

The presentation will begin shortly. There will be no audio until then.

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Developing and Selecting Indicators for Evaluation

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bjectives

- Define what an indicator is and its purpose
- Describe how indicators relate to your program or project logic model
- Understand the criteria for selecting a good indicator
- How to explain or share an indicator

What is an indicator?



Ask participants to give their definition

“An indicator is a **documentable** or **measurable** piece of information regarding some aspect of the program in question”

— Goldie MacDonald
Centers for Disease Control and Prevention



As a starting point, what is an indicator? The term is used widely with variation in meaning and application. An indicator is a documentable or measurable piece of information regarding some aspect of the program in question (e.g., characteristics of the program, facets of implementation or service delivery, outcomes). In many cases, indicators provide a meaningful marker or approximation of the status of program implementation or outcomes. For the purposes of monitoring and evaluation, an indicator requires an operational definition and methodologically sound, rigorous data collection. An indicator may use qualitative or quantitative information.

EXAMPLE

- Proportion of schools reporting the implementation of at least one sun safety policy
- Average age at which young people first smoked a whole cigarette
- Children who have health insurance the entire year
- Percentage of North Dakotans age 50-75 who have had a colonoscopy within the last 10 years
- Fiscal resources allocated to address colorectal cancer screening
- Implementation of evidence-based interventions across the socio-economic model (i.e., individual, interpersonal, organizational, community, and public policy)



Don't confuse your indicator with your goal. Your goal is a target; it is where you want to be. Your indicator is independent of that and merely gives a measurement which you can then compare to your goal. The indicator shows what is.

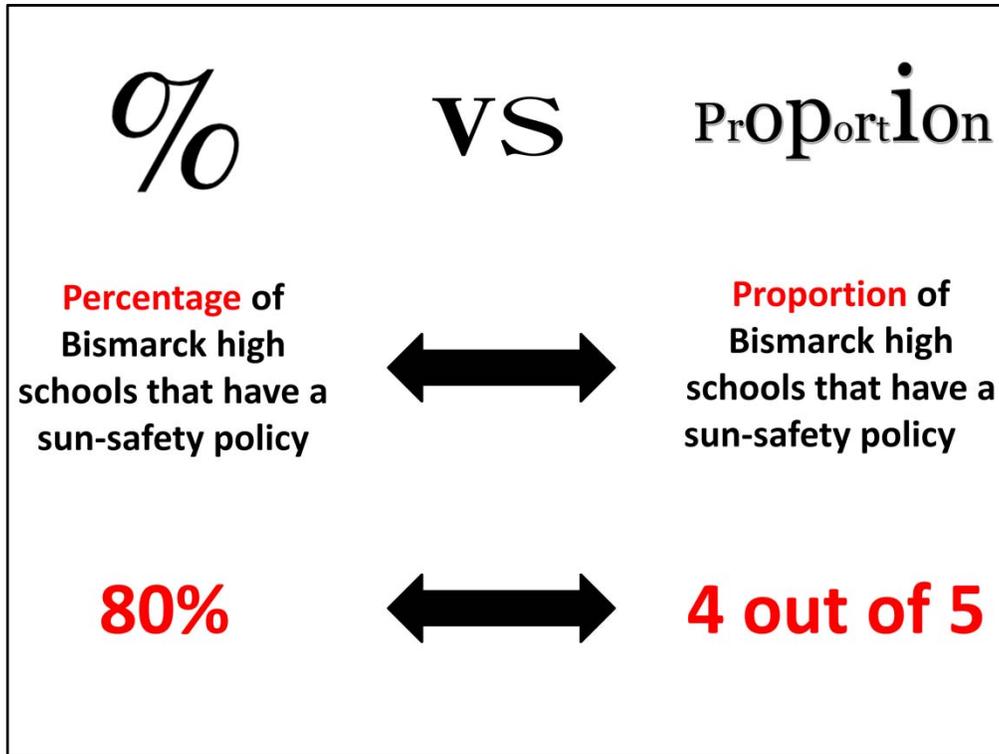
Avoid using directional language in your indicator. Avoid words like increase, decrease, maintain.

Ex. Indicator should be written as "level of knowledge" rather than "increase in knowledge"

Some indicators
include a standard
or threshold

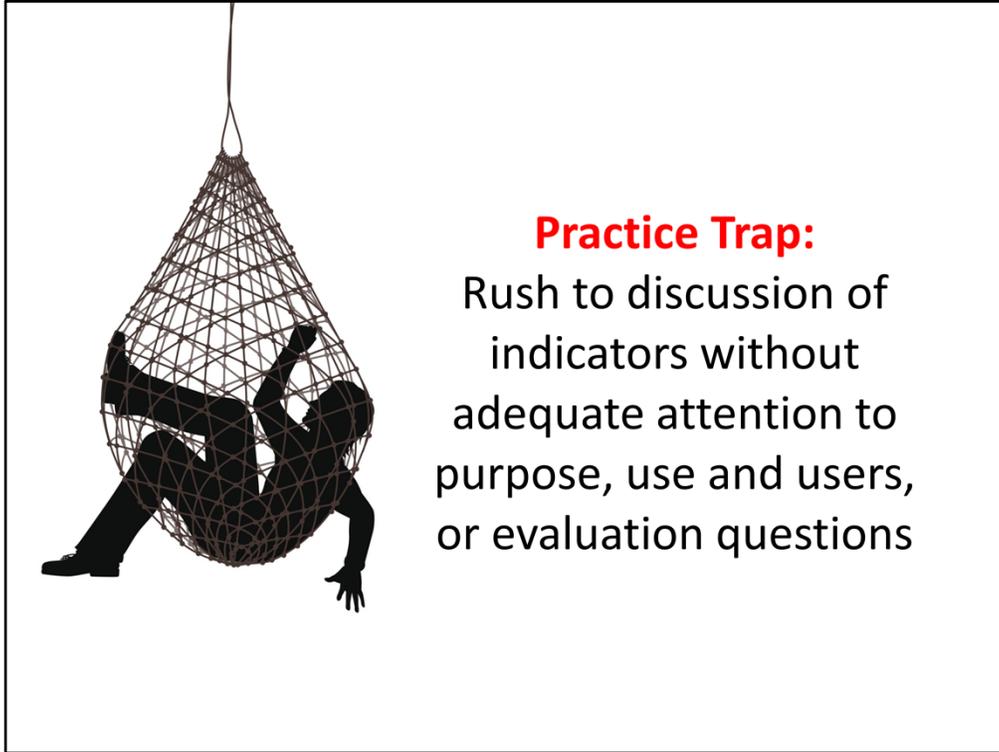


- Proportion of persons with diabetes with an A1c value greater than nine percent
- Proportion of adults who received colorectal cancer screening based on the most recent guidelines



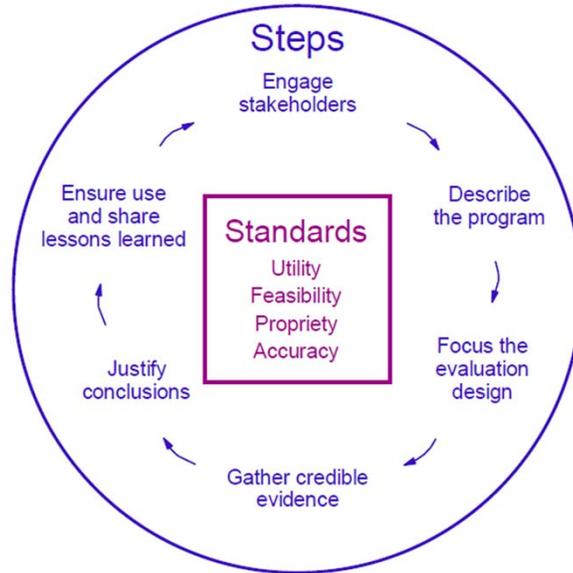
We tend to use percentage a lot in writing indicators. A percentage is a ratio of two numbers (i.e., a numerator and denominator). A proportion is often able to give more perspective on the situation than what a percentage would offer.

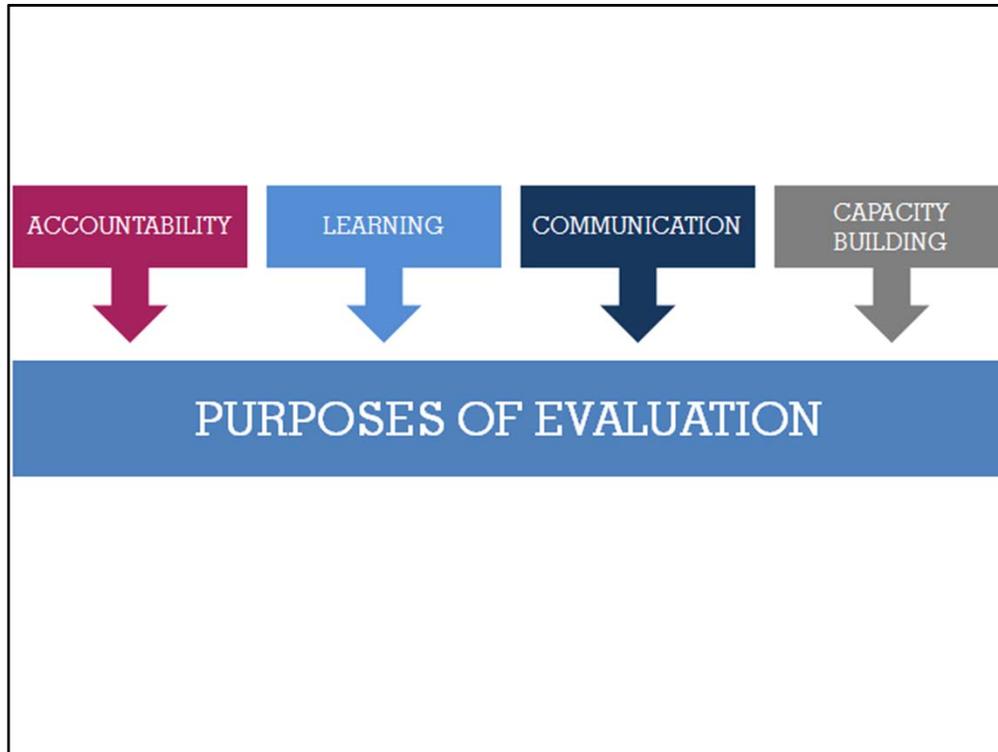
Ex. Test scores



- Data collection on far too many indicators
- Limited knowledge of indicators used previously by same or similar programs
- Limited knowledge of existing sources of data or information
- Those responsible for the evaluation must not succumb to *measurement mania*
- **Recommended action:** define items above before discussion of indicators

FIGURE 1. Recommended framework for program evaluation





Articulate precisely *why* you will do the evaluation (not what or how)

Provide an early opportunity for discussion with stakeholders

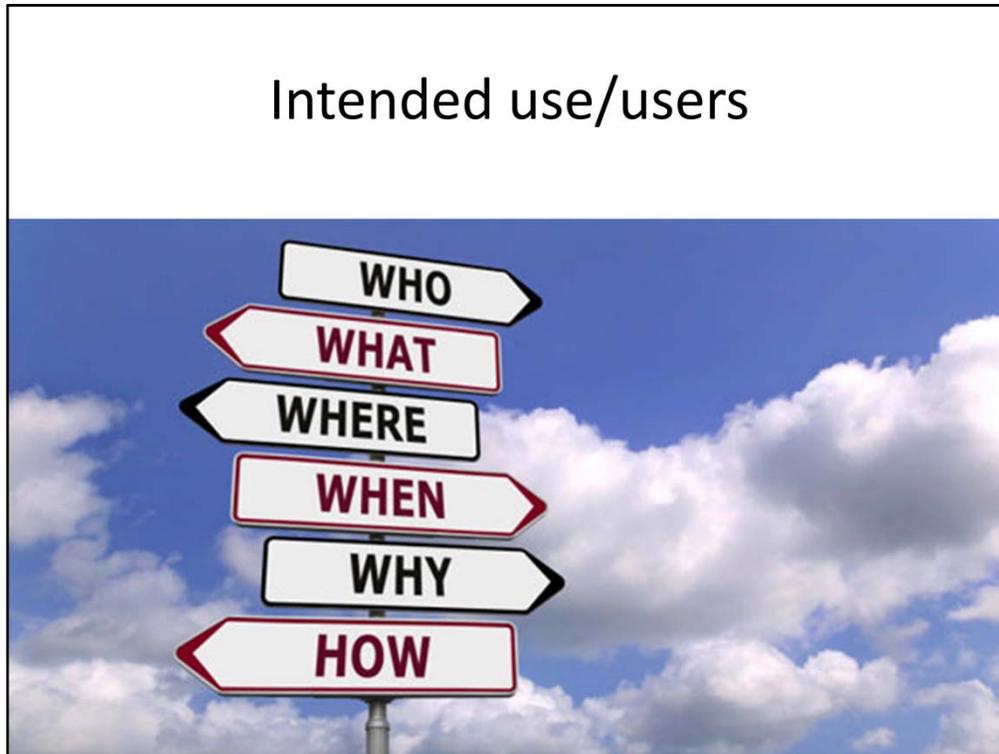
Set an agreed upon foundation for all of the decisions to follow

- Subsequent pieces of the evaluation fall into place more easily with agreement here (e.g., identification of evaluation questions, indicators, sources of data, methods of data collection and analysis)

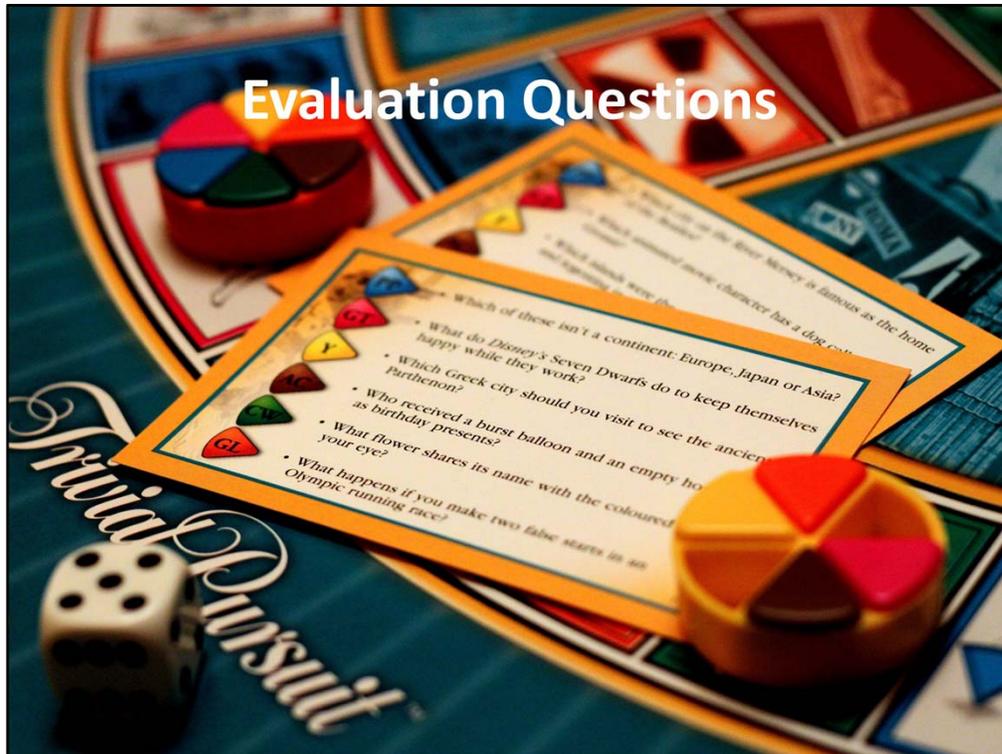


- Document program implementation or operations
- Determine progress toward intended outcomes
- Identify opportunities for program improvement
- Demonstrate accountability for resources to key stakeholders
- Provide data for decision-making
- Identify program strengths and weaknesses to adjust or enhance implementation
- Explore the intended or unintended effects of the program
- Document the outcomes or impacts of the program
- Assess the merit or worth of the program

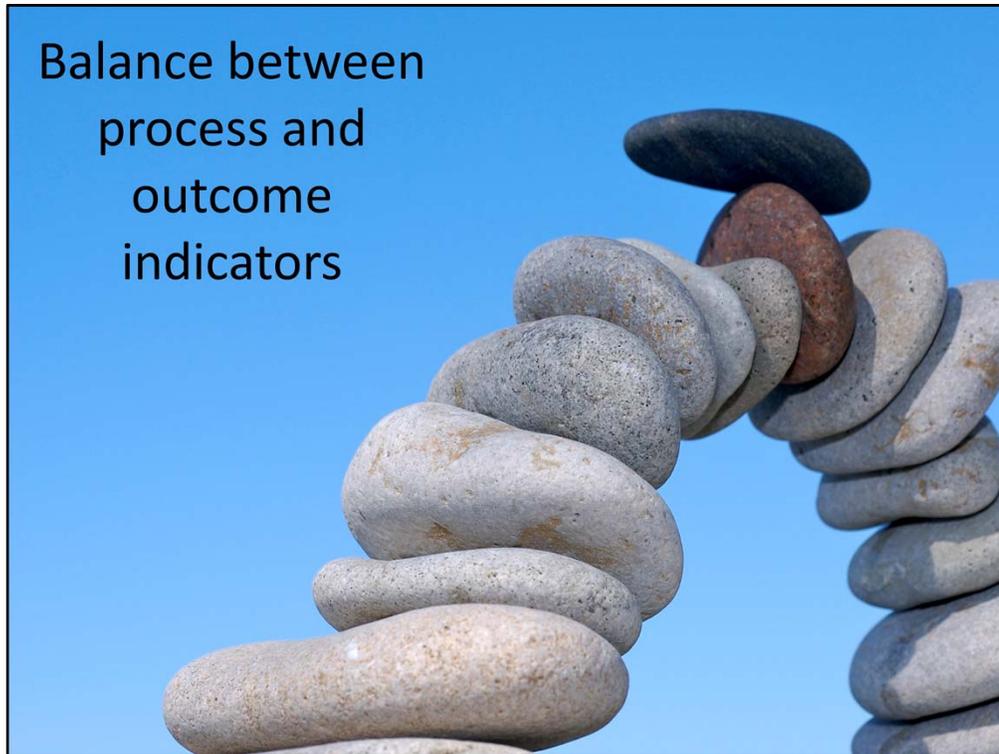
Intended use/users



- Intended use and/or users: refers to actual use of information—not simply how you intend to release or share information.
- Explicit attention to use and users from the outset helps to avoid *measurement mania*
- Findings do not *automatically* translate into decisions or action—there is real work to be done here and presenting this item explicitly is the first step



- Heart of the evaluation plan and must be in place to make informed decisions about data collection
- Emerge from shared understanding of the program plus well-defined purpose users, and uses of evaluation
- Establish practical boundaries for program evaluation—define the precise components of program to be addressed in the study
- Inform all of the technical decisions to follow (e.g., data collection methods and sources)



- Outcome indicators speak to benefits, changes, or results of the program
- Outcome indicators do not demonstrate *how* or *why* the program works or does not work



Process

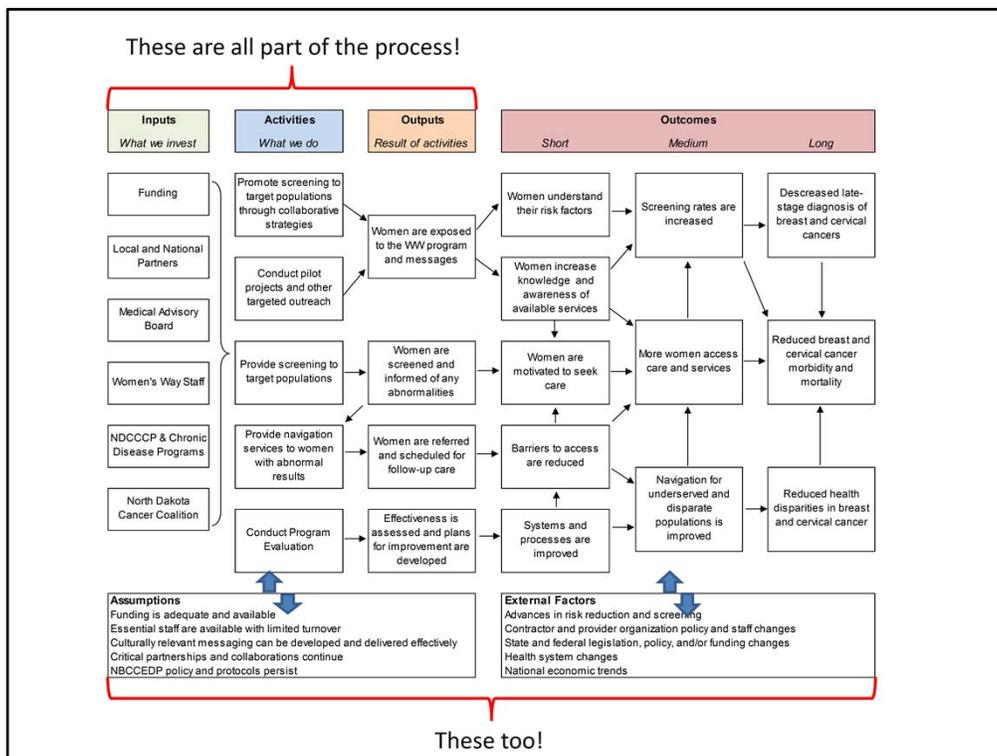
Process evaluation can help you understand how your program works and if it is working the way you expect. It can help you identify any implementation concerns, determine if the program is communicating the right messages about colorectal cancer screening, or determine if participants understand the information they receive. Benefits of a process evaluation include:

☑ **Explaining how your program is put into practice and identifying room for improvement.** A process evaluation provides an in-depth look at how your program operates – the reach of your campaign or activities, whether participants understand your materials, the adequacy of funding to meet your objectives, and the strength of your organization’s partnership with other entities. This information will help you see if your program is doing what it intended and can help you pinpoint where changes could be made in order to reach your goals.

☑ **Understanding potential for program impact.** Although a process evaluation does not assess actual outcomes, it can help you see if the program is on the right course to accomplish its goals. Should any challenges present themselves, you will be able to devise a plan for dealing with them.

☑ **Describing programs to stakeholders.** Program stakeholders, such as funders, may be interested in understanding how your program functions, the activities you offer, and how many people you reach. Funders may use process evaluation results to decide whether a program should be continued or expanded. Should others be

interested in replicating your program, the results can help with understanding how your program runs and any challenges that have emerged.



Process indicators to document characteristics of the program and implementation

- Includes inputs, activities, outputs, and context
- Address what, how or how much, for whom, when, and by whom

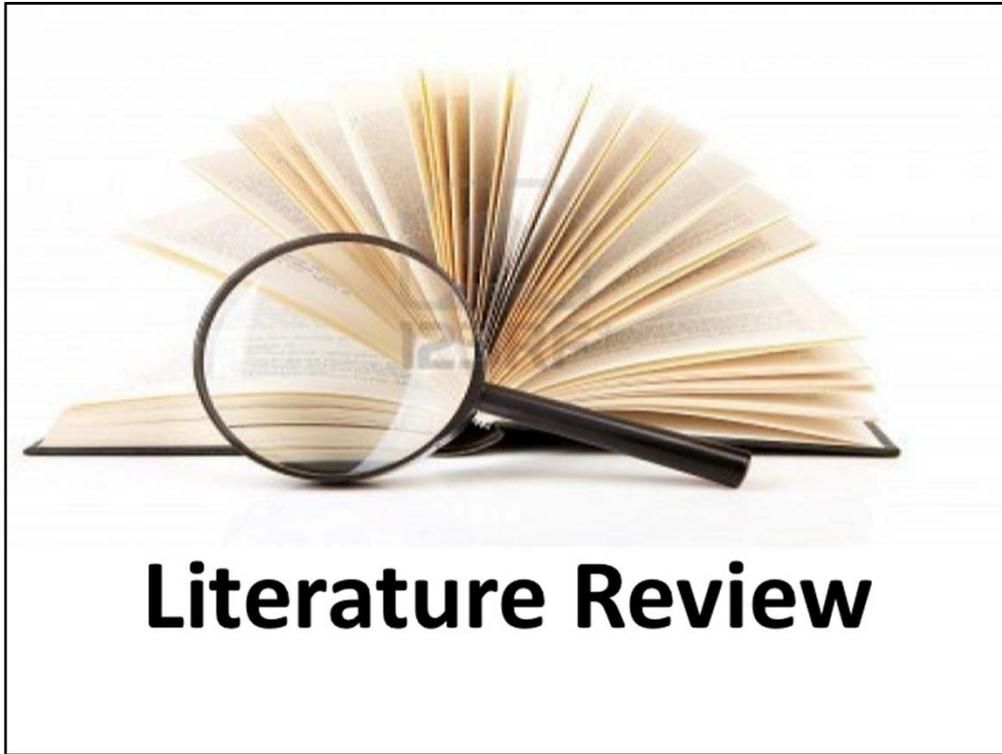
Process evaluation is about more than counting participants

- Document characteristics, quality, quantity of programming
- Document reach to communities, hospitals, groups, households, people receiving program (**not** always a simple count of participants)
- Document what really happens during implementation
- Document how money or other resources are used
- Document fidelity of implementation of an evidence-based activity or intervention

How do we select indicators?



What do you want to know? Remember the purposes for your evaluation.



Literature Review

Complete a literature search on your project topic. Use peer reviewed sources.

Work with stakeholders



Checklist of Criteria for High-Performing Indicators

- Accepted practice and history of use
- Applicability in different settings
- Availability of data
- Burden of data collection on participants
- Clarity of focus and meaning
- Cultural appropriateness and relevance
- Data quality
- Investment of resources
- Non-directional language
- Opportunity to detect unexpected or unintended findings
- Pathway for use of data
- Relevance to evaluation questions
- Strength of evidence or substantive merit
- Value within a set of indicators



How do we explain or share an indicator (or set of indicators) with others?

What is an operational definition

- Content of indicator (explicit and implicit) defined and explained
- Information needed for data collection and analysis (but may include other information too)
- There is no agreed upon template for an operational definition

Why should you prepare an operational definition

- Working on this content can be an important part of the process to clarify the indicators
- Provides a tangible manifestation of transparency
- Provides a much-needed platform for full participation of stakeholders
 - Stakeholders bring diverse knowledge and experience to evaluation planning

Indicator	Colorectal cancer screening rate
Rationale for using this indicator	The evidence is convincing that screening for colorectal cancer with fecal occult blood testing, sigmoidoscopy, or colonoscopy detects early-stage cancer and adenomatous polyps and that screening with any of the 3 recommended tests reduces colorectal cancer mortality in adults age 50 to 75 years.
Definition	The percentage of adults aged 50-75 who are adherent with the USPSTF colorectal cancer screening guidelines. The guidelines are as follows: 1) colonoscopy within the last 10 years, 2) high-sensitivity blood stool test within the last year, or 3) sigmoidoscopy within the last 5 year combined with a high-sensitivity blood stool test within the last 3 years
Data points to be used for analysis	The following data points are combined to get an overall screening rate: 1. Percentage of adults aged 50-75 who have had colonoscopy within the last 10 years 2. Percentage of adults aged 50-75 high-sensitivity blood stool test within the last year 3. Percentage of adults aged 50-75 sigmoidoscopy within the last 5 year combined with a high-sensitivity blood stool test within the last 3 years
Sources of information	Behavioral Risk Factor Surveillance System (BRFSS) Survey
Data issues or limitations	Data is self-reported; respondents may inaccurately recall and/or report procedures Sampling bias may exist and may skew toward certain demographics Sampling methodology was changed in 2012 which results in new data being unable to be compared to previous years

- For questions about today's topic please email Jesse Tran at jtran@nd.gov
- The post-test for 1.0 contact hours is available here or when the presentation closes you will be automatically directed to the webpage.

<http://www.ndhealth.gov/compcancer/education-events/>

Resources

- Criteria for Selection of High-Performing Indicators: A Checklist to Inform Monitoring and Evaluation
 - http://www.wmich.edu/sites/default/files/attachments/u350/2014/Indicator_checklist.pdf

For Credit:

- 1.0 Contact Hours from the North Dakota Board of Nursing will be provided to those who successfully complete the post-test and are eligible for contact hours.
- Certificates will be emailed to the address provided on the post-test form.

If you have any questions regarding credit for today's presentation please contact:

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