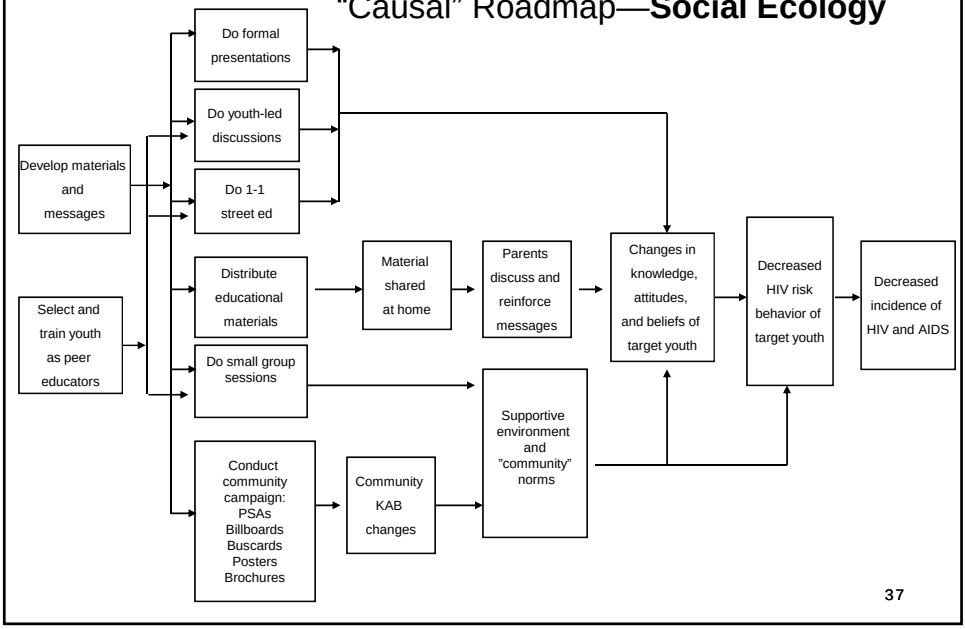
Eastside HIV/AIDS Prevention Program

"Causal" Roadmap— "**Dosage"**



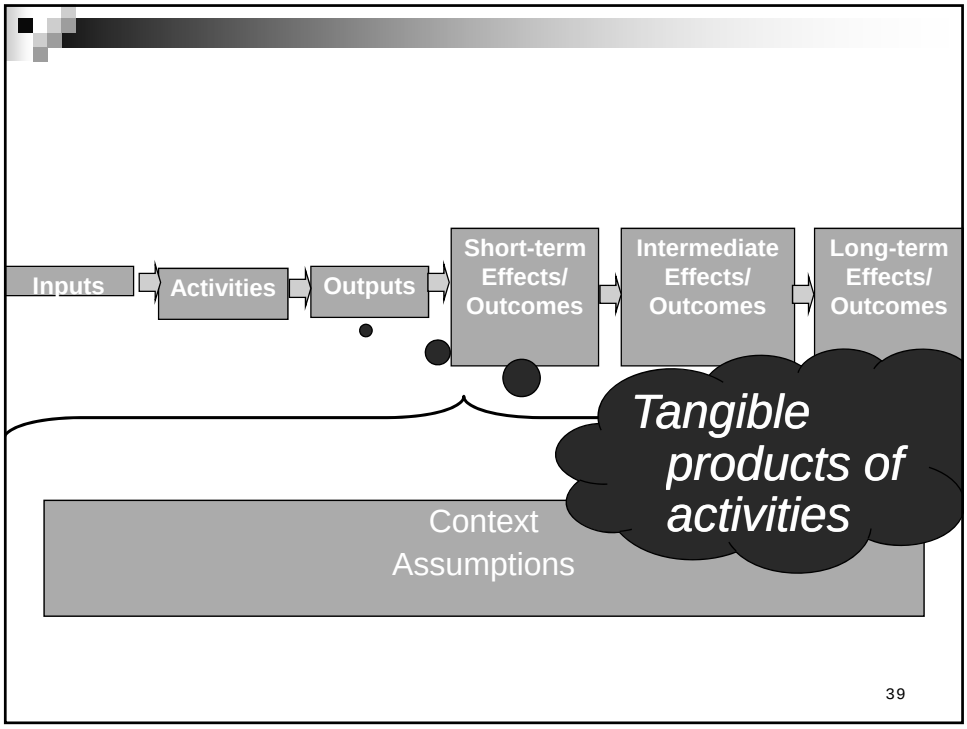
Eastside HIV/AIDS Prevention Program

"Causal" Roadmap—**Social Ecology**



Intro to Program Evaluation

Elaborating the Logic Model



Lead Poisoning: Sample Outputs

- Pool (#) of eligible kids
- Pool (#) of screened kids
- Referrals (#) to medical treatment
- Pool (#) of assessed homes
- Referrals (#) for clean-up

Doing the Right Things Right! What Does "Good" Mean?

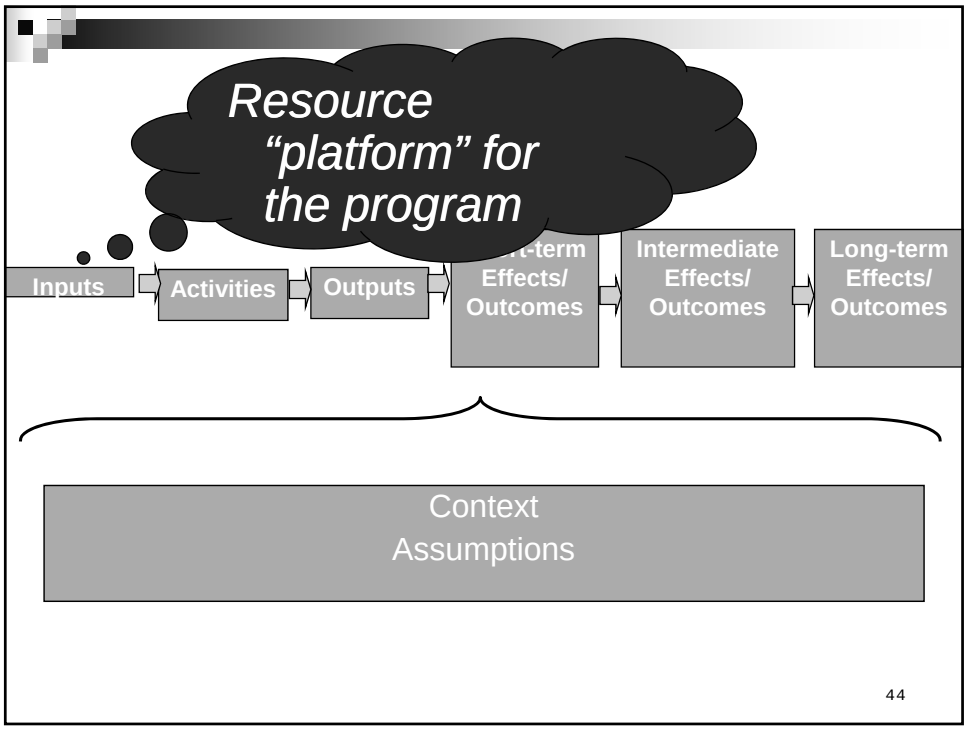
- Fidelity—reflect our "gold standard" plan?
- Reach—get to the "right" people?
- Penetration—get to enough of the "right" people?
- Exposure/Dose—give targets "enough" of our program to cause change?
- Staff/Target Match—delivered by "right" staff?

Lead Poisoning: "Upgraded" Outputs

- Pool (#) of screened kids *(meeting likely risk profile)*
- Pool (#) of eligible kids *(with lead level >XXd/ul)*
- Referrals (#) to *(qualified or willing)* medical treatment providers
- Pool (#) of assessed *("leaded")* homes
- Referrals (#) for clean-up *(to qualified or willing orgs)*

Global Logic Model: Childhood Lead Poisoning Program

Early Activities	Later Activities	Outputs	Early Outcomes—	Later Outcomes
Outreach	Do case mgmt	***Pool (#) of eligible kids***	EBLL kids get medical treatment	EBLL reduced
Screening	Refer for medical treatment	***Pool (#) of screened kids***	Family performs in-home techniques	Develop'l slide stopped
ID of elevated kids	Train family in in-home techniques	***Referrals (#) to medical treatment***	Lead source identified	Quality of life improves
	Assess environ't	***Pool (#) of "leaded" homes***	Environ cleaned up	
	Refer house for clean-up	***Referrals (#) for clean-up***	Lead source removed	



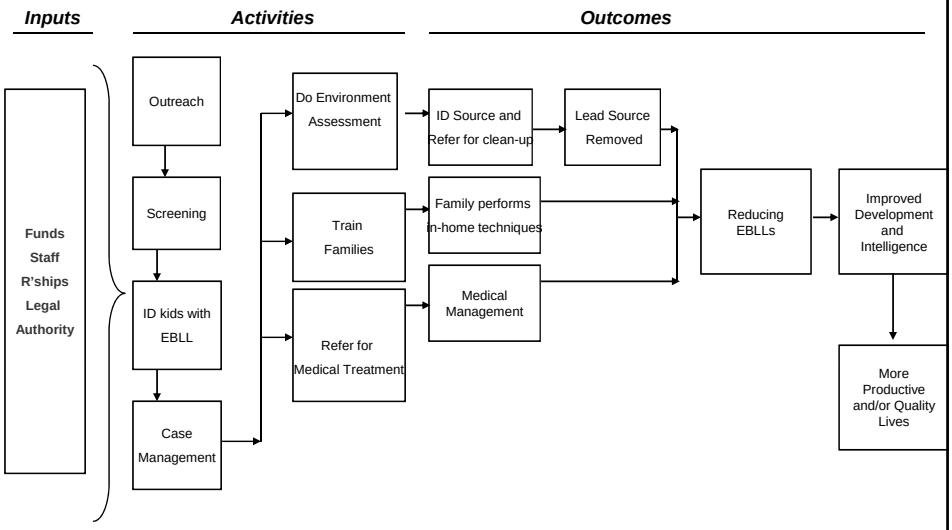
Lead Poisoning: Sample Inputs

- Funds
- Trained staff
- Relationships with orgs for med tx and env clean-up
- Legal authority to screen

Global Logic Model: Childhood Lead Poisoning Program

Inputs	Early Activities	Later Activities	Outputs	Early Outcomes—	Later Outcomes
Funds	Outreach	Do case mgmt	***Pool (#) of eligible kids***	EBLL kids get medical treatment	EBLL reduced
Trained staff	Screening	Refer for medical treatment	***Pool (#) of screened kids***	Family performs in-home techniques	Develop'l slide stopped
R'ships with orgs for med tx and clean up	ID of elevated kids	Train family in in-home techniques	***Referrals (#) to medical treatment***	Lead source identified	Quality of life improves
Legal authority		Assess environ't	***Pool (#) of "leaded" homes***	Environ cleaned up	
		Refer house for clean-up	***Referrals (#) for clean-up***	Lead source removed	

Lead Poisoning: "Causal" Roadmap



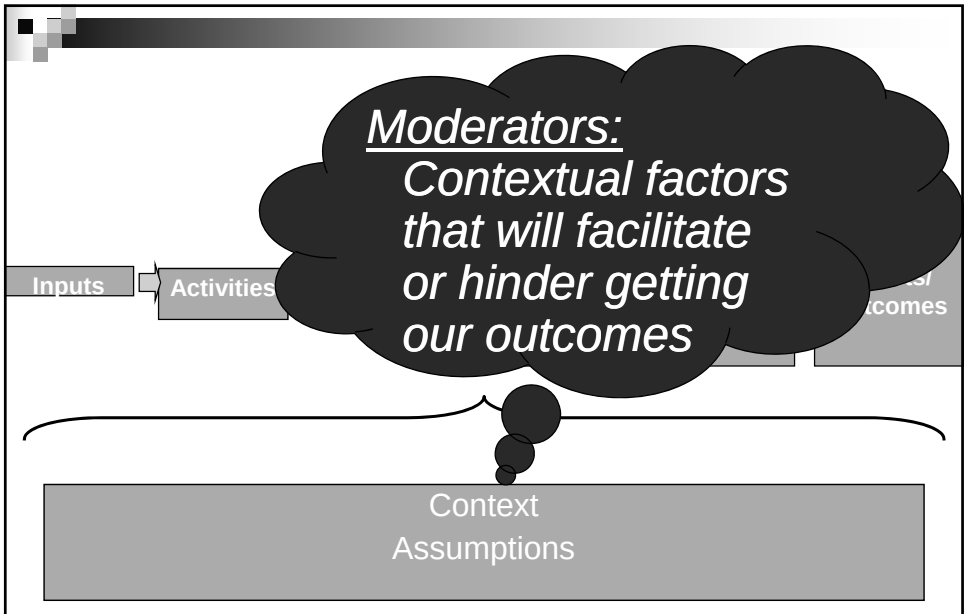
Moderators

- Is the relationship between activities and outcomes always the same, ***OR***
- Are there characteristics of the situation or participant that influence the amount or intensity of the intended outcome produced?

Group Exercise:
Elaborating *Simple Logic Models*

1. Key outputs

2. Key inputs



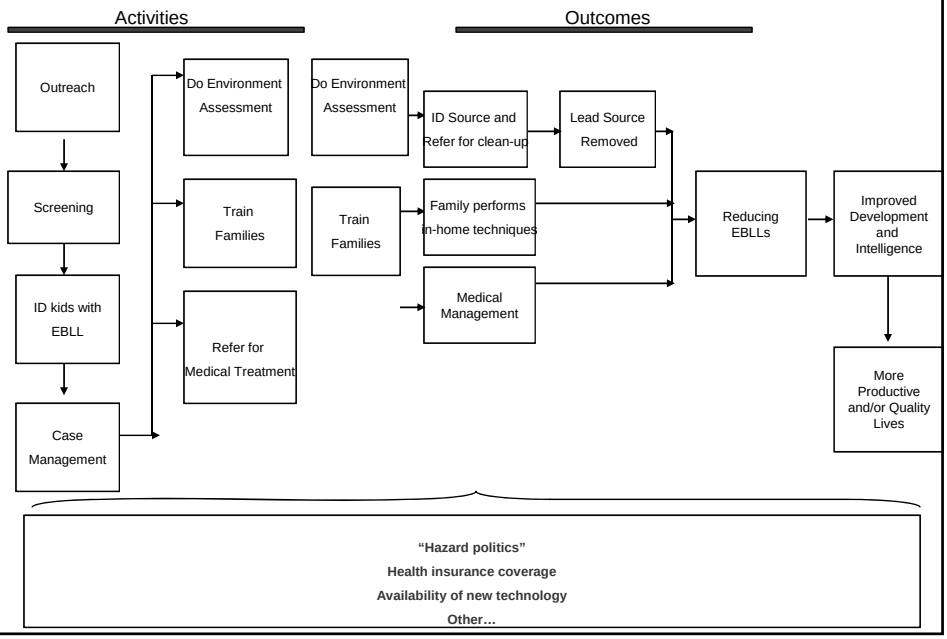
Contextual Factors

- ***P***olitical
- ***E***conomic
- ***S***ocial
- ***T***echnological

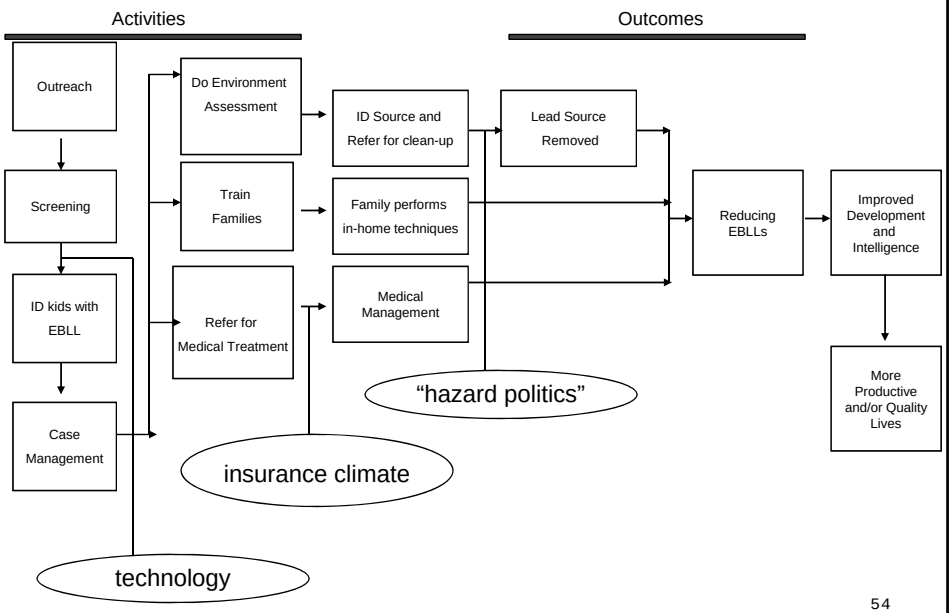
Moderators—Lead Poisoning

- ***P***olitical—*"Hazard" politics*
- ***E***conomic— *Health insurance*
- ***T***echnological— *Availability of hand-held technology*

Lead Poisoning: "Causal" Roadmap



Lead Poisoning: "Causal" Roadmap and Moderators



Group Exercise: Elaborating *Simple Logic Models*

1. Potential moderators
2. Where in program they matter most

Note!

Program Description makes the program theory ***clear***, not ***true***!

Intro to Program Evaluation

Putting the Program Description to Use in Evaluation

Informs Two Steps in CDC Eval F'work

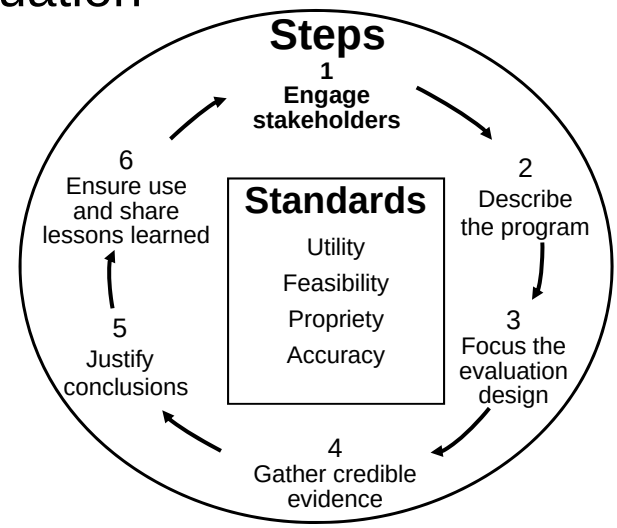
- ***In F'work Step 1. Engage Stakeholders:***
  - Who are major stakeholders for our efforts?
  - Where in this model do they want to see success?
  - Who needs to be engaged upfront to ensure use of results?

- ***In F'work Step 3. Setting Eval Focus:***
  - Today, 1 year, 5 years, 10 years, where in the model should I be measuring changes?
  - If no change, where should I look for problems?

Intro to Program Evaluation

Step 1. Engaging Stakeholders

CDC's Framework for Program Evaluation



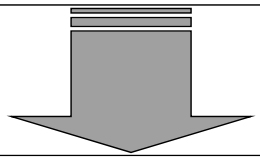
Source: Centers for Disease Control and Prevention. Framework for Program Evaluation in Public Health. MMWR1999; 48 (No. RR-11).

Who are Stakeholders?

- Three major groups:
  - Those served or affected by the program
  - Those involved in program operation
  - Primary intended users of the evaluation findings

Which S'holders Matter Most?

Who is:
Affected by the program?
Involved in program operations?
Intended *users* of evaluation findings?



Of these, who do we most need to:
Enhance *credibility?*
Implement program changes?
Advocate for changes?
Fund, authorize, expand program?

What Unique Needs/Preferences Do They Have….

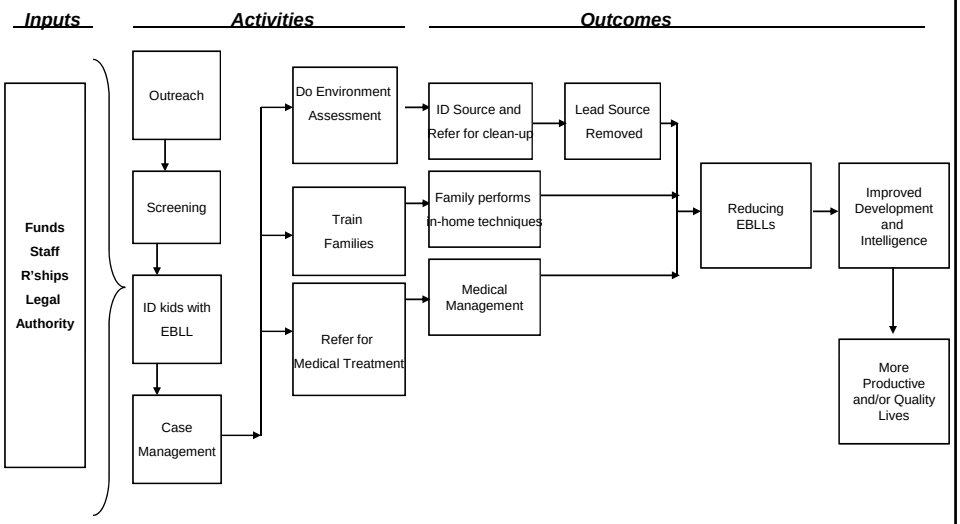
Might agree/disagree on:

- The activities and outcomes depicted?
  - The "roadmap"?
    - Which outcomes in roadmap = program "success"?
      - How *much* progress on outcomes = program "success"?
        - Choices of data collection/analysis methods?

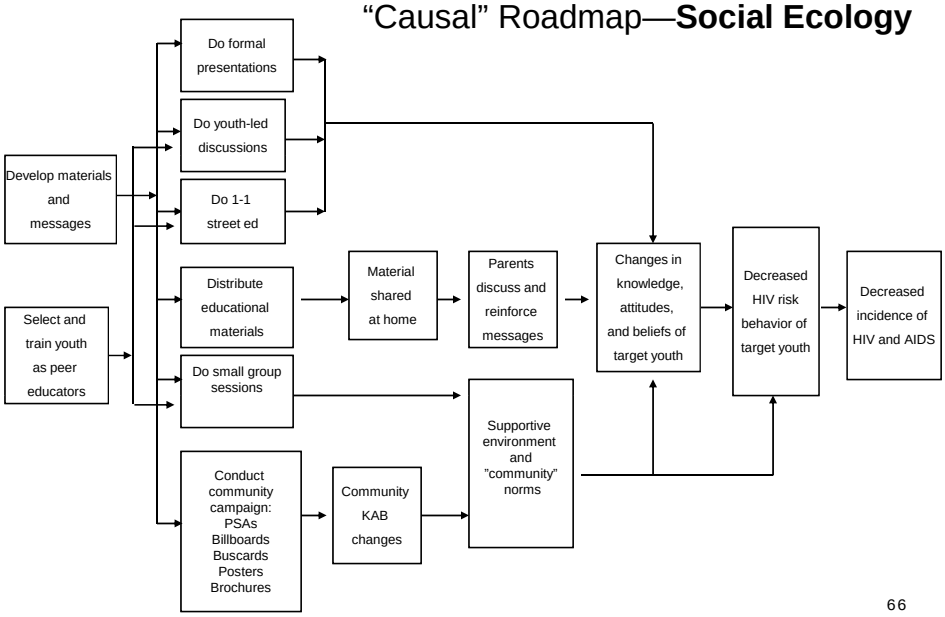
Case Exercise—Stakeholders

- We need [*this stakeholder*]…
- To provide/enhance our [any/all of: *credibility, implementation, funding, advocacy*]…
- And, to keep them engaged as the project progresses…
- We'll need to demonstrate [*which selected activities or outcomes*].

Lead Poisoning: "Causal" Roadmap



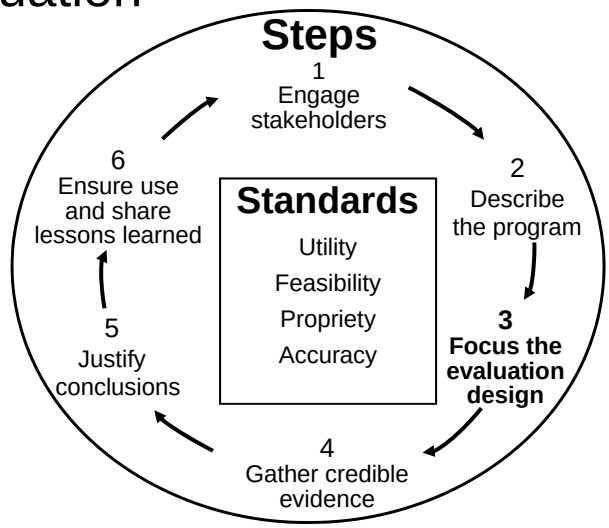
Eastside HIV/AIDS Prevention Program
"Causal" Roadmap—**Social Ecology**



Intro to Program Evaluation

Step 3. Setting Evaluation Focus

CDC's Framework for Program Evaluation



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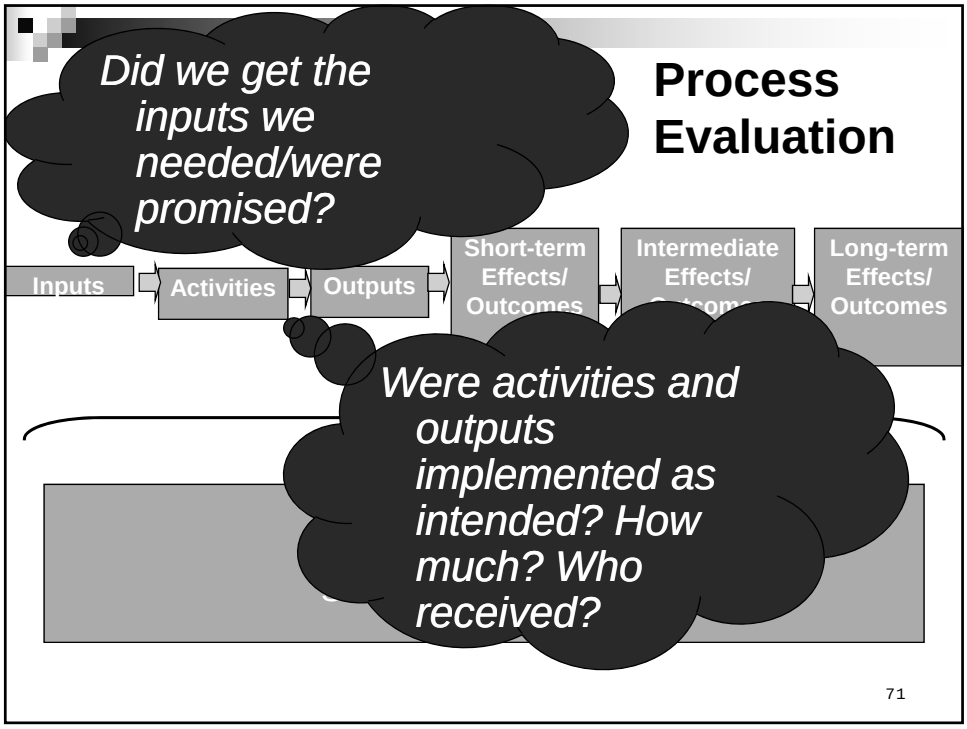
Eval Plan vs. Eval Focus

- Eval ***Plan***: How I intend to measure ***all*** aspects of my program---all the boxes (and arrows) in my logic model?
- Eval ***Focus***: The part of my program that needs to be measured in ***this evaluation, this time***?
- Over life of the program:
  - Eval plan may never change
  - Eval focus is always changing

Evaluation Can Be About Anything

- Evaluation can focus on any/all parts of the logic model
- Evaluation questions can pertain to
  - Boxes---did this component occur as expected
  - Arrows---what was the relationship between components


Process Evaluation
Did we get the inputs we needed/were promised?
Inputs
Activities
Outputs
Short-term Effects/ Outcomes
Intermediate Effects/
Long-term Effects/ Outcomes
Were activities and outputs implemented as intended? How much? Who received?
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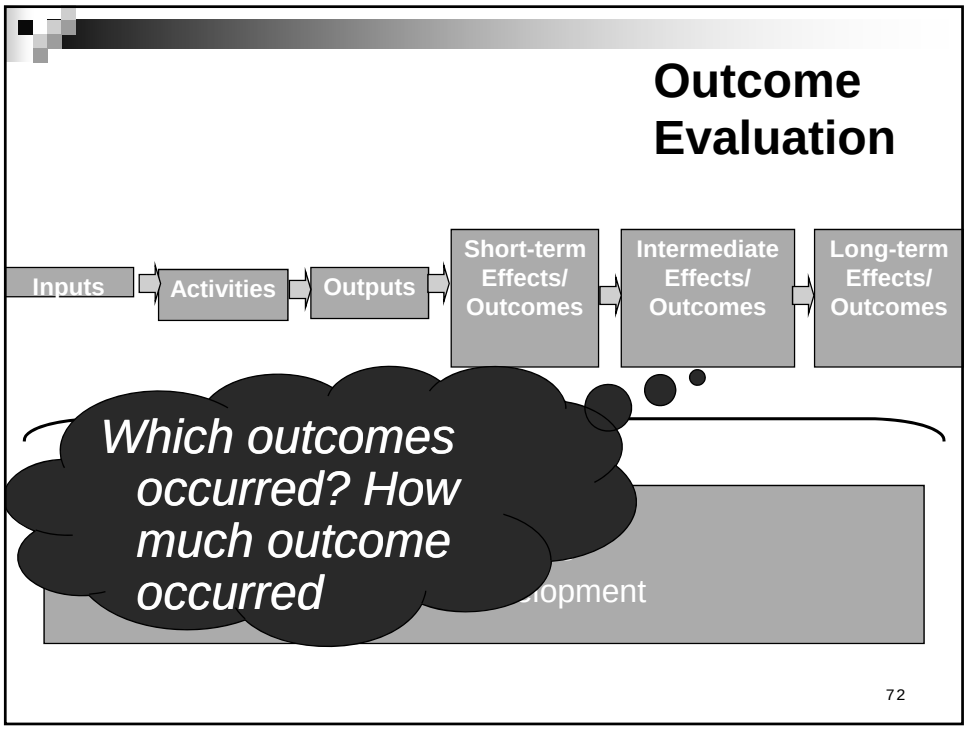
Outcome Evaluation
Inputs
Activities
Outputs
Short-term Effects/ Outcomes
Intermediate Effects/ Outcomes
Long-term Effects/ Outcomes
Which outcomes occurred? How much outcome occurred
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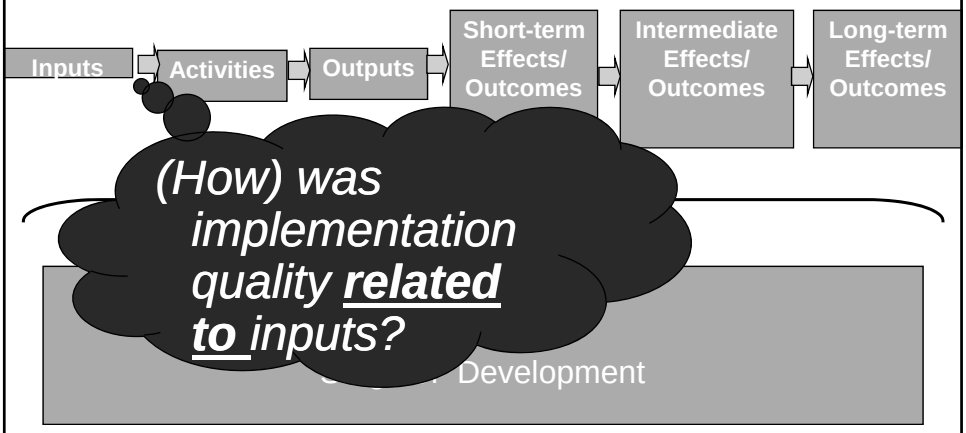
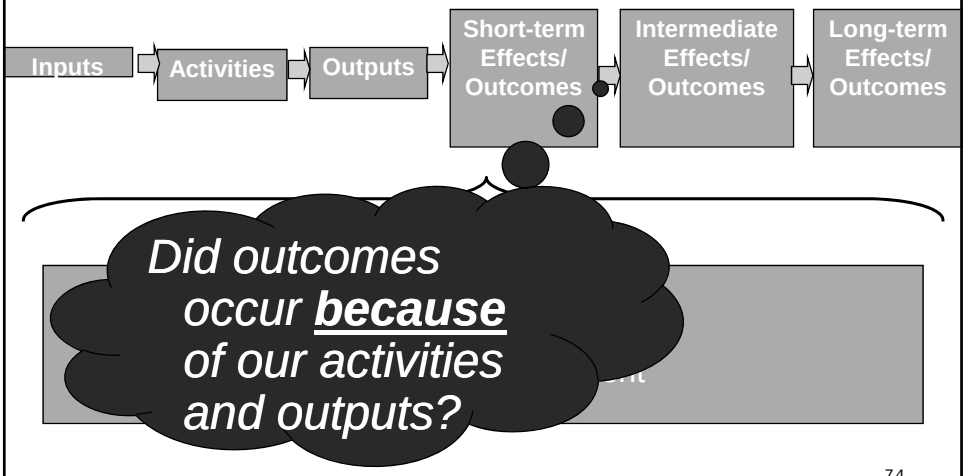
Efficiency Evaluation



Causal Attribution



Setting Focus: Some Rules

Based on “utility” standard:

- ***Purpose:*** Toward what end is the evaluation being conducted?
- ***User:*** Who wants the info and what are they interested in?
- ***Use:*** How will they use the info?

Step 1 Helps Here…

From Step 1:

- What are key stakeholders most interested in?
- Must I address their needs in the focus for THIS evaluation?

(Some) Potential Purposes/Uses

- Show accountability
- Test program implementation
- “Continuous” program improvement
- Increase the knowledge base
- Other…
- Other…

“Reality Checking” the Focus

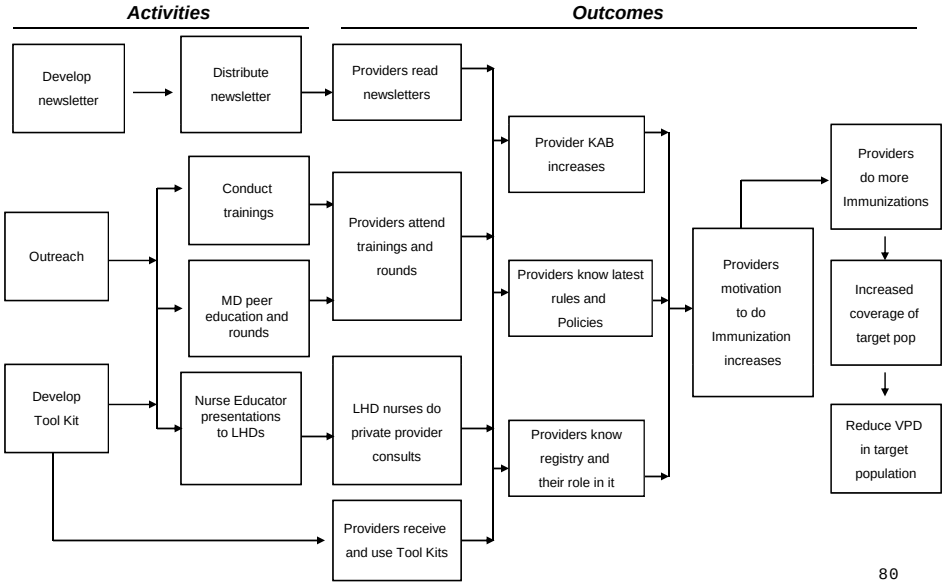
Based on “feasibility” standard:

- ***Stage of Development:*** How long has the program been in existence?
- ***Program Intensity:*** How intense is the program? How much impact is reasonable to expect?
- ***Resources:*** How much time, money, expertise are available?

Global Logic Model: Provider Education

Early Activities	Later Activities	Early Outcomes	Later Outcomes
Do outreach to providers	Distribute newsletter	Provs read newsletters	KAB increases
Develop newsletter	Conduct immuno trainings	Provs attend trainings and rounds	Know policies
Develop Tool Kit	Nurse educator LHD presentations	Provs receive and use tool kits	Know registry
	Physician peer ed rounds	LHD nurses do private prov consults	Motivation increases
			Do more immuno
			Coverage increases
			VPD reduced

Provider Education: "Causal" Roadmap



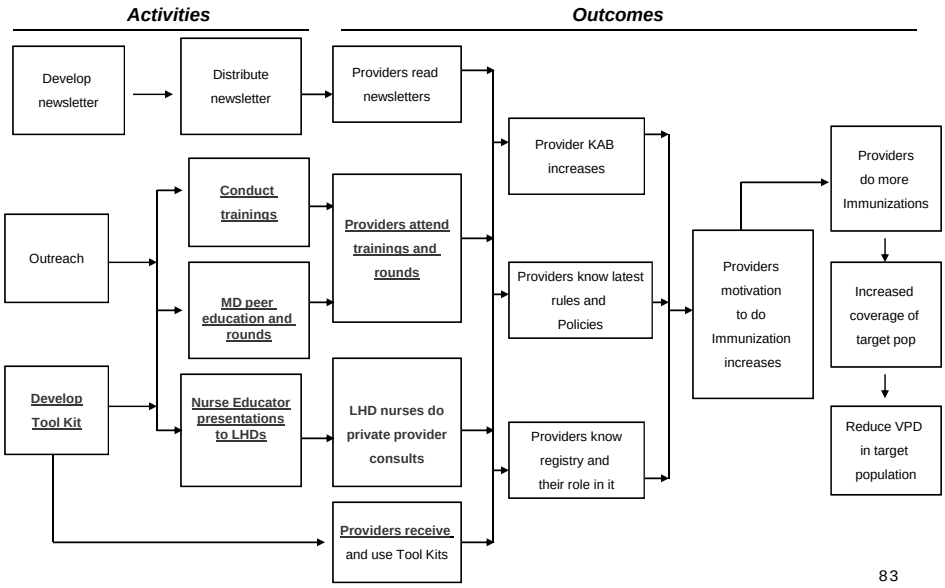
Some Evaluation Scenarios

- ***Scenario I:*** At Year 1, other communities want to adopt your model but want to know “what are they in for”

Scenario 1:

- ***Purpose:*** Examine program implementation
- ***User:*** The “other community”
- ***Use:*** To make a determination, based on your experience, whether they want to adopt this project or not

Provider Education: "Causal" Roadmap



Some Evaluation Scenarios

- ***Scenario II:*** At Year 5, declining state revenues mean you need to justify to legislators the importance of your efforts so as to continue funds.

Scenario 2:

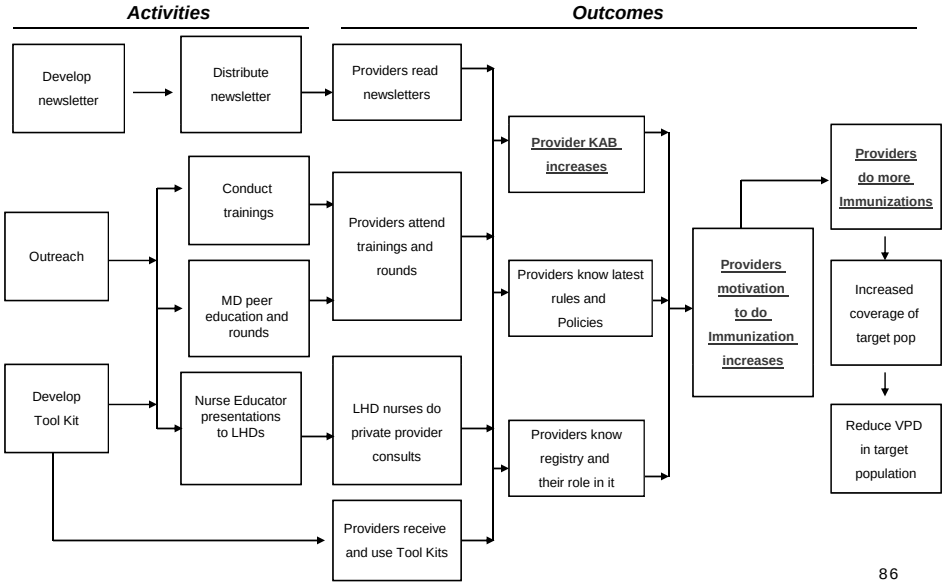
Purpose: Determine program impact

User: Your org and/or the legislators

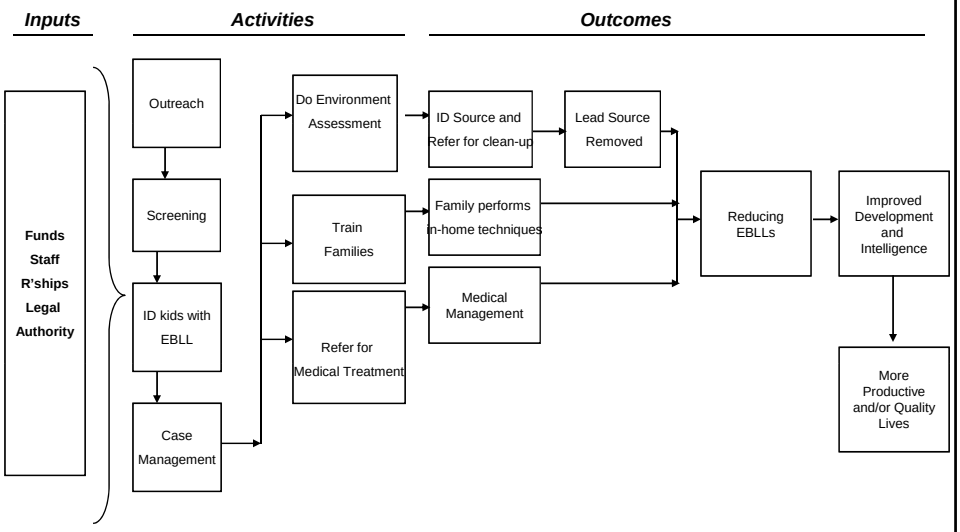
Use:

- ***You*** want to muster evidence to prove to legislators you are effective enough to warrant funding, or
- ***Legislators*** want you to show evidence that proves sufficient effectiveness to warrant funding

Provider Education: "Causal" Roadmap



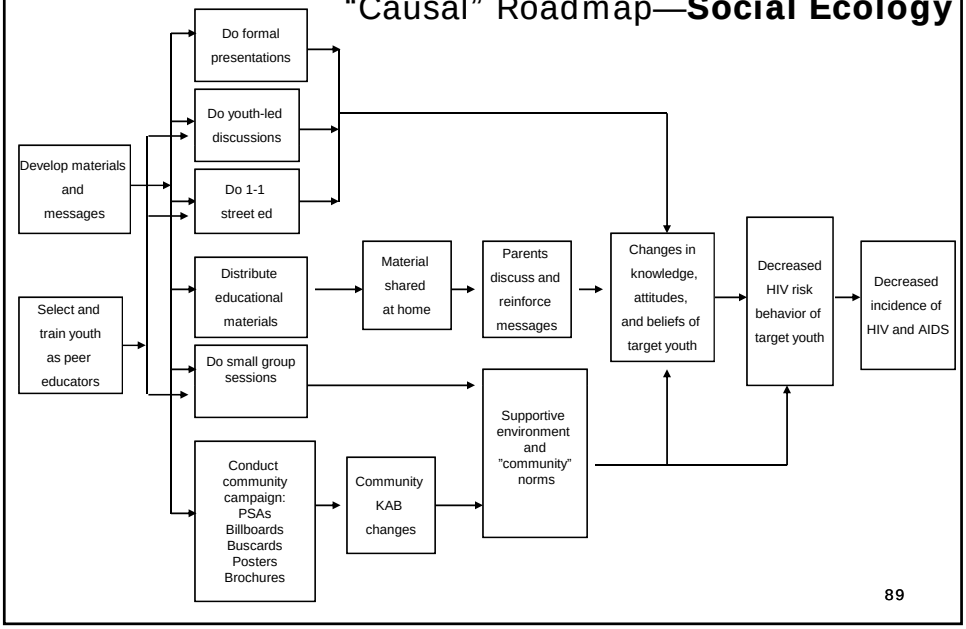
Lead Poisoning: "Causal" Roadmap



Group Exercise: *Evaluation Focus*

1. *User*
2. *Purpose/Use*
3. *These parts of the logic model are in the focus to meet purpose/use…*
4. *Some specific questions…*
5. *Is this focus feasible given stage, intensity, resources?*

Eastside HIV/AIDS Prevention Program
"Causal" Roadmap—**Social Ecology**

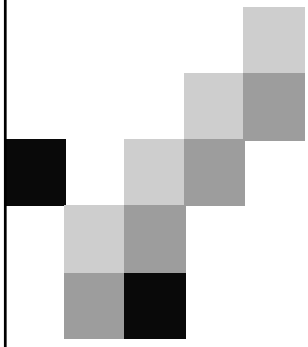


Taking Stock…What We've Done:

- Clarified relationship of activities and outcomes
- Identified inputs, outputs, and moderators
- Ensured clarity and consensus with stakeholders
- Helped identify a focus for my evaluation

Taking Stock…What's Next:

- Elaborate evaluation questions
- Write indicators
- Affirm evaluation design
- Choose data collection sources and methods
- Define data analysis plan
- Determine how best to report findings to ensure use



Intro to Program Evaluation

Choosing Evaluation Design

Thinking About Cause: Evaluation Design Continuum

Non Experimental	Quasi Experimental	Experimental
Weakest	Stronger	Strongest

Requirement	Implications
Experimental and control conditions	Must be at least two groups: One that gets the program, one that does not
Single experimental condition	Must be only one activity or program that distinguishes the experimental and control conditions
Random assignment to conditions	Participants are just as likely to be assigned to experimental condition as to the control condition
Pre- and post-program measurements	At a minimum, measures are taken from people in both conditions before the program begins and after it is over

"Classic" Experimental Design

*R*E	O_1	X	O_2
*R*C	O_3		O_4

Where:
R= Random assignment
E=Experimental group
C=comparison group
O=Observation/Data Collection

Design Continuum:

What's Missing as Move Right → Left?
Why Does It Matter?

Non Experimental	Quasi Experimental	Experimental
E: X O	X O	X O (R)
C:	O	O (R)
E: O X O	O X O	O X O (R)
C:	O O	O O (R)
E:	O O O X O O O	O O O X O O O(R)
C:		

Group Exercise: *Choosing Design*

- What might an experimental design look like?
  - How close can you come?
  - What do you have to compromise?
  - (Why) does it matter?

Experimental Model as Gold Standard

- But, sometimes “fool’s gold”
  - Internal validity vs. external validity
  - Community interventions
- So
  - Sometimes→ “Right”, but hard to implement
  - Sometimes→ Easy to implement, but “wrong”

Beyond the Scientific Research Paradigm

- Complex programs and community initiatives
  And since these initiatives are based on multi-source and multi-perspective community collaborations, their goals and core activities/services are constantly changing and evolving to meet the needs and priorities of a variety of community stakeholders. In short, these initiatives are "unevaluatable" using the dominant natural science paradigm (Connell, et. al., 1995)

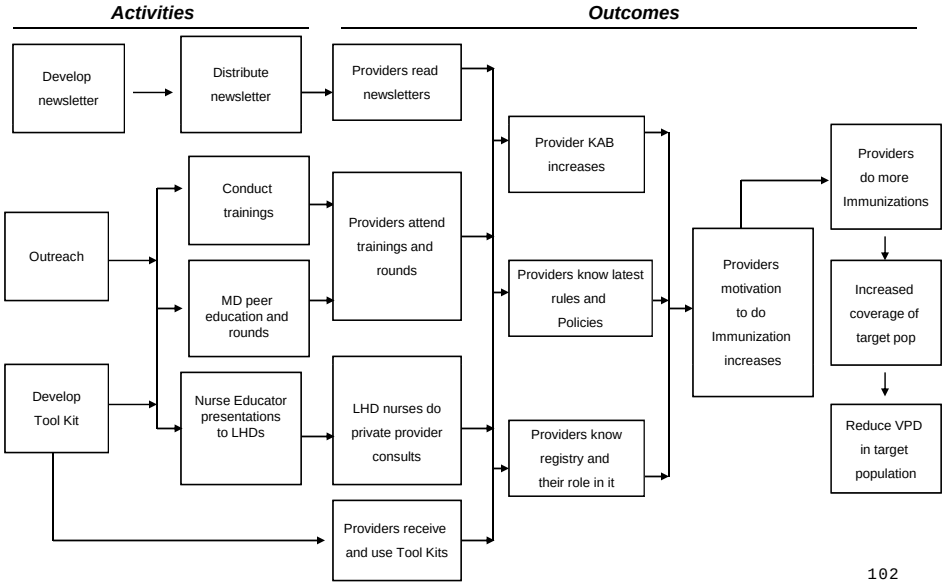
Other Ways to Justify…

- Proximity in time
- Accounting for/eliminating alternative explanations
- Similar effects observed in similar contexts
- Plausible mechanisms/program theory

Provider Ed: “Proving Higher Coverage is “Due to Us”

- Proximity in time
- Accounting for/eliminating alternative explanations
- Similar effects observed in similar contexts
- Plausible mechanisms/program theory

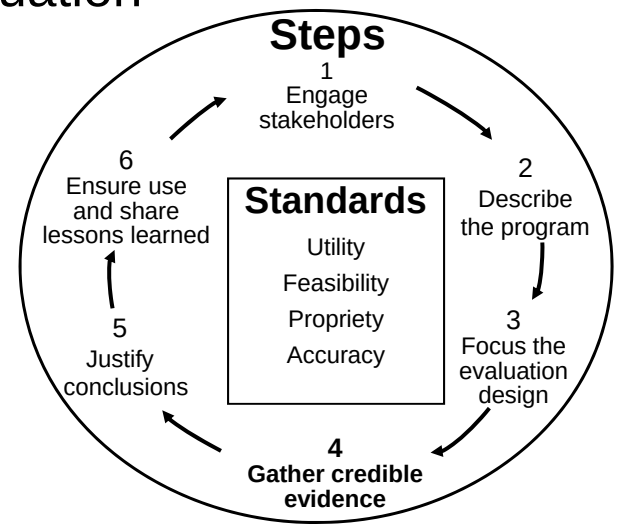
Provider Education: Logic Model as “Program Theory”



Intro to Program Evaluation

Step 4: Gathering Credible Evidence

CDC's Framework for Program Evaluation



Source: Centers for Disease Control and Prevention. Framework for Program Evaluation in Public Health. MMWR1999; 48 (No. RR-11).

Evaluation Plan

Evaluation Plan Matrix								
Evaluation Questions	Indicators	Data Sources	Data Collection Methods	Data Collection Procedures		Data Analyses		
				Person Responsible	Schedule	Procedure	Timeline	Person Responsible

Evaluation Plan—Core

Evaluation Questions	Indicators	Data Source(s)	Data Collection Methods

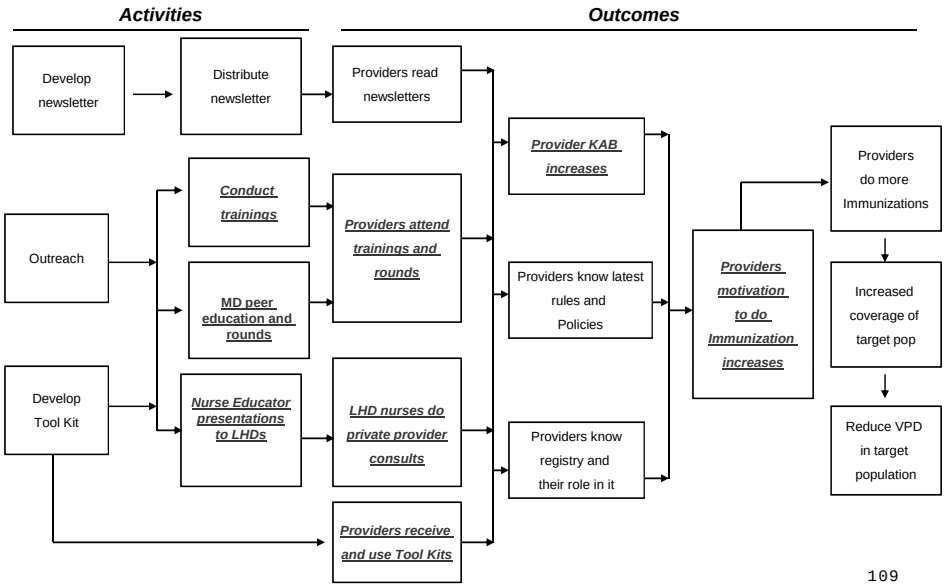
Developing Indicators

- "Gray" area between abstract concepts and methods/sources of data collection
- Indicators "operationalize" – restate abstract concept in tangible way
- May, but need not, be S-M-A-R-T objectives
- Tangible indicators help find/match appropriate data sources/methods

Developing Indicators

- May vary in level of specificity:
  - ***Concept:*** Timely jail screening
    - ***Indicator***: Inmates are screened prior to release, OR
    - ***Indicator:*** % inmates screened prior to release
    - ***Indicator:*** 80% of felony inmates screened within 24 hours of booking

Provider Education: Combined Evaluation Focus



Measurement Table: Scenarios 1-2 : Provider Education Program

Eval Focus Components	Indicators
Conduct immuno trainings	# trainings conducted in each region of the state
Nurse educator LHD presentations	# nurse educators presentations made to (targeted) LHDs # physician-hosted peer ed rounds at (targeted) hospitals
Physician peer ed rounds Provs attend trainings and rounds	# participants in trainings # participants completing series of trainings % participants by discipline % participants by region
Provs receive and use tool kits	% providers who report use of toolkit # "call-to-action" cards received from toolkit
LHD nurses do private prov consults	% trained nurses in LHDs will do provider consults with (targeted) provider practices in county
KAB increases	% providers showing increases in (targeted) KAB items % increase in provider KAB on (targeted) items
Motivation increases	% providers reporting increased motivation to immunize % increase in provider motivation to immunize

Group Exercise

- List the elements of your logic model that are to be included in your eval focus.
- "Operationalize" each element into
  - Specific eval questions—think about all 4 domains!
  - And/or tangible indicators

These Ways to Gather Evidence…

- Written survey
- Personal interview
  - individual, group
  - structured, semi-structured, conversational
- Observation
- Document analysis
- Case study
- Group assessment
  - brainstorming, delphi, nominal group, fishbowl
  - Role play, dramatization
- Expert or peer review
- Portfolio review
- Consensus modeling
- Testimonials
- Perception tests
- Hypothetical scenarios
- Storytelling
- Geographical mapping
- Concept mapping
- Freelisting
- Sociograms
- Debriefing sessions
- Cost accounting
- Photography, drawing, art, videography
- Diaries/journals
- Logs, activity forms, registries

Cluster Into These Six Categories…

- Surveys
- Interviews
- Focus groups
- Document review
- Observation
- Secondary data analysis

Choosing Data Collection Methods

- Function of ***context***:
  - Time
  - Cost
  - Ethics
- Function of ***content*** to be measured:
  - Sensitivity of the issue
  - "Hawthorne effect"
  - Validity
  - Reliability

Reliability and Validity

- ***Reliability***: stability and consistency of a measurement
- ***Validity***: accuracy of a measurement to assess what it is intended to measure

Trade-offs of Different Data Collection Methods

Method/Factor	Time	Cost	Sensitive Issues	Hawthorne Effect	Ethics
Survey: Mail					
Personal Interview					
Focus Groups					
Document Review					
Survey: Phone					
Observation					
Secondary Data					

Data Collection Methods

Methods	Advantages	Disadvantages
Surveys	■Anonymity possible ■Can administer to groups ■Efficient & cost effective	■Forced choices is limiting ■Wording may bias response ■Impersonal
Individual interviews	■Can build rapport ■Can probe for more info ■Can get breadth/depth of info	■Time consuming ■Expensive ■Interview style may bias
Focus groups	■Can get breadth & depth of info in short time frame ■Can convey key info re program	■Need trained facilitator ■Time consuming to analyze responses
Observation	■Can assess fidelity as activities occur	■Interpretation of behavior difficult ■Expensive & time consuming
Document review	■Info already exists ■Doesn't disrupt program	■Depends on quality of info ■Time consuming

Measurement Table: Scenarios 1-2 : Provider Education Program

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KAB increases	% providers showing increases in (targeted) KAB items % increase in provider KAB on (targeted) items
Motivation increases	% providers reporting increased motivation to immunize % increase in provider motivation to immunize

Measurement Table: Provider Education Program

Indicators	Methods/Sources
# trainings conducted in each region of the state	Training logs
# nurse educators presentations made to (targeted) LHDs # physician-hosted peer ed rounds at (targeted) hospitals	Training logs
# participants in trainings # participants completing series of trainings % participants by discipline % participants by region	Training logs Registration info
% providers who report use of toolkit # "call-to-action" cards received from toolkit	Survey of providers Analysis/count of call-to-action cards
% trained nurses in LHDs will do provider consults with (targeted) provider practices in county	Survey of nurses, survey or providers, or training logs
% providers showing increases in (targeted) KAB items % increase in provider KAB on (targeted) items	Survey of providers, or focus groups, or intercepts
% providers reporting increased motivation to immunize % increase in provider motivation to immunize	Same

Eval Plan—Provider Ed Program

Evaluation Questions	Indicators *Info I need to have be able to answer question*	Data Source(s)	Data Collection Methods
Were trainings conducted?	# of trainings conducted	Training log	Review of logs
Did providers attend trainings?	% of invited providers who attended trainings % of providers who completed the whole series	Travel Records Sign-in sheets	Review of sign-in sheets for all the sessions
Did training increase KAB?	% providers who showed increase in KAB % Increase in KAB	Pre- and post-test results Report of changes in practice	Administer Pre- & Post-tests Survey 6 months following training

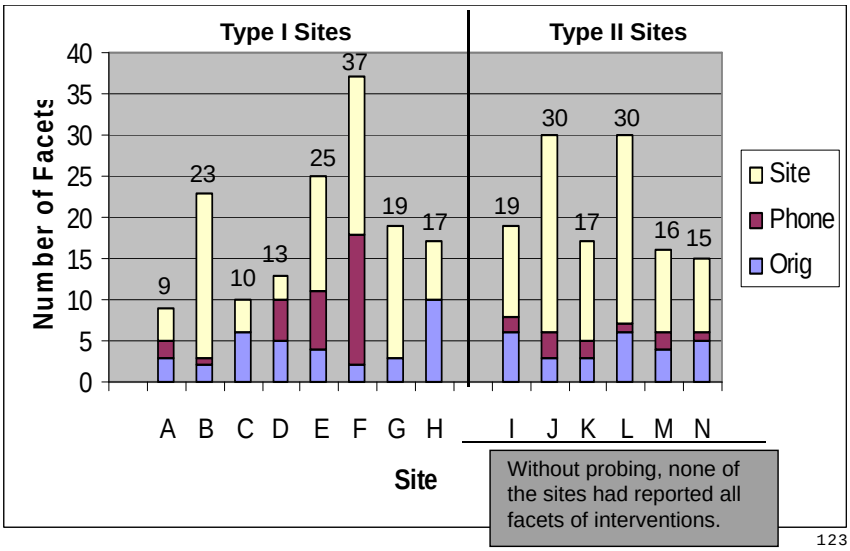
Tips for Data Collection

- Use existing data when feasible
- Understand agency policies and regulations that may effect data collection
- Identify who will be responsible
- Be clear about the data you want to collect and sensitive to the time and effort needed to be expended by the data providers
- Design instruments as needed
- Code instruments for easier analysis.

Using Mixed Data Sources and Methods

- Using more than one data source and/or data collection method.
- Advantages:
  - Allow examination of different facets of the same phenomenon
  - Obtain comprehensive information
  - Increase validity of results

Triangulation Helps! # of Project "Facets" ID'd at Each Stage of Data Collection



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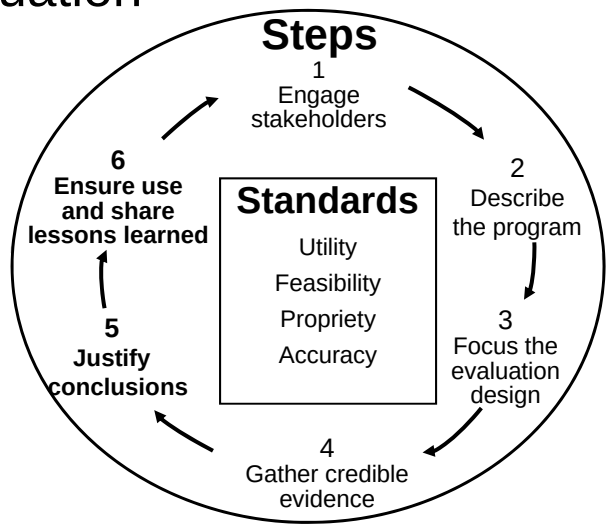
Intro to Program Evaluation

Steps 5-6. Justifying Conclusions and Using Lessons Learned

CDC's Framework for Program Evaluation



Source: Centers for Disease Control and Prevention. Framework for Program Evaluation in Public Health. MMWR1999; 48 (No. RR-11).

Now that I have this data, what do I do with it?

- Create a data management system
- Analyze your data
  - Quantitative
  - Qualitative

Data Management Plan

- Determine data management responsibilities
- Determine what software, if needed, will be used to analyze data
- Review the data for completeness and accuracy
- Transfer/transcribe data
- Code data
- Enter data

Analyzing Data—Considerations

Qualitative Methods

- Review transcripts thoroughly
- Categorize similar findings (coding, subcoding)
- Consider patterns
- Depending on the analysis, specific qualitative analysis skills may be needed

Quantitative Methods

- Develop a database for all fields from instrument
- Depending on type of analysis, specific quantitative skills may be needed

Justifying Conclusions

"It is not the facts that are of chief importance, but the light thrown upon them, the meaning in which they are dressed, the conclusions which are drawn from them, and the judgements delivered upon them."

– Mark Twain

Steps 5: Justifying Conclusions

- Analyzing and synthesizing data are key steps now
- BUT REMEMBER: "Objective data" are interpreted through a prism of stakeholder "values"
- Seeds planted in Step 1 are harvested now. What did we learn in stakeholder engagement that may inform what we analyze and how?

Reminder: Some Prisms

- Cost and cost-benefit
- Efficiency of delivery of services
- Health disparities reduction
- Population-based impact, not just impact on those participating in the intervention
- Causal attribution
- “Zero-defects”

Developing Recommendations

Recommendations should be:

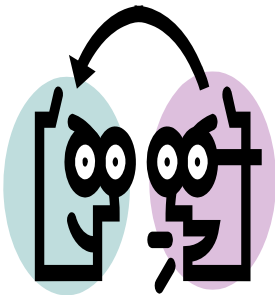
- Linked with the original purpose of your evaluation.
- Based on answers to your evaluation questions.
- Linked to findings from your evaluation
- Tailored to the users of the evaluation results to increase ownership and motivation to act.

Steps 6: Using Lessons

- The ultimate payoff
- Enhanced by work done in early steps!

Ensure Use and Share Lessons Learned

- Share the results and lessons learned from the evaluation with stakeholders and others
- Use your evaluation findings to modify, strengthen, and improve your program



How to Share the Evaluation Results/Recommendations

- Consider information needs of the audience/stakeholders.
- Tailor message and format of dissemination to the users of the evaluation results
  - Oral
  - Written
    - Full Report
    - Executive Summary

Type of Dissemination Methods

- **Evaluation Reports**
  - Provide an executive summary.
  - Use examples, graphics, quotes to highlight findings.
  - Present data simply and concisely.
  - Use active verbs to shorten sentences.
  - Organize results by evaluation question.

Type of Dissemination Methods

- **Oral Presentations**
  - Place evaluation in the context of the program.
  - Use slide show; provide handouts
  - Involve audience in discussion of how to use findings to improve program, help set policy, etc.

Components of Effective Report

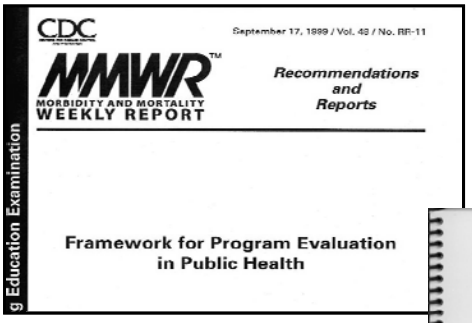
- Include an executive summary
- Describe the stakeholders and involvement
- Describe features of the program, include the logic model
- Outline key evaluation questions
- Include a description of the methods, methodological strengths and weaknesses
- Present results and conclusions into context (what is reasonable at this point and how the results should be interpreted)

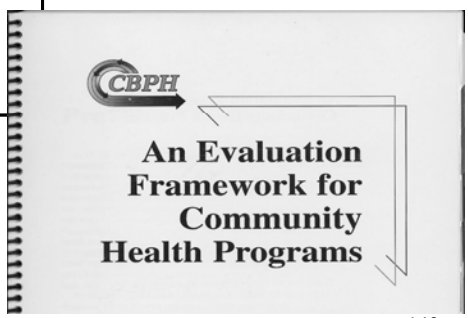
- Translate findings into recommendations
- Minimize technical jargon
- Provide detailed information in appendices
- Use examples, illustrations, graphics, and stories
- Involve stakeholders in preparation of the report
- Consider how the findings might affect others
- Develop additional communication products suited to a variety of audiences, for sharing the results

Intro to Program Evaluation

Life Post-Session

Helpful Publications @ **www.cdc.gov/eval**





Helpful Resources

- NEW! Intro to Program Evaluation for PH Programs—A Self-Study Guide: http://www.cdc.gov/eval/whatsnew.htm
- Logic Model Sites
  - Innovation Network: http://www.innonet.org/
  - Harvard Family Research Project: http://www.gse.harvard.edu/hfrp/
  - University of Wisconsin-Extension: http://www.uwex.edu/ces/lmcourse/
  - CDC/DASH:http://www.cdc.gov/healthyyouth/evaluation/resources.htm #4
  - CDC/STD: http://www.cdc.gov/std/program/progeval/TOC-PGprogeval.htm
- Texts
  - Kellogg Foundation Logic Model Development Guide: www.wkkf.org
  - W.K. Kellogg Foundation Evaluation Resources: http://www.wkkf.org/programming/overview.aspx?CID=281
  - Rogers et al. Program Theory in Evaluation. New Directions Series: Jossey-Bass, Fall 2000
  - Chen, H. Theory-Driven Evaluations. Sage. 1990

Community Tool Box
http://ctb.ku.edu