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Introduction to Evaluating
Health Promotion Programs


November 23-24, 2004

Facilitators:

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Format of Workshop



During the workshop participants will:

- Apply lecture materials and other practical tools to small group exercises
- Interact with peers and workshop facilitators to address questions and issues arising from the application of the workshop material to real and hypothetical issues

Learning Objectives



1. To understand the purpose of program evaluation
2. To be familiar with the steps involved in planning program evaluations
3. To be familiar with the quantitative and qualitative methods used to evaluate health promotion programs
4. To develop evaluation instruments
5. To have fun

Warm-up exercise



- Use each letter of the word EVALUATION to create a new word that describes your feelings about, or experiences with, program evaluation
- EXAMPLE: E= evidence, effective, exciting, evil....

Definitions:



- **Program** – any group of related activities carried out to achieve a specific outcome or result
- **Example:** To promote sexual health among adolescents = brochures, presentations, sexual health clinics, condom distribution...

Definitions:



- **Program Evaluation** – “The systematic gathering, analysis and reporting of information to assist in decision-making.”

Ontario Ministry of Health, Public Health Branch (1996)

Overview



Program Evaluation has evolved:

- From rigid scientific methods to evaluate outcomes to a stronger focus on utility, relevance, practicality
- From externally driven to participatory
- From proving the success or failure of a program, to continuous feedback and improvement

Why evaluate?



1. To assess effectiveness/impact of a program
2. To be accountable to key stakeholders (funders, clients, volunteers, staff and community)
3. To identify ways to improve a program (what works/doesn't work and why?)

Why evaluate?



4. To compare programs with similar programs being implemented elsewhere
5. To assess the economic efficiency of a program (**cost benefit** or **cost effectiveness** analysis)
6. To guide development of dissemination materials (for promotion, advocacy, fundraising...)

35 Different Types of Evaluation



- Needs assessment
- Accreditation
- Cost-benefit
- Effectiveness
- Efficiency
- Formative
- Summative
- Goal-based
- Appraisal
- Risk Analysis
- Process
- Outcome
- Implementation
- Monitoring
- Impact
- Evaluability assessment
- Quality review
- Internal
- ... etc, etc.

(McNamara, C., Basic Guide to Program Evaluation, www.mapnp.org)

Our focus: 3 Common Types of Evaluation



- Formative
 - Guides program development
- Summative (Process)
 - Documents process of program implementation
- Summative (Outcome)
 - Documents program impacts

Both summative forms of evaluation together provide a judgement about the program

Formative evaluation



- Assesses process of planning/developing a program
- Helps to ensure that programs are developed in accordance with stakeholder/community needs
- Identifies how/why key decisions were made

Process Evaluation



- Assesses the procedures and tasks involved in implementing a program (“what’s happening?”)
- Sometimes known as program tracking or monitoring, implementation assessment

Components of Process Evaluation



- # and type of people reached by program
- quantity and type of activity/service provided
- Description of how services are provided
- Quality of services provided (participant satisfaction)

Outcome evaluation



- Assesses extent to which program achieved its intended purpose (ie., did desired change take place?)
- In health promotion, outcome evaluations usually tied to achievement of program objectives

Components of Outcome Evaluations THE HEALTH COMMUNICATION UNIT
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- Changes in awareness
- Changes in knowledge
- Changes in attitudes
- Changes in behaviours
- Changes in policy
- Changes in social/physical environment
- Changes in morbidity/mortality rates
- Cost effectiveness/cost benefit analysis

Evaluation Questions by Evaluation Type THE HEALTH COMMUNICATION UNIT
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1. Is there a need for the program?
2. Is there evidence to demonstrate the effectiveness of the approach(es) used in this program?
3. Is the program being implemented as intended?
4. Are there changes in knowledge, attitudes, intentions?
5. Are there changes in behaviour?
6. What is the population impact of the program?
7. What is the environmental impact of the program?


Commonly Used Methods for Different Evaluation Types THE HEALTH COMMUNICATION UNIT
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TYPE (purpose)	COMMONLY USED METHODS
Formative (needs assessment, issue mapping)	Needs assessment, Knowledge synthesis, focus groups
Process/Implementation (understanding, improvement, capacity building)	Documentation review Interviews with program delivery agents Interviews/surveys of clients Focus groups
Outcome (environmental impacts, behavioural impacts – for program justification)	Population surveys Client surveys

Steps in Evaluation Process



1. Get ready to evaluate (clarify your program)
2. Engage stakeholders
3. Assess resources for evaluation
4. Design the evaluation
5. Determine appropriate methods of measurement and procedures
6. Develop workplan, budget and timeline for evaluation
7. Data collection
8. Data analysis
9. Interpretation and dissemination of results
10. Take action



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Step 1: Clarify Your Program

Pre-requisites for evaluation



1. Clearly defined goals and objectives
2. Identified population(s) of interest (aka program participants or recipients)
3. Well defined activities implemented in a prescribed manner
4. Plausible linkages between objectives and activities
5. Clearly specified indicators tied to objectives and activities
6. Resources to conduct evaluation (time, money, person-power, technical expertise, equipment)

Program Goal: THE HEALTH COMMUNICATION UNIT
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- Statement summarizing ultimate direction or purpose of program (aka purpose, mission)

Examples:

- To foster a school environment that enables students to make healthy choices (*positive outcome goal*).
- To reduce the incidence of alcohol-related harm in Community X (*problem reduction goal*).

Program objectives THE HEALTH COMMUNICATION UNIT
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- A brief statement specifying desired impact or effect of a program (i.e., how much of what happens, to whom, by when)

Specific (clear and precise – specific event or action identified)
Measurable (quantifies amount and direction of change)
Appropriate (consistent with program goal)
Realistic
Time-limited

e.g. decrease percentage of adult nonsmokers who report they have been exposed to ETS in prior 7 days from 26% in 2003 to 20% in 2005

Types of objectives THE HEALTH COMMUNICATION UNIT
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- 1. Process/activity** (aka output) Example: "To implement peer-led substance abuse prevention programs at all area high schools by September 2004 ."
- 2. Short-term** Example: "To increase the level of knowledge of low-risk drinking practices."
- 3. Long-term** Example: "To reduce the proportion of youth (12-19 year olds) who consume alcohol at least once a week."

Types of objectives



- **Benchmarked vs. Open-ended**
- **Benchmark:** To increase the proportion of smoke-free homes in York Region to 90% by the year 2010
- **Open-Ended:** To increase the proportion of smoke-free homes in York Region by the year 2010.

'Bench-marking' objectives



Choice to set specific change targets depends on:

- Knowledge of existing prevalence of condition to be changed in community (ie., 'baseline')
- Knowledge of possible magnitude of change (what's achievable)
- Confidence in ability of intervention to bring about desired change
- Ability to collect data identifying degree of change

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Population of Interest



- Groups taking part in/served by program

- Aka: target group, priority group, participants, audience, community of interest

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Linking Objectives and Activities



- | | |
|--|--|
| <ul style="list-style-type: none">▪ Prevention<ul style="list-style-type: none">➢ media and school-based education➢ retail controls▪ Protection<ul style="list-style-type: none">➢ smoke-free public places➢ smoke-free workplaces➢ smoke-free homes | <ul style="list-style-type: none">▪ Cessation<ul style="list-style-type: none">➢ 1-800 line➢ access to services/supports➢ media-based education➢ health care provider advice |
|--|--|

Pre-requisites for evaluation THE HEALTH COMMUNICATION UNIT
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Indicators THE HEALTH COMMUNICATION UNIT
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- Variable that can be measured in some way (sign that something happened)
- Used as measures to assess extent to which program objectives have been met

Matching indicators to objectives THE HEALTH COMMUNICATION UNIT
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- **Promoting healthy food choices in the workplace**
- **Process/Activity/Output indicators** - # of educational sessions, # of participants, % of participants rating sessions as 'excellent' or 'good', # of brochures distributed, # of meetings with key stakeholders re. development of supportive environments and policies promoting healthy eating in the workplace.

Matching indicators to objectives



Short-term indicators - % of employees reporting increased knowledge of healthy food choices, % of employees reporting increased knowledge of health risks associated with unhealthy choices, % of employees reporting intentions to practice healthy eating, % of workplaces committed to creating healthy environments and policies supporting healthy food choices

Matching indicators to objectives



• **Long-Term indicators:** % of employees making healthy food choices, % of workplaces adopting policies promoting healthy food choices, % of workplace cafeterias offering healthier range of food choices, long-term change in incidence of heart disease at workplaces taking part in program.

Sources of Health Promotion Indicators



- Health Canada website (search 'indicators') www.hc-sc.gc.ca
- U.S Healthy People 2010 Local Health Indicators www.healthypeople.gov/LHI
- Canadian Council on Social Development www.ccsd.ca
- Federation of Canadian Municipalities quality of life reporting system www.fcm.ca
- "Indicators that Count: Measuring Population Health at the Community Level" www.utoronto.ca/chp/p-titles.htm

Pre-requisites for evaluation



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Putting the pieces together: A Program Logic Model



- A **logic model** is a graphic depiction of the relationship between the key elements of a program (i.e., goals, objectives, populations of interest, strategies, activities and indicators)
- Logic models are a useful resource for program evaluation

How logic models help an evaluation effort



- Matching activities with associated objectives and indicators;
- serving as a resource for evaluability assessment;
- aiding in the identification of success indicators;
- demonstrating accountability;
- providing a starting point for engaging stakeholders in participatory evaluations.

What do Logic Models Look Like?

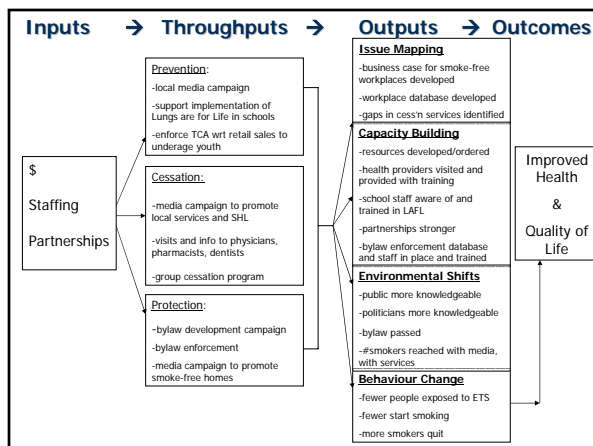


- Usually depicted in chart form using boxes & arrows to show relationships.
- Most effective when printed on one page.
- No standard format as it can be tailored to meet the needs of the program and the stakeholders. Also depends on intended purpose.

Basic Elements of a Logic Model



- Inputs – resources dedicated to the program
- Throughputs – program components and activities
- Outputs – products, performance indicators
- Outcomes – impacts of program activities (goals of the program)



Level of Accomplishment	Performance indicators
Issue Mapping	<ul style="list-style-type: none"> •extent of problem or issue outlined •nature of problem or issue defined •gaps in knowledge identified •gaps in service identified
Capacity Building	<ul style="list-style-type: none"> •resource, new service developed •resource disseminated •staff trained •interagency collaboration improved •funding opportunities identified and proposals submitted •human resources recruited •tracking/evaluation system established
Environmental Shift	<ul style="list-style-type: none"> •policy changed, bylaw passed •barriers to service delivery removed •knowledge, attitudes, awareness increased •supportive media coverage •program reach
Behaviour Change	<ul style="list-style-type: none"> •Shift in stage of change •Increased quit attempts, increased sustained quits •Fewer and later starters •Reduced smoking in home, workplace, public places •Reduced sale and supply to youth

Source: Ontario Tobacco Research Unit, 2003

Issue Mapping			
Output	Indicators	Target	Data Sources
Business case for smoke-free workplaces developed	<ul style="list-style-type: none"> •Business case is accurate, easy to read •Business case is in paper format and ppt presentation format 		<ul style="list-style-type: none"> •Literature •Health Canada website •Tobacco control websites
Workplaces database developed	<ul style="list-style-type: none"> •All workplaces listed in database, with info on size, type, address, smoking policy 		<ul style="list-style-type: none"> •Workplace directories •New: Excel spreadsheet or Access database
Gaps in service identified – cessation	<ul style="list-style-type: none"> •Needs assessment developed and implemented •Local data collected and synthesized in reports 		<ul style="list-style-type: none"> •New: survey of community agencies and workplaces

Capacity Building			
Output	Indicators	Target	Data Sources
Resources developed/ordered	<ul style="list-style-type: none"> •Local cessation services pamphlet updated •Smoke-free homes pamphlet ordered and a plan for distribution in place 		<ul style="list-style-type: none"> •Survey of community agencies and workplaces
Health providers visited and provided with training	<ul style="list-style-type: none"> •% smokers receiving direct info from health professionals regarding smoking 		<ul style="list-style-type: none"> •CCHS (2002, 2004) •CTUMS
School staff aware of and trained in LAFL	<ul style="list-style-type: none"> •% teachers in Grades 6-8 using LAFL 		<ul style="list-style-type: none"> •New: survey of teachers in Grade 6-8
Partnerships stronger	<ul style="list-style-type: none"> •# active members on tobacco-free coalition increases 		<ul style="list-style-type: none"> •Tobacco-free coalition meeting attendance
Bylaw enforcement database and staff in place and trained	<ul style="list-style-type: none"> •2 FTE staff hired •6 Inspectors assigned and trained for bylaw enforcement •Staff trained to use workplace database to track visits, tickets issued, information sent, etc. 		<ul style="list-style-type: none"> •Health Unit administrative records

Environmental Shifts			
Output	Indicators	Target	Data Sources
Public more knowledgeable about ETS	Proportion of population with negative opinions about smoking in public places		CTUMS
Politicians more knowledgeable about ETS and public opinion	Proportion of politicians who support strong controls on smoking in workplaces and public places		Council meeting minutes Survey of politicians
Bylaw passed	Bylaw passed No of few concessions made to water down bylaw.		Bylaw
Fewer retailers sell tobacco to minors	Proportion of youth who bought cigarettes Proportion of youth asked age/ID Proportion of youth had store refuse to sell them tobacco Proportion of youth asking others to buy cigarettes for them		CCHS, CTUMS
Decreased social acceptability of smoking	Proportion of population with negative opinions about smoking in public places		CTUMS

CTUMS	CCHS
500 youth and 500 adults per province Ages 15 and up	130,000 total in Canada
Twice a year	Once every 2 years (started 2001)
Provincial level and national-level results	Results can be broken down to health unit regions
Detailed tobacco items	Tobacco is one of many issues covered

Behaviour Change			
Output	Indicators	Target	Data Sources
Fewer people exposed to ETS in public places and workplaces	Proportion of people reporting restrictions on smoking in the home Proportion of people reporting restrictions on smoking at work		CTUMS, CCHS
Fewer students in Gr 6-8 start smoking	Proportion of youth classified as nonsmokers, experimental smokers (<100) daily smokers, nondaily smokers, former smokers		CCHS, CTUMS School Smoking Profile (U of Waterloo)
More smokers quit	Proportion of smokers who tried to quit in last 2 years Proportion who quit in last year Proportion of population that smokes daily Proportion of population that smokes nondaily		CCHS, CTUMS

Description of Levels Vary



- Terminology varies.
- Ensure you have reached a common understanding with all key stakeholders.
- Ensure you are consistent.

Terminology Varies



THCU Term	Alternatives
Goal	Purpose, Mission
Population of Interest	Target Group, Priority Group, Audience, Community of Interest
Objectives	Outcomes, Impacts, Effects
Indicator	Benchmarks, Criteria for Success
Strategies	Components, Initiative, Intervention
Activities	Process Objectives, Implementation Objectives
Resources	Budget, Assets, Inputs



Step 2: Engaging Stakeholders for Evaluation

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Step 2: Engage stakeholders



- Define who your stakeholders are
- Understand stakeholder interests and expectations
- Engage stakeholder participation
- Develop evaluation questions

Understanding Stakeholder Interests



- Identify all stakeholders
 - stakeholders of the program
 - stakeholders of the evaluation
- What do they want to know from the evaluation?
 - How can you meet their information needs?
- May need to prioritize stakeholder needs due to budget limitations

Engaging Stakeholder Participation



- clearly identify and communicate the benefits to stakeholders
- involve stakeholders in decision making at the beginning
- only expect involvement in things they are interested in
- get consensus on design and division of responsibilities (especially around data collection)
- do not burden them with unnecessary data collection or unrealistic timelines
- share results in formats tailored to different stakeholders
- celebrate your successes with stakeholders
- take action on evaluation results

Benefits of Participatory Evaluation Approaches



- helps to ensure the selection of appropriate evaluation methods (e.g., reading level, cultural appropriateness)
- helps to ensure that evaluation questions are grounded in the perceptions and experiences of the program participants
- helps to facilitate the process of empowerment (i.e., giving people greater control over programs and decisions affecting their health issues)
- helps to overcome resistance to evaluation by project participants
- helps to foster a greater understanding among project participants

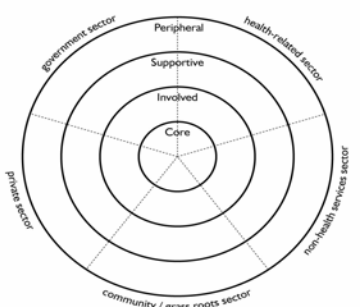
What are your stakeholders' evaluation questions?



- What do the different stakeholders want to know about your program?
 - Clients
 - Staff
 - Managers
 - Board members
 - Community partners
 - Funders

Worksheet 2

Levels of Stakeholders



Some Common Barriers to Stakeholder Buy-in



- Barrier: Workers resist evaluation, arguing that:
 - Data will not capture the full story of the program
 - Program impacts are not measurable
 - Evaluation is intrusive and counter to program philosophy

- Solution:
 - Regular communication/ involvement of all stakeholders in evaluation design, interpretation of results, decision-making about program changes

Some Common Barriers to Stakeholder Buy-in



- Barrier: Staff see evaluation as an 'add on' and find direct service more rewarding

- Solution:
 - Explicitly define evaluation as a standard operating procedure and part of everyone's job
 - Contract evaluation out

Some Common Barriers to Stakeholder Buy-in



- Barrier: skills and experience in evaluation is limited

- Solution:
 - Seek out local companies that do evaluation on a consulting basis
 - Link with a local university or college
 - Access supports from the Ontario Health Promotion Resource System

Some Common Barriers to Stakeholder Buy-in



- Barrier: Fear that weak or negative results may jeopardize a program
- Solution:
 - Frame evaluation as assisting with continuous quality improvement

Exercise 1: Engaging stakeholders in evaluation



1. What is your experience in involving different stakeholder groups in program evaluation?
2. What processes/structures did you put in place to enable stakeholder participation?
3. What worked well?
4. What, if anything, would you do differently?



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Step 3: Assess Resources for Evaluation

Step 3: Assess Resources



- Budget \$\$\$\$
- Staff availability
 - special skills of staff
 - interest in project
 - interest in learning new skills
- Support of partner organizations
- Equipment availability
 - photocopier, phones, computers, software
 - space
- Volunteer availability
- Time available before you need results

Worksheet 3

Resources for evaluation




- As a general rule, the World Health Organization (WHO) recommends that at least ten percent of a total program budget should be allocated to evaluation

Critical Questions for Assessing Resources



- What you need?
- What you have?
- What you can obtain (through partnerships, in-kind contributions, additional grants to support evaluation)?



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Step 4: Design the Evaluation

Step 4: Design Your Evaluation

- Select the type of evaluation to be conducted
 - What are your stakeholders' evaluation questions?
 - What is your program's stage of development?
 - What evaluations have already been done?
 - What resources do you have available?
- Design the evaluation approach



Step 4: Design Your Evaluation

- What is your program's stage of development?
 - Development
 - Implementation
 - Up and running
 - Sun setting (winding down)
 - Completed
 - Restarting

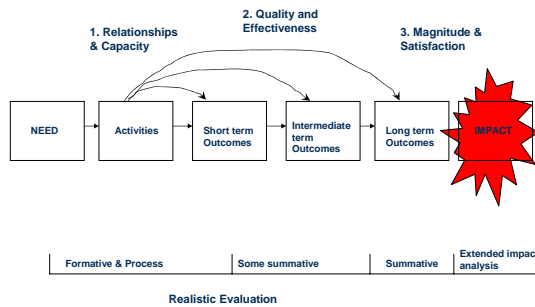


Step 4: Design Your Evaluation



- Formative (development or restarting a program)
- Process (during first two years of implementation)
- Summative/Outcome (after program has been operating for a few years)

Programs Evolve



Potential Barriers to Evaluation



- lack of interest among stakeholders; evaluation not a priority
- evaluation not a mandated requirement
- lack of evaluation skills/capacity
- inherent fear of evaluation (afraid of bad news, fear of change, fear of being judged personally)
- limited applications of past evaluation ('dusty report syndrome')
- lack of resources to implement evaluation
- evaluation viewed as a 'big thing' at the end of a program rather than a series of small activities over the course of a program

Strategies for overcoming barriers to consensus



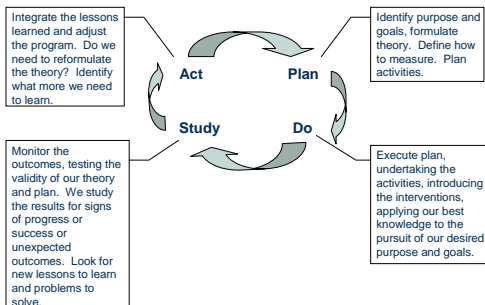
- create a 'milestone chart' documenting program achievements and 'successes' as a way of maintaining motivation and interest in evaluation
- establish and maintain clear, ongoing channels of communication about evaluation activities
- pick something easy to start with that will turn out well; promote this to demonstrate the value of evaluation
- provide evaluation training and capacity building activities that help participants to develop skills in areas of interest to them
- encourage a broad perspective and awareness that positive results are sometimes invisible without evaluation – evaluation can work by showing benefits you're not aware of

A CQI approach to evaluation



- Focus is not only on showing what we did well, or whether the program 'passed' or 'failed' but what we can do better and the changes we can make to improve our work!
- You measure what you need to know to improve your program and to determine whether it works (process and outcome)
- All evaluation becomes formative in some way
- Staff are encouraged to look for what is not working and why not

CQI Approach - PDSA Cycle



Scholtes, 1998. The Leaders Handbook (Based on the work of Dr. W. Edwards Deming)

Benefits



- Staff are more open to collecting information on how to improve their program
- Less threatening
- Increases likelihood results will be used
- Program planners can be more responsive to what is working and not working
- Creates a 'learning environment' for both program staff and funders

Drawbacks



- May be criticized for not being "objective" enough
- Need to develop a culture of critical assessment and quality improvement in order for the evaluation to be as objective as possible
- Requires staff time and training

Measuring Outcomes



- Ideally, we choose a design that will show that the 'intervention' (program) caused the desired effect
- Some designs are more powerful than others to measure cause and effect relationships
- Each design has strengths and weaknesses

Step 4: Design Your Evaluation



- Descriptive vs Analytical
- Descriptive
 - one time assessment; look at relationships
- Analytical
 - quasi-experimental; true experiments

Evaluation Designs




- One shot case studies/descriptive
 - X O
- Pre/post design
 - O X O
- Quasi-experimental designs
 - O X O
 - O O
- Experimental designs
 - R O X O
 - R O X O

O=Observation
X=Intervention
R=Randomization

Keys to Successful Evaluation Design



- Know the underlying assumptions of the design
- Limit as many biases as possible
- Acknowledge the evaluation's limitations. Do not over generalize.
- Cause and effect can be very difficult to show without an experimental design




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Step 5: Determine Appropriate Evaluation Methods


Part 1: Method Selection

Quantitative vs. Qualitative Evaluation



- **Quantitative** – application of numerical (statistical) data collection and analysis methods
- **Qualitative** – application of more in-depth, open-ended data collection and analysis methods
- Both methods are necessary to fully understand and appreciate the impact of health promotion programs

Quantitative vs Qualitative Evaluation



“Not everything that can be counted counts, and not everything that counts can be counted.”

Albert Einstein

Your Evaluation Toolbox



- The various data collection methods are like tools. No tool is “better” or “worse” than any other. Each tool has a different purpose.
- Like tools, data collection methods are problematic only when used for the wrong purpose.

Determine appropriate evaluation methods: your evaluation 'toolbox'



- Focus groups
- Face-to-face interviews
- Self-administered mailed questionnaire
- Telephone surveys
- Internet/e-mail surveys
- Process/tracking forms
- Program journals or 'diaries'

Your evaluation 'toolbox': Focus Groups



- Semi-structured discussion with 8-12 participants led by facilitator following outline
- Often used to pre-test/prepare for other evaluation methods (e.g., survey)
- Relatively quick and inexpensive evaluation method
- Provides in-depth contextual information
- Results are subjective, prone to influence of dominant participants

**Your evaluation 'Toolbox':
Face-to-face interviews**



- Useful for longer, more complex surveys, qualitative-only surveys, surveys of people with ESL, or limited literacy skills
- Interviewer can clarify questions, encourage participation and judge extent of participant involvement
- Validity of interview data can be threatened by social desirability and interviewer-participant interaction

**Your Evaluation 'Toolbox'
Mailed Questionnaires**



- Generates large amounts of data at relatively low cost
- Allows for anonymity
- Misunderstandings about questions cannot be addressed
- Low response rate, even when postage paid

**Your Evaluation 'Toolbox':
Telephone surveys**



- Roughly same advantages of face-to-face interview, though social desirability can still be a problem
- Advantageous if sample is geographically dispersed
- Dependent on availability of respondent at given point in time (becoming ever more challenging)

Your Evaluation 'Toolbox': Web-based Surveys



- Convenient for respondent
- Significant cost advantages: eliminates postage (up to \$2.50-\$3.00 per person) and data entry costs
- Efficient electronic reminder system allows for increased ability to follow up an increase response rate
- May still be problems with generalizability (not everyone has access)
- Concerns about anonymity/confidentiality

Web-based surveys



- Can be set up through web survey companies, such as SurveyMonkey.com or Circumnetworks.com, OR
- Use existing website infrastructure to launch web-based questionnaire, then analyze information from survey returns via traditional software (e.g., numerical into Excel, then SPSS)

Your Evaluation 'Toolbox': Process/Tracking Forms



- Collection of program implementation (process) measures in a standardized manner
- Fairly straightforward to design and use
- Can be incorporated into normal program administration routine
- Can be time-consuming

**Your Evaluation 'Toolbox':
Program Journals/Diaries**



- Detailed account of program implementation and perceptions about program
- Used primarily for process evaluations
- Helps to put other evaluation results into context
- Very inexpensive to collect
- Can be unstructured or structured (e.g., 'critical incident' technique)

**Selecting Evaluation Methods:
Group Exercise 2**




- Which evaluation method, or combination of methods, would you use in the following situations?
- a) An evaluation of a collective kitchen program for a group of low income women residing in a subsidized housing complex, many of whom have English as a second language
- b) An evaluation of a social marketing campaign promoting use of the emergency contraceptive pill for women age 18-34 living in Toronto.

**Evaluation 'Toolbox':
Exercise 2 (Continued)**



- c) An evaluation of smoking cessation counselling guidelines developed for health care professionals (physicians, nurse practitioners, etc.)
- d) An evaluation of an advocacy campaign aimed at increasing the number of community recreational facilities in York Region
- e) An evaluation of an injury and falls prevention program for seniors living within the catchment area of a rural community health centre in Eastern Ontario



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The Evaluation Toolbox:

Part I: Surveys and Questionnaires


Purpose of surveys



To collect information from a **sample** of the Population of interest, so that the results are:

- a) Representative of the population of interest and/or
- b) Generalizable to a larger population (e.g., community, region, province or country)

Advantages of Surveys



- Large volume of information can be collected within a relatively short time-frame
- Can be quantifiable and generalizable to entire population if appropriate sampling strategy used
- Standardized questions minimize interviewer bias

Disadvantages of Surveys



- More difficult to obtain comprehensive understanding of respondents' perspective (compared to focus groups or in-depth qualitative interviews)
- Resource-intensive (money, person-power)
- Specialized skills needed to process and interpret results
- Surveys are a 'snapshot in time' (usefulness of information is time-limited)

Open vs. Closed-Ended questions



- **Open-ended question** – Qualitative question designed to capture in-depth information about attitudes, beliefs and opinions of respondents.
- **Example:** What do you like about living in York Region?
- What can be done to prevent alcohol-related injuries among young people?

Open vs. Closed-Ended questions



- **Closed-ended question:** Standardized "scaled" question limiting respondent to a specific range of choices.
- **Example:**
Homelessness is a major health issue:
 - a) Strongly agree
 - b) Agree
 - c) No opinion
 - d) Disagree
 - e) Strongly disagree

Scaling for Closed-Ended Questions



Nominal Scale:

- Used to gather factual information from survey respondents
- Straight-forward way of collecting categorical information about opinions, beliefs and demographics of respondents
- Cannot be used to measure amount of anything other than percentages

Nominal Scale



Examples:

- Have you utilized the services of the sexual health clinic? yes no
- What do you like to spread on your toast?
 peanut butter jam margarine other

Ordinal Scales



- Closed ended survey items designed to gather information about frequency, duration or intensity

Ordinal Scales



Example:

- How often do you choose low-fat menu items at restaurants?

- ___ never
- ___ sometimes
- ___ often
- ___ always

Likert Scale



- Common example of ordinal scaling with a numerical value assigned to each response option

Likert Scale Example



- The Ontario government is doing an effective job of restructuring the province's health care system.

- 1._ strongly disagree
- 2._ disagree
- 3._ neutral
- 4._ agree
- 5._ strongly agree

Likert Scale Example



• How do you rate this seminar on cancer screening?

- 1._ poor
- 2._ fair
- 3._ good
- 4._ very good
- 5._ excellent

Interval Scale



- Ordinal scale with equal numerical differences between categories

- Interval scale items provide researchers with more precise measures of differences in amount.

Interval Scale Example



▪ How many times have you consumed alcohol over the past six months?

- ___ 0 times
- ___ 1-5 times
- ___ 6-10 times
- ___ 11-15 times
- ___ 16-20 times
- ___ > 20 times

Scaling



- Need to be wary of **habituation**, tendency for respondent to give same answer, (especially for longer surveys)

Tips for Questionnaire Design



1. **Specific** questions are better than **general** questions for collecting standardized data.

Tips for Questionnaire Design



- **General question:** How often have you attended the parent support group?
- **Specific question:** How often have you attended the parent support group?
 - _ once a week
 - _ two times a week
 - _ more than two times a week

Tips for Questionnaire Design



2. **Closed questions** are better than **open questions** for collecting standardized data

Tips for Questionnaire Design



- **Open question:** How do you feel you benefit from taking part in the parent support group?

- **Closed question:** How do you feel you benefit from taking part in the parent support group?
 - _ meet new friends
 - _ share experiences
 - _ get information on parenting
 - _ other (please specify)

Tips for Questionnaire Design



3. Use a 'forced choice' (yes/no) response format when a definite opinion is required.
- Example: Would you be more likely to attend the Parent Support group if it was offered in another location? (yes/no)

Tips for Questionnaire Design



- 4. Specific questions should be preceded by more general questions
 - **General:** How useful are the educational sessions provided in the Parent Support Group?
 - **Specific:** What changes to the educational sessions would you suggest?

Questions to avoid



- **Loaded questions** worded in a way that implies a 'correct' response
 - Example: Which of the following medications would you prescribe for stomach ulcers?
 - a) Brand A, favoured by over 90% of physicians; or
 - b) Brand B, a cheaper, generic substitute?

Questions to avoid



- **Loaded response categories** with an unbalanced range of choices
 - **Example:** How would you rate this workshop on program evaluation?
Very good excellent outstanding

Questions to avoid



- **Leading questions** that suggest a socially acceptable or correct answer:
- **Example:** As a result of taking part in the 'Lungs for Life' program are you more likely to give up your filthy smoking habit?

Questions to Avoid:



- **Double-barreled questions** – two distinct questions contained in a single question
- **Example:** Have you taken measures to protect your child from safety risks in the home, or do you keep a close eye on your child at home?

Tips for questionnaire design



1. Have draft of questionnaire reviewed by at least two external readers
2. Conduct a 'readability test' with a small sample of your population
3. Give yourself plenty of time: most questionnaires go through multiple revisions

Strategies for increasing survey response rate



- Postage paid (for mailed surveys)
- Incentives for participation
- Cover letter (for mailed surveys)
- 'user-friendly' layout – large, readable print, clear space for answers

Contents of Cover Letter



- who you are/what organization you're representing
- the purpose of the survey: why the survey is being conducted
- how the results will be used
- who the results will be shared with
- assurances re. anonymity/confidentiality
- contact information if the respondent has any questions/concerns

For more information...



Check out

- www.surveysystem.com/sdesign.htm

Group exercise 3



- Develop a six-item evaluation questionnaire for one of the following:
 - a) A pre-post knowledge questionnaire for seniors taking part in an injury prevention/home safety workshop
 - b) A questionnaire for members of a heart health coalition assessing the effectiveness of the coalition
 - c) A feedback form for a 'self-help' manual on making healthy food choices
 - d) Any other health-related issue

The 'Evaluation Clinic'




- Experiences?
- Questions?
- Challenges?
- Insights?



Guest Presenter:
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The Evaluation Toolbox

Part II: Focus Groups


Focus Group: Definition

- A formal, facilitated discussion with 8-12 participants on a specific topic.
- Purpose of a focus group is to collect in-depth information from a group of people representative of your population of interest (e.g, seniors, adolescents)



Advantages of Focus Groups

- Allows for in-depth discussion and probing on an issue
- Provides large volume of information at relatively low cost (compared to other data collection methods)
- Opinions of more people can be obtained within a shorter time frame (compared to surveys/interviews)



Limitations of Focus Groups T H
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- Potential for participants to influence opinions of other participants
- Do not provide quantifiable information about a population
- Number of questions that can be asked is limited (more participants = fewer questions)

Limitations of Focus Groups T H
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- Quality of information is very dependent on skills of the moderator
- May not be appropriate for some populations/topics due to strong influence of social context on responses
- Can be difficult to conduct with populations with hearing, cognitive or communicative impairments

Steps in Conducting a Focus Group T H
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1. Clarify purpose of group
2. Assess resources to conduct group
3. Decide on methods and procedures
4. Write moderator's guide
5. Recruit focus group participants
6. Coordinate logistics
7. Facilitate focus group
8. Analyze focus group data
9. Interpret and disseminate results
10. Take action

1. Clarify purpose of group



- Identify needs/priorities of population of interest
- Pilot test new materials
- Pilot test other data collection instruments (e.g., questionnaire)
- Assess beliefs, attitudes opinions of population of interest
- Evaluate impact of program or activity

2. Assess Resources to Conduct Group



- **Budget:** facilities, equipment, honoraria for participants, data analysis expenses.
- **Staff:** availability and skill level
- **Facilities and equipment**
- **Time**

3. Decide on Methods and Procedures



Need to determine:

- Number of groups
- Size of groups
- Composition of groups

4. Write moderator's guide



- Moderator's guide is the outline of the discussion to be carried out by the focus group.
- Writing the guide involves deciding on the topic(s) to be discussed and translating the topics into logically ordered questions for discussion

Format of Moderator's Guide



1. Introduction/purpose of focus group, ground rules
2. Warm-up (general questions that set the stage for the discussion)
3. Key content section (more specific questions and related probes)
4. Summary (clarification, additional information)
5. Closing (explain next steps, how information will be used)

Tips for developing questions



- Number of questions usually limited to 10-12 for a two hour focus group
- Refer back to reason for wanting to conduct focus group (step 1)
- Focus on 'need to know', not 'nice to know'
- Questions should be general in nature, with suggested probes to stimulate discussion when necessary

Probes T H
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- Short comments or questions that can be used to stimulate a more in-depth discussion of topics/sub-topics
- Probes used only when moderator feels that participants require further direction or encouragement in their discussion

Facilitating Focus Group Sessions T H
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Role of Moderator:

- Creates a non-threatening, supportive atmosphere that encourages all participants to share their views
- Builds rapport with participants
- Facilitates interaction among participants
- Covers all topics/questions, interjecting with probes and summaries when necessary

A good moderator: T H
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- Doesn't need to be (or pretend to be) an expert on the topic(s) under consideration
- Can build a rapport with participants
- Can probe issues without reacting to, or influencing, participants
- Can lead the discussion without becoming side-tracked
- Can control opinionated participants and encourage input from reluctant participants
- Keeps the discussion flowing with minimal response time
- Promotes discussion among, not between, participants

**Exercise 4:
Facilitating Focus Groups**



- Each group select a moderator and a recorder
- Using the moderator's guide provided, groups discuss and identify emerging public health issues
- Record the participants' responses on the flipcharts provided.

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**Step 8: Process the Data
Quantitative Data**



- Quantitative information is easier to analyze when it has been entered as a number. In other words all response categories should be assigned a number
- Use data analysis software (EXCEL, SPSS)
- Verify 10% of the data entry to eliminate errors. Most errors are systematic
- What if you don't have data analysis software?

Step 8: Analyze the Data
Quantitative Data



- For most surveys or tracking methods simple descriptive statistics (frequencies, means, ranges, etc.) are all that is needed.

- More complex analysis may be required when comparisons are needed between subgroups of the population or to test changes over time.

Step 8: Process the Data
Qualitative Data - Focus Groups



1. Transcribe the discussion
2. Segregate and organize the data into logical and meaningful segments
3. Read through all material and formulate the different themes that are evident
4. Coding - Read through again comment by comment and assign a theme(s)

Step 8: Process the Data
Qualitative Data - Focus Groups



- Focus group #1
 - Area 1: What Safety Issues are discussed with kids
 - comment 1
 - comment 2
 - etc.
 - Area 2: What problems do parents face with enforcing safety
 - comment 1
 - comment 2
 - etc.
- Focus group #2
 - Area 1: What Safety Issues are discussed with kids
 - comment 1
 - comment 2
 - etc.
 - Area 2: What problems do parents face with enforcing safety
 - comment 1
 - comment 2
 - etc.

Exercise 5: Analyzing evaluation data



- Trade your focus group notes with another group
- Review the notes to identify the key themes and issues for each question.
- Record the key themes and issues on the flipcharts provided.

Step 9: Presenting Evaluation Data



- It is easy to become overwhelmed with too much information, so focus on the evaluation questions and only present the information which answers those questions.
- Choose a format which will highlight the key results.
- Keep it simple.
- Pictures are worth a thousand words.

Response Rates for Each Province



	Number Sent	Number Received and Used in analysis	Response Rate %
Ontario	155	117	75.5
Quebec	173	113	65.3
British Columbia	99	72	80
Manitoba	112	70	62.5
Nova Scotia	90	54	60
Alberta	71	52	73
Saskatchewan	31	23	74
New Brunswick	31	22	71
Prince Edward Island	8	7	87.5
Newfoundland	8	6	75
North West Territories	7	2	28.6

Step 9: Interpret and Disseminate Results



- Results need to be interpreted within the context of the purpose of the project.
- Keep your audience in mind when preparing report. What do they need and want to know?
- Consider the limitations of your design and instruments
 - Possible biases (selection, non-response, measurement, etc.)
 - Validity of results
 - Reliability of results
 - Generalizability of results

Step 9: Interpret and Disseminate Results



- Are there alternative explanations for your results?
- How do your results compare to other similar programs?
- Are different data collection methods used to measure your program showing similar results?
- Are your results consistent with theories which have been supported through previous research?
- Are your results similar to what you expected? If not, why do you think they may be different?

Dissemination of Results



- Goal: Share the information in order to empower people to make changes.
- What is needed to do this?
 - Who do you disseminate to?
 - What format do you use? What has been effective?
 - What information do you give them?

Step 10: Take Action



- Involve your stakeholders in interpreting and taking action on your results
- Revisit your original goals of data collection.
- Write a list of recommended actions
- Prioritize those changes which are most important and most feasible
- Set up an action plan to implement changes
- Implement!

Step 10: Take Action



- Look for opportunities to improve your program
- Consider improving one or two areas that will have the largest positive impact
- What are some of the programs strengths? How can you build on these areas?

Disclaimer



- The Health Communication Unit and its resources and services are funded by the Public Health Branch, Ontario Ministry of Health and Long-term Care. The opinions and conclusions expressed in this paper are those of the author(s) and no official endorsement by the Ministry of Health and Long-term Care, Public Health Branch is intended or should be inferred.
