

CDC's Program Evaluation Framework Action Guide

Office of Policy, Performance, and Evaluation

CDC's Program Evaluation Framework Action Guide

Centers for Disease Control and Prevention. CDC's Program Evaluation Framework Action Guide. Atlanta, GA: Centers for Disease Control and Prevention; 2024

Please contact cdceval@cdc.gov for more information or with questions about this resource.

Table of Contents

DC's Program Evaluation Framework Action Guide	1
Overview of the Program Evaluation Framework Action Guide	
How to Use the Action Guide	
What is Program Evaluation?	6
Types of Program Evaluations	7
How is Program Evaluation Different from Research, Surveillance, and Monitoring?	9
Program Evaluation Compared with Research	
Program Evaluation Compared with Surveillance	
Program Evaluation Compared with Performance Measurement	
Cross-Cutting Actions	
Evaluation Standards	11
Understanding Approaches to and Practical Application(s) of the CDC Evaluation Framework	12
Step 1: Assess Context	
Key Takeaways for Step 1	
Overview and Importance	
Implementing Step 1 with Illustrative Examples	
Applying the Cross-Cutting Actions and Evaluation Standards	20
Step 2: Describe the Program	21
Key Takeaways for Step 2	
Overview and Importance	
Implementing Step 2 with Illustrative Examples	
Applying the Cross-Cutting Actions and Evaluation Standards	
Step 3: Focusing the Evaluation Questions and Design	
Key Takeaways for Step 3	
Overview and Importance	
Implementing Step 3 with Illustrative Examples	26
Applying the Cross-Cutting Actions and Evaluation Standards	32
Step 4: Gather Credible Evidence	33
Key Takeaways for Step 4	
Overview and Importance	
Implementing Step 4 with Illustrative Examples	
Applying the Cross-Cutting Actions and Evaluation Standards	
Step 5: Generate and Support Conclusions	
Key Takeaways for Step 5 Overview and Importance	
Implementing Step 5 with Illustrative Examples	
Applying the Cross-Cutting Actions and Evaluation Standards to Step 5	
Step 6: Act on Findings	48

Key Takeaways for Step 6	
Overview and Importance	
Implementing Step 6 with Illustrative Examples	
Applying the Cross-Cutting Actions and Evaluation Standards to Step 6	
Toolkit Appendix: Worksheets	•••••
Step 1: Assess Context	
Step 2: Describe the Problem	
Step 3: Focusing the Evaluation Question and Design	
Step 4: Gather Credible Evidence	
Step 5: Generate and Support Conclusions	

Overview of the Program Evaluation Framework Action Guide

The **Program Evaluation Framework Action Guide** serves as a comprehensive resource to assist new or early career evaluators with applying the CDC Program Evaluation Framework across a range of programs and settings. This Action Guide acts as a complement to the **CDC Program Evaluation Framework, 2024** and serves as a how-to guide for planning, designing, and implementing evaluations in a practical way.

A key theme across effective evaluation planning and implementation is the integration of the <u>cross-cutting actions</u> and <u>evaluation standards</u> across all steps of the framework. To ensure that evidence is actionable for decision-making and supports continuous program improvement, the cross-cutting actions and evaluation standards are designed to improve the quality of evaluations by guiding decisions throughout each step of this process.

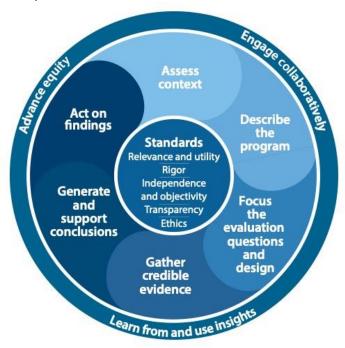


Figure 1: CDC Program Evaluation Framework

Topics Covered

The following foundational objectives are covered in this Action Guide:

- Defining program evaluation, its importance, and the types of program evaluation
- Distinguishing program evaluation from other related areas such as surveillance, research, and program monitoring
- Defining <u>cross-cutting actions</u> and <u>evaluation standards</u>
- Understanding how to apply evaluation standards and integrate cross-cutting actions from the CDC Program Evaluation Framework into your program evaluation approaches
- Identifying the approach and practical application(s) of the evaluation framework

How to Use the Action Guide

This guide is a starting point for planning and implementing program evaluations. It provides practical applications of the **CDC Program Evaluation Framework** to any program evaluation. Although the CDC Program Evaluation Framework is often discussed as a linear process, conducting program evaluation is iterative. This Action Guide is intended to support your current evaluation need(s) and help you develop robust program evaluations. The guide is organized by each step of the Framework and can be used as a stand-alone resource.

The following features are included within each step to help with navigation:

- 1. **Key takeaways**. Important tips to help you understand the main objectives of each step
- 2. **Overview and importance**. Explanation of each step at a high level and discussion of the benefits of implementing this step within the evaluation process
- 3. **Implementation with illustrative examples**. Explanation of how to carry out each step and make important decisions. Integration of a case example, CDC's Colorectal Cancer Control Program (CRCCP), is used throughout to illustrate the application of each step of the Framework, as well as other examples and callout boxes to reiterate important concepts
- 4. **Applying the cross-cutting actions and evaluation standards**. Explanation of how to integrate these foundational principles throughout each step of the framework
- 5. **Appendix:** The appendix includes fillable or downloadable <u>Worksheets</u> that can be adapted to meet specific evaluation needs and skillsets

What is Program Evaluation?

Program evaluation uses systematic data collection and analysis to assess the effectiveness and efficiency of one or more programs, policies, and organizations (Kidder DP, Fierro LA, Luna E, et al., 2024). Program evaluation can help clarify how to improve existing programs and build upon their strengths, identify why a program is or is not being implemented as planned or producing intended results, and why certain trends or patterns are observed in existing data sources.

A **program** is defined as *any set of related activities undertaken to achieve an intended outcome*. In this context, **program** is used to describe the object of evaluation, which could be any organized public health action.

Program evaluation is one of the <u>ten essential functions of public health</u>. **Figure 2** shows how evaluation is part of a lifecycle of continuous program improvement providing the feedback loop to assess the program to inform decision-making for action.

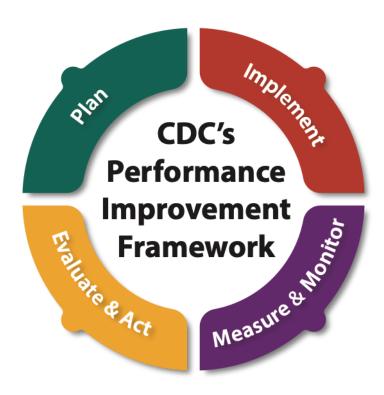


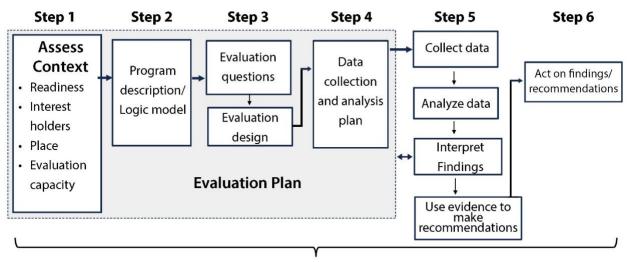
Figure 2: CDC's Performance Improvement Framework

Program evaluation helps to provide answers to important questions regarding:

- 1. Program implementation (Are program activities being completed as planned?)
- 2. Effectiveness (Is the program achieving what was intended?)
- 3. Attribution (Did the outcomes achieved happen because of the program?)
- 4. Contribution (Are factors that could contribute to outcomes identified?)
- 5. Efficiency (Is the program operating using the appropriate resources?)

Figure 3 demonstrates how program evaluation can answer those questions through the methodical and intentional engagement with interest holders that leads to a deep understanding of the program (i.e. logic model), what will be evaluated, and how to evaluate it (i.e. evaluation plan). Program evaluation produces findings that:

- Translate evidence to recommendations for action
- Demonstrate accountability to funders, policymakers, and participants of the program
- Document progress and ensure optimal use of resources
- Help inform decisions about areas for program improvement



Engage collaboratively with interest holders, learn from and use insights, advance equity (cross-cutting actions)

Figure 3: Detailed flow of the activities for planning and implementing an evaluation aligned with the CDC Program Evaluation Framework steps and cross-cutting actions.

Types of Program Evaluations

There are many types of evaluations that can be used for different purposes.

- Formative evaluation is typically conducted to assess whether a program, policy, or organizational approach is feasible, appropriate, and acceptable before it is fully implemented. It can include process or outcome measures and focuses on learning and improvement (OMB, 2021).
- **Process/Implementation evaluation** assesses how well program implementation followed the original plan. It often includes information on content, quality, quantity, and structure of what is being assessed (Kidder DP, Fierro LA, Luna E, et al., 2024).
- Outcome evaluation measures how well a program, policy, or organization has achieved its intended outcomes. It cannot determine what causes the specific outcomes (causality), only whether they have been achieved (Kidder DP, Fierro LA, Luna E, et al., 2024).

- Impact evaluation compares the outcomes of a program, policy, or organization to estimates of what the outcomes would have been without it. It usually seeks to determine whether the activities caused the observed outcomes (Kidder DP, Fierro LA, Luna E, et al., 2024).
- **Economic evaluation** examines programmatic effects relative to program costs. Common approaches include cost analysis, cost-benefit analysis, and cost-effectiveness analysis (Kidder DP, Fierro LA, Luna E, et al., 2024).

How is Program Evaluation Different from Research, Surveillance, and Monitoring?

While evaluation is often used interchangeably with these other ways of using systematic approaches to answer questions, they each have their own distinct purpose.

Program Evaluation Compared with Research

Research and evaluation are scientific activities that use similar methods, though the purpose is different. Research seeks to contribute to generalizable knowledge and test a hypothesis, whereas evaluation seeks to continuously improve programs and produce findings and recommendations for decision-making (Kidder DP, Fierro LA, Luna E, et al., 2024). Evaluation focuses on determining the value or significance of a program and providing information to help the program improve.

Program Evaluation Compared with Surveillance

Surveillance is the ongoing, systematic collection, analysis, and interpretation of health-related data (CDC, 2001). Surveillance data are often used as data sources for program activities. However, surveillance data alone may be insufficient to appropriately answer certain types of evaluation questions.

Program Evaluation Compared with Performance Measurement

Performance measurement is the ongoing monitoring and reporting of program accomplishments, particularly progress toward pre-established goals (M-21-27, 2021). These data can be used to identify increasing or decreasing performance that may warrant further investigation. Program evaluation helps you to identify the reasons behind these changes and potential areas of improvement.

Cross-Cutting Actions

Cross-cutting actions are the foundational principles that are woven into every step of an evaluation. Evaluations that integrate them are likely to produce more rigorous evidence that is informed by many perspectives and is meaningful, informative, timely, and actionable (Kidder DP, Fierro LA, Luna E, et al., 2024). Applying these cross-cutting actions also generates insights that may further health equity.

The cross-cutting actions include the following:

- 1. **Engage collaboratively.** Evaluators can facilitate co-ownership of the program evaluation with interest holders. By doing so, the evaluator can increase the validity of evaluation findings and improve the likelihood that results are used by interest holders (Kidder DP, Fierro LA, Luna E, et al., 2024). Strong evaluations proactively engage people with a range of perspectives who may typically be excluded. This collaboration starts at the beginning of the evaluation planning process and continues into the implementation and interpretation phases.
- 2. Advance equity. Health equity is defined as the state in which everyone has a fair and just opportunity to obtain their highest levels of health (Burton DC, Cardo D, et al., 2024). Evaluation can contribute to advancing equity and the elimination of health inequities in several ways:
 - By using collaborative and equitable evaluation approaches to create environments where everyone is respected and heard.
 - By considering the effects of potential decisions, and their impact on the advancement of equity, throughout each step of the framework and when applying the standards.
 - By proceeding with cultural responsiveness and recognition of shared experiences, integrating the uniqueness of each context into the design and implementation of an evaluation.
 - By conducting evaluations that uncover factors perpetuating health inequities.
- 3. **Learn from and use insights**. Evaluators also serve as facilitators for continuous learning, use of findings, and improvement through evaluation. Successful evaluators build relationships, cultivate trust, and model the way for interest holders to see value and utility in evaluation insights.

This Action Guide provides you more information on how to integrate these cross-cutting actions into your program evaluation approaches in the sections below.

Evaluation Standards

Evaluation standards describe what constitutes a high-quality evaluation by guiding decisions at each step. These standards are intentionally broad to ensure flexibility to the unique circumstances and context that apply to each evaluation. Each evaluation should balance these standards, along with other factors, depending on the evaluation and the needs of the situation (M-20-12, 2020).

The US federal evaluation standards are:

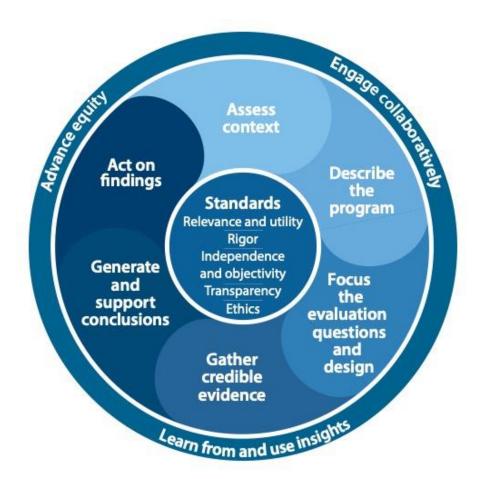
- Relevance and Utility. Evaluations must address the information that is important to the
 interest holders to be useful. The evaluation findings must be actionable and available in time
 for use as well as presented in a way that is understandable, culturally responsive, and
 informative for interest holders to act.
- 2. Rigor. Evaluations must produce findings that interest holders can confidently rely upon while also providing clear explanations of limitations. The rigor of an evaluation is highly dependent on thoughtful planning and implementation of the underlying design and methods, as well as how findings are interpreted and reported. Credible evaluations must be planned, implemented, and interpreted by qualified evaluators in collaboration with interest holders. The most appropriate design and methods to answer the evaluation questions must be used while balancing the evaluation goals, scale, timeline, feasibility, and available resources.
- 3. Independence and Objectivity. Evaluations must strive to be as independent and objective as possible for interest holders, experts, and the public to accept their findings. The implementation of evaluation activities must be appropriately insulated from political and other undue influences that may affect their objectivity, impartiality, and professional judgement. Evaluators must strive for objectivity in the planning and conducting of evaluations and in the interpretation and dissemination of findings. Conflicts of interest, bias, and other partialities must be avoided to enhance objectivity; evaluators can regularly assess their potential biases which may affect whom they choose to engage in an evaluation, what they pay the most attention to, and what they may be overlooking as a result.
- 4. **Transparency**. Evaluations must be transparent throughout the planning, implementation, and reporting phases to enable accountability and help ensure that aspects of an evaluation are not tailored to generate specific findings. Decisions regarding the evaluation's purpose and objectives, the range of interest holders who will have access to findings, the design and methods, and the timeline and strategy for releasing findings must be clearly documented before conducting the evaluation. Once evaluations are complete, comprehensive reporting of the findings should be released in a timely manner and provide sufficient detail so that others can review, interpret, or reproduce the work.
- 5. **Ethics**. Evaluations must be conducted to the highest ethical standards to maintain trust in the process and products. Evaluations must be planned and implemented to safeguard the dignity, rights, safety, and privacy of participants, interest holders and/or affected entities. Evaluators must abide by current professional standards pertaining to treatment of participants. Evaluations must be equitable, fair, and just, and must consider cultural and contextual factors that could influence the findings or their use.

Understanding Approaches to and Practical Application(s) of the CDC Evaluation Framework

The CDC Evaluation Framework consist of six steps:

- 1. Assess Context
- 2. Describe the Program
- 3. Focus the Evaluation Questions and Design
- 4. Gather Credible Evidence
- 5. Generate and Support Conclusions
- 6. Act on Findings

These steps are guided by the integration of three <u>cross-cutting actions</u> and five <u>evaluation</u> <u>standards</u>. The framework is a practical and iterative process for designing and implementing good program evaluations. For more information on each step, as well as the associated evaluation standards and cross-cutting actions, please refer to the <u>CDC Program Evaluation Framework</u>, <u>2024</u>.



Step 1: Assess Context

Key Takeaways for Step 1

- Evaluations are influenced by the context in which the evaluation is situated.
- Key products include: 1) Evaluability assessment that examines evaluation readiness, 2) Relevant interest-holder mapping, and 3) Documentation of place-based context, evaluation capacity assessment, and evaluator readiness assessment.

Overview and Importance

Understanding a program's context sets the stage for meaningful, actionable, and culturally responsive evaluation (Kidder DP, Fierro LA, Luna E, et al., 2024). This can include the various features of an evaluation's setting, such as location and environment, people and their cultural values, historical circumstances, roles that power and privilege play, and other pertinent characteristics.

Tip: What Happens When Context is not Considered in the Evaluation?

- Only the evaluator or evaluation team's culture, context, and values may be reflected in the evaluation.
- The wrong interest holders could be involved, and their priorities could be misinterpreted.
- Program participants are not engaged in a way that is respectful and this could increase harm.
- The program is not accurately described.
- Data are not collected in a way that is culturally appropriate and enhances multicultural validity.
- Reporting results in modes that are only accessible by the dominant culture or those in positions of power.

Adapted from: Snow, B. (2016). Context in Evaluation. Dr. Beth Snow Blog. Retrieved from: Context in Evaluation | Dr. Beth Snow (drbethsnow.com)

Four factors to consider when assessing context include:

- 1. Readiness for Evaluation
- 2. People (interest holders),
- 3. Place
- 4. **Evaluation Capacity** (as well as assessing the evaluator's readiness and understanding how to apply the <u>cross-cutting actions</u> and <u>evaluation standards</u> to this step)

The main products of step 1 include the following:

- 1) Evaluability assessment to examine whether a program is ready to be evaluated
- 2) Relevant interest holder mapping of the four main types of interest holders
- 3) **Documentation** of place-based context and evaluation capacity assessment
- 4) **Evaluator reflection** to assess your readiness to conduct evaluation

Implementing Step 1 with Illustrative Examples

Readiness for Evaluation

Evaluability assessments are a type of pre-evaluation method used to determine which aspects of a program are ready for evaluation.

Table 1.1 describes the components of an evaluability assessment. The results of the assessment will help evaluators understand if a program is ready for evaluation, and if not, identify which components to rework. <u>Use Worksheet 1A</u> to apply the evaluability assessment concepts.

Table 1.1 Common Components of an Evaluability Assessment and Example Strategies

Evaluability Components	Description	Key Question(s) to Consider	Example Strategies
Program Intent and Logic Model	Determine program objectives and expectations and depict the relationships between/among inputs, activities, and expected outcomes.	 What is the program? Is the program logic clear, rational, and understandable? Are there any apparent gaps? Do interest holders understand their role(s)? 	 Review programmatic materials for program goals. Conduct literature reviews to develop a foundation for the Logic Model or Theory of Change (Mayne, 2015; Chen, 2018; King, 2021). Interview interest holders to assess interest, buy-in, and perception of the program's role.
Program Plausibility	Determine if the programmatic goals, outcomes, and the feasibility of measuring progress towards programmatic goals are clearly defined.	 What would success look like? Are program expectations realistic? 	 Observe the program in action to compare the expected and actual implementation. Review goals and outcomes to determine if they are realistic and measurable.
Data Accessibility	Determine the likelihood that data potentially needed for the evaluation are acquired feasibly given resource and time constraints.	 Are you collecting data on what you want to achieve? What data are available? What new data are feasible to collect for the evaluation? 	 Identify available data, collection tools, and monitoring systems. Identify the types of resources needed to support data collection.
Program readiness	Determine if the program needs to be adjusted and/or if additional resources are needed. If no adjustments are needed, then you are ready for evaluation.	What adjustments need to be made to prepare the program for evaluation?	 Assess the program scope and magnitude of resource needs. Identify program training needs for personnel. Determine program partnership needs. Assess if program goals and objectives are realistic or need to be adjusted.

Sources:

- Armstead, T. Lee, R. (2013). Evaluability Assessment Guidance for DELTA FOCUS Recipients. Internal report (CDC). Unpublished.
- 2. D'Ostie, R.L., Dagenais, C., Ridde, V. (2013). An evaluability assessment of a West Africa based non-governmental organizations (NGO) progressive evaluation strategy. *Evaluation and Program Planning*, 36(1), 71-79.
- **3.** Farmer, H. (2018). Conversations to have when designing a program: Fostering evaluative thinking. *Better Evaluation Blog*. Retrieved from Conversations to have when designing a program: Fostering evaluative thinking Blog post on Better Evaluation

People

Interest holders are people or organizations who are invested in and may be affected by the evaluation. **Table 1.2** shows four types of interest holders to keep in mind when implementing Step 1.

Table 1.2: Type of Interest Holders and Implementation

People Who	Potential Interest Holder	Implementation Consideration
are served or affected by the program	 Past, current, and future program participants Employers or associates of program participants Local recipients of your funds Populations affected by the problem 	Individuals or groups who directly or indirectly receive program services may be most interested in aspects of the evaluation that are related to improvements or modifications in program services.
plan or implement the program might use the evaluation findings	 Local and national professional organizations State or local health departments and health commissioners Program designers, implementers, and evaluators Local government, state legislators, and governors Universities and 	Individuals or groups who have a professional role in the program may be most interested in how to improve the process for implementing the program's services, and the outcomes that are a result of the program. Individuals or groups who have authority to make decisions about the program and individuals and groups who have a general interest in the results because they design, implement, evaluate, or advocate on behalf of the program being evaluated or similar programs.
are skeptical about the program	Past, current, and future program participants, employers or associates of program participants, and developers of similar, complementary, or competing programs	Individuals or groups who are opposed to the program may be most interested in knowing if the outcomes can be attributed to the program and if there is a cost-benefit of the program,

Adapted from:

Bryson, J.M., Patton, M.Q., Bowman, R.A. Working with evaluation stakeholders: A rationale, step-wise approach and toolkit. *Evaluation and Program Planning*. 2011;34(1):1-12. doi:https://doi.org/10.1016/j.evalprogplan.2010.07.001

Each interest holder group may have different interests, needs, concerns, power, priorities, and perspectives that may need to be understood to ensure relevance and use of evaluation findings (Bryson JM, Patton MQ, Bowman RA, 2011). While there are many techniques evaluators can use to conduct interest holder identification, worksheets 1B and 1C are two examples. <u>Use Worksheet 1B</u> to identify interest holder needs for each step, cross-cutting actions, and evaluation standards. <u>Use Worksheet 1C</u>

to identify interest holder's stakes in the evaluation and the interest they seek to serve as well as their desired level of involvement.

Tip: Collaborative Engagement and Interest Holders

In addition to identifying the interest holders and their possible needs, as it relates to the evaluation, also consider how and when they will be engaged. Principles for engaging interest holders can be rooted in Community-Based Participatory Research and include:

- Using a participatory approach that is empowering to program participants (e.g., Participatory Learning and Action Tools).
- Program participants and program evaluators having an equal contribution.
- Using a co-learning process, where both the program participants and evaluators learn from each other.
- Using a systems development and local community capacity building model to enhance the evaluation capacity for both the program evaluator and program participants.
- Creating balance between evaluation and action.

Adapted from: Wallerstein, N., Duran, B., Oetzel, J.G., Minkler, M. (Eds.). (2018). Community-based participatory research for health: Advancing social and health equity (3rd edition). Jossey-Bass. ISBN-13:978-1119258858

Source: Napier, A., Simister, N. (2017). Participatory Learning and Action. Intrac for Civil Society Retrieved from Participatory-learning-and-action.pdf (intrac.org)

Case example: Interest Holder Identification for Colorectal Cancer Control Screening Program (CRCCP)

An example of how and when to engage interest holders can be found in **Table 1.3**. This is an adapted case example from the Division of Cancer Prevention and Control's CRCCP evaluation plan for engaging interest holders in the evaluation. The CRCCP funds recipients through a cooperative agreement to partner with health systems and their primary care clinics to implement evidence-based interventions within clinics to increase colorectal cancer (CRC) screening among priority populations and ultimately reduce CRC incidence and mortality.

In the case example, the interest holders were engaged throughout evaluation planning, implementation, and the dissemination of findings to ensure the following:

- Interest holder needs were prioritized
- Multiple perspectives for data collection and analysis procedures were shared and considered
- Findings would be useful for program improvements and policy change

In **Table 1.3**, interest holders are identified as "internal" or "external" to the CDC or organization and then categorized with an "X" according to when they were engaged in the evaluation.

Table 1.3: Interest Holder Engagement Matrix

Internal International	Dona ile	Farmer March	Callant	Land Co.	A - 4
Internal Interest Holders	Describe	Focus the	Collect	Justify	Act on
(Federal)	the	Evaluation	Credible	Conclusions	Findings
	Program	Questions	Evidence		
		and Design			
U.S. Federal Agencies					Х
Division of Cancer	Х	Х	Х	Х	Х
Prevention and Control					
Leadership					
Division of Caner	Х	Х	Х	Х	Х
Prevention and Control					
Program Consultants					
External Interest Holders	Describe	Focus the	Collect	Justify	Act of
	the	Evaluation	Credible	Conclusions	Findings
	Program	Questions	Evidence		
		and Design			
CRCCP Recipient		Х	Х	Х	Х
Programs					
Information Management		Х	Х	X	Х
Services, Inc. (IMS) Data					
Coordinator					
National Association of		Х	Х	Х	Х
Chronic Disease Directors					
(NACDD)					
National Partners					Х
			1		

Adapted from: Division of Cancer Prevention and Control Program. (2020). "CRCPP Evaluation Stakeholder engagement" table in the CDC Evaluation Plan: DP20-2002 Cancer Control Program. Internal Report (CDC): unpublished

Place

It is important to consider the place-based context in which the program and evaluation are conducted. This includes recognizing the program and community history, and power dynamics. Existing systems in a community affect how evaluators engage with interest holders, design the evaluation, and communicate findings, especially in communities that are marginalized (Kidder DP, Fierro LA, Luna E, et al., 2024).

There are two place-based contexts that are important to consider in Step 1: **Program Features** and **Program Environment.**

As you think about place-based context, use the questions in **Table 1.4** as a starting point for understanding programmatic features and the programmatic environment. See **Worksheet 1D** for additional guidance.

Table 1.4. Key Questions to Consider for Identifying Place in Context

Programmatic Features	Programmatic Environment
What is the program, and why was it	What is the history of the community, program,
developed?	organization and of the evaluation within it?
	What are the historical, economic, health, and social
	dimensions of the communities?
Who funds the program?	What are the strengths of this context? Are there any
	conditions or circumstances that are problematic? What are
	the ongoing political, social, or economic conditions that
	might influence the program?
Who is involved in the program development	How is power distributed among persons who interact with
and implementation?	or influence the program or who might be engaged in the
	evaluation (e.g. funders, planners, implementers)?
What is the program user's commitment to	How does the organization typically learn (e.g., about what
the program?	they are doing well, areas for improvement) and what is the
	general level of receptiveness to learning from mistakes?
What are the demographics of the user	What are the spoken or unspoken rules about evaluation at
group, including income, education, gender,	the organization?
race or ethnicity, and other identities?	
Who has authority and decision-making	What are the spoken or unspoken rules about identifying
power? What do decision-making processes	and using data for action at the organization? How does the
tend to look like?	organizational mission support or oppose evaluation?

Evaluation Capacity

Evaluation capacity is the program's existing capacity to "do" and "use" evaluation. Specifically, **Individual** and **Organizational** are two types to consider.

Culture is a cumulative body of learned and shared behavior, values, customs, and beliefs common to a particular group or society (Kirkhart, 2010; American Evaluation Association, 2011). Evaluation can be part of organizational culture. Organizations that have a strong evaluation culture seek out information about their programs and use that information to improve them. As you think about evaluation culture and capacity, use the questions in **Table 1.5** as a starting point, then <u>use **Worksheet 1E**</u> **to apply the concepts**.

Table 1.5. Key Questions for Understanding Individual and Organizational Evaluation Capacity

Individual Evaluation Capacity	Organizational Evaluation Capacity
How knowledgeable is the individual, or evaluation team, about the different evaluation approaches and methods?	What financial resources are available for the evaluation?
How much experience does the individual or evaluation team have with developing evaluation tools and templates for use by the organizations?	What human resources (e.g., time and internal/external evaluation staff) are available for the evaluation?
How much experience does the individual or evaluation team have with analytical and facilitation skills?	What is the organizational culture with respect to evaluation and using evaluation findings?
What is the individual's attitude toward evaluation?	What mechanisms already exist to share products from the evaluation with others in the organization who could benefit?

Individual Evaluation Capacity	Organizational Evaluation Capacity
Does the individual view the evaluation as important and valuable?	Are there opportunities within the organization to reflect on insights that arise throughout the course of the evaluation?

Adapted from: Buetti, D., Bourgeois, I., & Jafary, M. (2023). Examining the competencies required by evaluation capacity builders in community-based organizations. *Evaluation and Program Planning*, 97, 102242.

Tip: Learn from and Use Insights about Evaluation Capacity

As you think through the existing evaluation capacity of the individual and/or organization, also think about how the findings from the evaluation will be used. Do the evaluators have knowledge and experience to develop the evaluation recommendations and influence use of findings? In the past, how has the organization used evaluation findings?

Evaluator Readiness

The lens that evaluators use in the evaluation is a direct reflection of their personal experiences and context. These experiences may reflect an individual's privilege and/or unintentional bias and may lead the evaluator to make decisions that perpetuate health inequities (Miranda-Hartsuff, et al., 2024). To help prevent this, evaluators may reflect on how their own personal context influences their evaluation practices. Use Worksheet 1F as a starting point to inventory and assess your own cultural dimensions. Reflective practice is a tool that can be used to better understand unintended consequences of the evaluators and their role in influencing the evaluation.

Table 1.6 lists several tools that evaluators can use for self-reflection. The information from these self-reflections can help evaluators understand how their own culture might affect what they ask, how they ask it, what they perceive, and whether they might be inadvertently favoring certain voices over others in this evaluation context. Then, they can consider how to adjust their thoughts and practices and use a collaborative approach to include multiple perspectives and contexts to potentially decrease biases in the evaluation.

Table 1.6. Tools for the Evaluator to Engage in Reflective Practice

Tool	Description		
Self as an Instrument	Set of self-calibration questions for identifying a person's own strengths, gifts,		
Portfolio	constraints, etc. that is brought to a particular research setting.		
Johari Window as a Skill-	Communication model that can be used to cultivate multilateral self-		
Building Resource	awareness through a four-paned window metaphor.		
Integral Evaluation Model	Framework for mindfully scanning and monitoring the human-system		
	dynamics through the individual and collective vantage points and across the		
	subjective, behavioral, intersubjective/cultural, and social systems		
	environments.		

Source: Symonette, H. (2009). Cultivating self as responsive instrument: Working the boundaries and borderlands for ethical border crossing. *Handbook of Social Research Ethics*. (pp.279-294). https://doi.org/10.4135/9781483348971.n18

Keep notes to document your thoughts and reflections that emerge during the evaluation. Use <u>Worksheet 1G</u> to engage in reflective practice.

Tip: Reflective Practice and Cultural Humility

The process of reflective practice is meant to highlight how culture and context emerge during the evaluation process and can enhance the evaluator's cultural awareness and humility.

Applying the Cross-Cutting Actions and Evaluation Standards

There are several key questions that an evaluator can use to make sure that they have successfully integrated the <u>cross-cutting actions</u> and applied the <u>evaluation standards</u> within Step 1 of the framework. <u>Refer to Table 2</u> in the <u>CDC Program Evaluation Framework, 2024</u> for how to consider applying these actions and standards to assessing context.

Step 2: Describe the Program

Key Takeaways for Step 2

- Logic models are a useful tool for communicating and understanding your program to show the connection between a program's activities and intended outcomes.
- Key products of this step are 1) A one-page graphic depiction of the program to be evaluated (e.g., logic model, program roadmap), and 2) An accompanying narrative of the program.

Overview and Importance

In Step 2, describe the program to be evaluated by identifying the intended outcomes and the key activities expected to lead to those outcomes. Providing a description of the program that is clear and concise with enough detail can help to facilitate an understanding of the program roadmap. This step is vital because it lays the foundation for the rest of the evaluation. Investing time and effort to accurately describe the program will help facilitate success as you further plan and implement the evaluation.

There are two key parts to describing the program (Kidder DP, Fierro LA, Luna E, et al., 2024):

- 1. A **logic model** or **program roadmap**, which is a 1-page graphic depiction of the relationship between a program's activities and its intended outcomes, typically including arrows showing the connections between/among each of these. The most common elements are:
 - Activities
 - Short-term, intermediate, and long-term outcomes
- 2. A **narrative description** providing more detail on the program, which typically includes the following:
 - Need
 - Inputs
 - Activities
 - Outcomes
 - Contextual factors
 - Stage of development

Tip: Rely on insights about program context from *Step 1* when developing your program description.

Implementing Step 2 with Illustrative Examples

Developing a Logic Model

A logic model helps visualize the connection between the program activities and the changes that are intended to result from them.

Tip: Engaging interest holders in the process of describing the program allows for greater understanding and agreement of the program activities and outcomes.

Your program's logic model can be useful for your interest holders and broader program. Engage your interest holders in developing your logic model and program description from the start.

Logic models differ widely in format and level of detail; however, the core elements in logic models include:

- Activities: strategies the program implements to effect change and achieve intended outcomes.
- Outcomes: who or what is expected to change due to the program's efforts. Outcomes are
 logically sequenced to show the temporal sequence, with shorter-term (often more specific)
 outcomes leading to intermediate then longer-term outcomes.

Additional terms you may see in logic models are

- **Inputs**: resources needed for program activities such as personnel, partners, materials, funding, equipment, data/surveillance, and the existing evidence-base.
- **Contextual factors**: factors outside the program which may affect the ability to achieve the desired outcomes.

Outputs are the products of program activities. As an indicator of the activities, outputs fit best in the narrative section that describes the evaluation measures.

There are several possible approaches to developing a logic model. A good place to start is by identifying activities and outcomes that may be contained in the program descriptions, mission/vision statements, or program planning documents. You can either start with the activities and ask "so what" to generate the outcomes or start with the desired outcomes and ask "how to" achieve them through program activities. See **Figure 4** for a logic model example from CDC's Data Modernization Initiative.

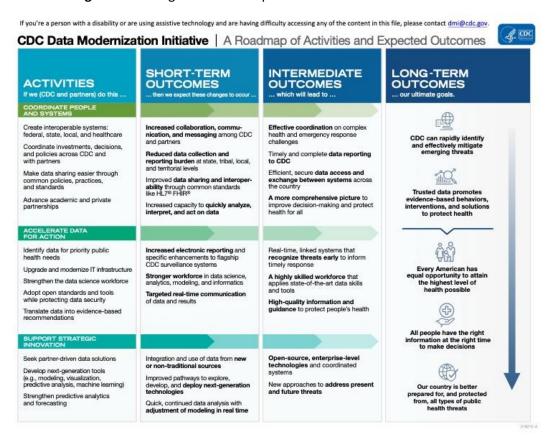


Figure 4: Example Logic Model for the CDC Data Modernization Initiative

Similar Terms for Logic Model

The logic model term is commonly used in evaluation, though there are other related terms you may see

- Program Roadmap
- Theory of Change (Mayne, 2015; Chen, 2018; King, 2021)
- Theory of Cause
- Theory of Action
- Concept/Conceptual Maps
- Outcome Maps
- Logical Frameworks (LogFrames) (Bamberger, 2020)

Logic Model Examples and Visualization Techniques

Case example: Logic Model for Colorectal Cancer Control Screening Program (CRCCP)

You can see an example of a logic model for a public health program in **Figure 5**, which uses the concepts we have highlighted in <u>Worksheet 2A</u> in the Appendix. The CRCCP is a program aimed at increasing colorectal cancer (CRC) screening in primary care clinics (CDC, 2020). The need for the CRCCP program centers around CRC as a leading cause of death among cancers in the United States. While this is not stated explicitly in the visualization (logic model) it is reflected in the long-term outcomes. The context is positioned underneath as foundational components of the program (and logic model) as a whole.

You can follow the inputs for the program, left to right, through each of the components of the logic model. You could "read" one portion of the CRCCP logic model as:

- If the program has all of their indicated inputs including CDC funding, the recipient organizations, clinics, evidence-based interventions, data, skills, tools, etc., then they will be able to establish partnerships with primary care clinics (activity).
- If they establish partnerships with primary care clinics, then they will be able to increase CRC screening in partner clinics (short-term outcome).
- If CRC screening in partner clinics is increased, then they will be able to increase the number of cancers prevented (intermediate outcome).

You would continue reading across the logic model in the same fashion.

Depending on how you (and possibly your interest holders) design the logic model, it may read differently. For example, if the CRCCP logic model did not include inputs, it would read as, "If partnerships are established, clinic assessments conducted, EBIs implemented, patients' linkage to colonoscopies facilitated, and data quality, program monitoring, and evaluation are conducted, then clinic-level CRC screening rates will increase. If CRC screening rates increase, then the number of cancers prevented, and early-stage CRC diagnoses will increase. If those increase, then it will result in a reduction of CRC incidence and mortality."

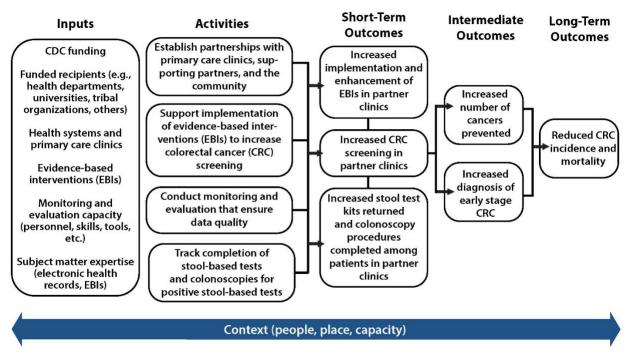


Figure 5: Example logic model adapted from Colorectal Cancer Control Screening Program (CRCCP)

Apply communications best practices when developing your logic model:

- Visualize relationships between and among groups using arrows
- Use space and color to signal clear groupings of logic model components
- Be careful when putting text on colored spaces
- Fit the logic model on a single page (not including the narrative)

Note how the <u>Logic Model</u> from the <u>Laboratory Leadership Service (LLS) Fellowship</u> program applies a number of these practices to make a somewhat complex logic model easier for the reader. It also provides text along the components to facilitate reading the model from left to right.

A template for developing logic models is provided in <u>Template 2A</u> along with <u>Worksheet 2B</u> & <u>C</u> Key Components of a Logic Model to help you identify the program components.

Developing the Narrative

The program narrative explains the components of the logic model in more detail and includes the following:

- 1) **Need**: The issue, challenge, or opportunity the program is intending to solve or is contributing to solving.
- 2) **Inputs**: Resources needed for conducting program activities such as personnel, partners, materials, funding, equipment, data (such as surveillance data) and the existing evidence-base.
- 3) **Activities**: Identifies what the program is implementing to effect change and achieve intended outcomes.
- 4) **Outcomes**: Identifies who or what is expected to change due to the program's efforts.

- 5) **Contextual factors:** Factors outside of the program that might affect achieving the desired outcomes.
- 6) **Stage of development:** The evolution of the program, as all programs change from planning stages to maturity.

Understanding contextual factors and stage of development are essential when conducting an evaluation. The sections below provide more detail on these important components.

Identifying and Describing the Contextual Factors

Programs operate in the real world, which is a complex environment. As such, incorporating how external elements may facilitate or hinder your program's ability to achieve its goals into your program description or logic model, helps account for and interpret findings accurately. Identifying and describing contextual factors that will influence whether your program is able to implement the activity and achieve the outcomes is helpful for transferring learnings from the evaluation to another context. During this process, draw on insights from your efforts assessing context in Step 1. Understanding the relationship of the context to the program functions and products allows you to understand potential impacts on the program's success.

Identifying and Describing the Stage of Development

A program's stage of development is a factor in determining the type of evaluation to be conducted (process, outcome). Align your evaluation purpose and questions with the program's stage of development (see Step 3: Focus the Evaluation Questions and Design). The most common stages of program development include:

Planning: The program being evaluated is early in its development and its activities have likely not been implemented or tested yet. Some piloting may/ be or have been occurring.

Implementation: The program and its activities are already being implemented at the time of evaluation.

Maintenance: The program is more mature, having been implemented for an extended period. The program or the component being evaluated has produced some if not most of the intended likely outcomes.

Applying the Cross-Cutting Actions and Evaluation Standards

As with all the evaluation framework steps, consider how to apply the <u>cross-cutting actions</u> and the <u>evaluation standards</u> when developing your logic model and evaluation to Step 2. <u>See Table 3</u> in <u>CDC Program Evaluation Framework, 2024</u> for how to consider applying the cross-cutting actions and standards to your program description.

Tip: Once you feel you have completed a draft of your logic model, be sure to review it for critical content, usability, and ease of understanding. Use <u>Worksheet 2D</u> Logic Model Review Checklist as a helpful guide in addition to the other materials in this toolkit section.

Step 3: Focusing the Evaluation Questions and Design

Key Takeaways for Step 3

- Collaboratively engage with interest holders to focus the evaluation efforts and develop the most appropriate evaluation design.
- The key products of this step include 1) Purpose statement explaining why the evaluation is being performed, how the findings are likely to be used, and who is likely to learn from or use the findings, 2) Statement about the type of evaluation that will be conducted (e.g., process, outcome), 3) List of intended users and use of the evaluation findings, 4) List of evaluation questions, and 5) Description of the overarching evaluation design.

Overview and Importance

Step 3 of the Evaluation Framework identifies what aspects of the program to evaluate. It uses the priorities and information needs from interest holders identified in Step 1 and the logic model from Step 2 to focus the evaluation questions and design. Step 3 prioritizes what is important to understand and identifies a culturally responsive evaluation design that accommodates the program context and resources while also incorporating relevant <u>evaluation standards</u>.

The main products of this step are the following:

- 1. Statement identifying the evaluation's purpose, how the findings are likely to be used, and who is likely to learn from or use the findings.
- 2. Statement about the type of evaluation that will be conducted (e.g., process, outcome).
- 3. List of intended users and use of the evaluation findings.
- 4. List of evaluation questions.
- 5. Description of the overarching evaluation design that will answer the evaluation questions.

Implementing Step 3 with Illustrative Examples

Develop Evaluation Purpose Statement

Before conducting an evaluation, identifying its main goal or purpose sets the tone for how the evaluation will be conducted. The evaluation purpose statement can be influenced by the following:

- <u>Intended users</u> of the evaluation: those who have a specific interest in the evaluation and a clear use in mind.
- <u>Intended uses</u> of the evaluation: the ways in which the intended users plan to use the knowledge and findings gained from the evaluation.
- <u>Program components</u>: contextual information of the program to assess evaluation readiness.
- Feasibility to conduct the evaluation: the resources available to conduct the evaluation.

Table 3.1. Key guestions to consider when identifying the purpose

Criterion	Question
Intended users of the evaluation	 Who will use and/or act on the evaluation findings? This includes funders, program implementers, community members, etc.
Intended uses of the evaluation findings	 What information is important to interest holders? What do they want to gain from the evaluation? When are the evaluation findings needed?

Criterion	Question		
Program components	 What is the stage of program development (i.e. planning phase, implementation phase, maintenance phase)? What is the overall context? Which components of the program are best suited for evaluation? 		
Feasibility to conduct the	What resources (i.e. time, money, effort) are needed for the evaluation?		
evaluation	(feasibility)		
	O What financial resources are available?		
	 How much staff time will be needed to invest in the evaluation? 		

O How intense is the program?

Use Worksheet 3A to apply the concepts outlined in Table 3.1.

Case example: Evaluation Purpose for Colorectal Cancer Control Screening Program (CRCCP)

The CRCCP funds recipients through a cooperative agreement to partner with health systems and their primary care clinics to implement evidence-based interventions within clinics to increase colorectal cancer (CRC) screening among priority populations and ultimately reduce CRC incidence and mortality. The CRCCP's evaluation team plans to conduct a five-year multi-level process and outcome evaluation across all recipient programs. The purpose of their evaluation includes the following:

- 1. Improving recipient programs
- 2. Strengthening CDC's accountability to the public and Congress and recipients' accountability to CDC
- 3. Informing future programmatic planning and decision-making

For additional examples of evaluation purposes and associated uses, see Table 4 in the CDC Program Evaluation Framework, 2024.

Determine Type of Evaluation to Conduct

The evaluation purpose provides clarity on the type of evaluation to conduct. The most common types of evaluations include formative, process/implementation, outcome, impact and economic. **Table 3.2** compares the evaluation types and when to use them.

Table 3.2. Comparison of Evaluation Types

Evaluation Type	What it Shows	When to Use	Why it is Useful	Examples
Formative Evaluation	Whether the proposed program, policy or organizational approach is feasible, appropriate, and acceptable to the population of reach before it is fully implemented	During the development of a new program, policy, or organizational approach When an existing program is being modified or used in a new setting When you want to focus on the who,	Allows for modifications before full implementation begins	Assessing if the program can be implemented as planned Assessing if the program will be accepted by the community

Evaluation Type	What it Shows	When to Use	Why it is Useful	Examples
		what, when, where, and how		
Process Evaluation	The extent to which the program, intervention, regulation, operation, or policy is being implemented as planned	Beginning of program or policy implementation During operations of existing program or policy	Provides early indications of gaps or issues that can be addressed early in the process Allows for programs to monitor activity efficiency	Assessing reach of activities to priority populations Assessing resource mobilization/allocation Assessing threshold level of participation or exposure to intervention Assessing access to and/or quality of services Assessing process for implementing program, policy, intervention, or organizational approach
Outcome Evaluation	The degree to which the program, policy, or organization has achieved its intended outcomes or results It cannot determine what caused specific outcomes (causality), only whether they have been achieved	After an intervention, policy or program has been implemented with the priority population	Identifies whether the program or policy is achieving its goals	Assessing change in knowledge, attitudes, and behaviors in priority populations Assessing change in policies, regulations, or social norms in priority populations Assessing change in incidence, mortality, and morbidity
Economic Evaluation: (cost analysis, cost- benefit analysis, cost-effectiveness analysis, cost- utility analysis)	Examines program effects relative to the costs of the program	At the beginning of a program or policy implementation During operations of an existing program At the end of program or policy intervention	Helps understand the cost of implementing a program and can assess program effects relative to the cost to produce them	Assessing if the value of the program's outcomes exceeds the cost
Impact Evaluation	Compares the outcomes of a program, policy, or organization to estimates of what the outcomes would have been without it. Usually seeks to determine whether activities caused the observed outcomes	At the end of a program During operation of a program at appropriate intervals	Provides evidence for use in policy and funding decisions	Assessing the extent to which the outcomes can be related to the program as opposed to other external factors (i.e. attribution/causality)

Adapted from:

- 1. Salabarria-Pena, Y. et al. (2007). Practical Use of Program Evaluation among Sexually Transmitted Disease (STD) Programs, Atlanta (GA): Centers for Disease Control and Prevention.
- Kidder DP, Fierro L, Luna E, et al. CDC Program Evaluation Framework, 2024. MMWR Recomm Rep. 2024;73(No. RR-6):1-37. doi: https://dx.doi.org/10.15585/mmwr.rr7306a1. Retrieved f
 https://www.cdc.gov/mmwr/volumes/73/rr/rr7306a1.htm?s cid=rr7306a1

Case Example: Evaluation Focus Area for Colorectal Cancer Control Screening Program (CRCCP)

Table 3.3 provides a case example of the CRCCP's focus area for the evaluation and the type of evaluation to be conducted. The CRCCP's evaluation team plans to conduct a five-year multi-level process and outcome evaluation of recipient's programs. Based on their logic model (<u>Figure 5</u>), the evaluation team is focused on understanding program implementation and identifying a change in clinic-level CRC screening rates over time.

Table 3.3 Case Example of CRCCP's Focus Area and Evaluation Type

Evaluation Focus	Process	Outcome
Partnerships with health systems and primary care clinics	Х	
Implementation of evidence-based interventions within partner clinics	Х	
Increase in clinic-level colorectal cancer screening rates		Χ
Reduction in colorectal cancer incidence and mortality		Χ

Develop Evaluation Questions

Evaluation questions identify the aspects of the program that will be investigated (Wingate L, Schroeter D, 2007). These questions are usually broad in scope, open-ended, and either process or outcome focused. They help to define the boundaries of the evaluation that align with its purpose, the intended uses and information needs, and interest holder priorities.

Tip: Evaluation questions **ARE NOT** the same as data collection questions (i.e. surveys, key informant interviews, etc.) which are usually specific, direct, and meant to collect a single data point.

Case Example: Evaluation Questions for Colorectal Cancer Control Screening Program (CRCCP)

CRCCP's evaluation questions are based on the main program activities and outcomes that align with the program logic model and evaluation purpose. See **Table 3.4** for a case example of CRCCP's alignment of evaluation questions with the evaluation focus and type of evaluation question.

Table 3.4 CRCCP's Evaluation Focus, Evaluation Questions and Type of Evaluation Question

Evaluation Focus	Evaluation Questions	Process X	Outcome
Partnerships with health systems and clinics	What are the characteristics of the recipient's partner health system and clinics?		
	What is the annual and overall reach of CRCCP?	Х	
	Are recipients partnering with clinics serving populations of need with low colorectal cancer (CRC) screening rates for completeness?	X	
Implement Evidence- Based Interventions (EBI)	What EBIs are recipients implementing in the clinics?	X	
	How are EBIs implemented in the clinics?	Χ	

Evaluation Focus	ocus Evaluation Questions		Outcome
	What are the costs and cost effectiveness of EBIs being implemented by CRCCP recipients?	Х	
Increased CRC Screening To what extent are screenings completed among patients who receive a screening referral?		Х	
	To what extent have clinic screening rates and the number of CRC screenings changed over time?		Х
Reduction in CRC What is the long-term impact of the CRCCP on lives saved? Incidence and Mortality			Х

For additional examples of evaluation questions for process and outcome evaluations, <u>see Table 5</u> in the CDC Program Evaluation Framework, 2024.

Developing and prioritizing evaluation questions can be influenced by several factors (CDC Asthma Control Program, 2013)

- Interest holder priorities and when information is needed.
- Appropriate fit within the program's description, goals, and stage of development.
- Relevance with evaluation purpose and providing information useful to interest holders.
- Resource availability in time, funding, and staffing.
- Timeline for conducting the evaluation.
- Availability of similar insights from prior evaluations or other evidence activities.
- Provided insights for advancing health equity.

In addition to developing and prioritizing the evaluation questions, assessing the effectiveness and appropriateness of the questions will help capture the most important information. There are certain characteristics that make a good evaluation question as highlighted in **Table 3.5**.

Table 3.5: Characteristics of good evaluation questions

Evaluation Question Characteristic	Definition
Evaluative	Provides determination on merit, worth or significance and can directly inform decisions about the program.
Pertinent	Clearly related to the purpose and intended user's information needs.
Reasonable	Linked to what a program can practically and realistically achieve based on scope, stage of development, resources.
Specific	Clearly identify what will be investigated during the evaluation.
Answerable	Questions reflect type and quantity of data that can be feasibly collected, analyzed, and interpreted.
Complete	Thoroughly addresses the purpose of the evaluation, intended users' information needs, and purposefully selected from a range of topics appropriate for the evaluation.

Adapted from Wingate, L., Schroeter, D. (2007). *Evaluation questions checklist for program evaluation*.

Use <u>Worksheet 3B</u> to assess evaluation questions that combines key factors and evaluation question characteristics.

Tip: Select evaluation questions that can be answered in a timely manner. Engage collaboratively with all interest holders (i.e. funders, implementers, community members, etc.) to develop questions that will answer their specific information needs. This will ensure all perspectives are represented in the evaluation questions.

Determine Evaluation Design

The evaluation design is the overarching structure for the evaluation (Kidder DP, Fierro LA, Luna E, et al., 2024). Selecting the appropriate evaluation design is guided by the evaluation purpose, key evaluation questions, and evaluation context, including available resources and constraints.

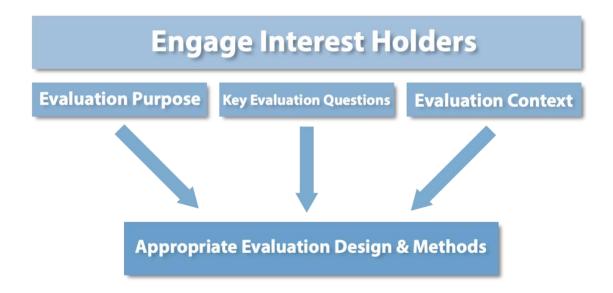


Figure 1: Schematic of how to identify an appropriate evaluation design (Kidder DP, Fierro LA, Luna E, et al., 2024)

The schematic above demonstrates that interest holder engagement influences the evaluation purpose, key evaluation questions and the understanding of the <u>evaluation context</u>. Collaboratively engaging interest holders contributes to the credibility of the evaluation and ensures that the selected design will be able to be answer the key evaluation questions with scientific integrity within the real-world constraints.

Tip: Implement the evaluation design in a manner that upholds the evaluation standards to the greatest extent possible. The choice of design has implications for what will count as evidence, how that evidence will be gathered, and what claims can be made [CDC Program Evaluation Framework, 2024].

The three types of scientific designs commonly used in evaluation are experimental, quasi-experimental, and observational as outlined in **Table 3.6**.

Table 3.6: Types of Evaluation Designs

Research Design	Example	Definition	Strengths	Limitations
Experimental	Randomized controlled trial (RCT)	Units of study are randomly assigned to a control group or a treatment/experimental group (Shackman, 2020)	May demonstrate causal relationship between activities and outcomes Considered a rigorous approach that may answer questions of causality	Not always practical due to costs May not be ethical to randomly assign people if the program or intervention involves treatment or another service
Quasi- experimental	Time series	Compare between non- equivalent groups that are not randomly assigned (Pell Institute Evaluation Toolkit 2024).	Enables experimentation when random assignment isn't possible or ethical	Additional analyses are needed to control for extraneous factors that can influence findings.
Observational	Case studies or cross- sectional	Does not use comparison or control groups. (University of Washington Training Evaluation Tools, 2024)	Simple design and may require least resources to conduct.	Inability to infer causality

Applying the Cross-Cutting Actions and Evaluation Standards

As with the other steps in the evaluation framework, integrating the cross-cutting actions throughout each step will increase the likelihood that the evaluation is credible, equitable, and findings are used. In addition, applying the evaluation standards will help to improve the evaluation quality and use by reducing options at each step to make the evaluation manageable (Office of Management and Budget, 2020). See table 6 in the CDC Program Evaluation Framework, 2024 for key questions for integrating the evaluation standards and cross-cutting actions for Step 3.

Step 4: Gather Credible Evidence

Key Takeaways for Step 4

- Determine the evidence needed to answer the evaluation questions, including what data will be collected, how, when, and from whom (or what).
- A key product of this step is a data collection strategy defining expectations for credible evidence, methods that will be used, indicators and associated measures of interest, and data sources.

Overview and Importance

Step 4 of the Evaluation Framework builds on the evaluation design from Step 3 to determine the evidence needed to answer the evaluation questions. During this step, evaluators will develop a data collection strategy, which involves the selection of data sources and associated measures that align with the evaluation purpose and questions.

Implementing Step 4 with Illustrative Examples

Establish Expectations

Evaluators will want to collaborate with interest holders and set expectations up front that are realistic and will produce the evidence needed to address their information needs.

Examples of Engaging with Interest Holders During this Step

- Collaboratively establish and manage expectations about the evidence that is needed to answer the evaluation questions, and the type and level of results that will be used to answer those evaluation questions.
- Identify indicators that are relevant and align with the evaluation purpose and questions. Interest holders can validate indicators or suggest alternatives.
- Discuss expectations of what constitutes success or a positive finding and the rationale for such expectations.
- Identify what data collection methods are practical, what data sources are reliable, and other expectations about the quality, type, and quantity of data needed to build credible evidence.

Choose Appropriate Methods

An evaluator can choose quantitative (numeric) or qualitative (narrative) data collection methods. Both quantitative and qualitative methods have benefits and limitations to their use.

Quantitative data methods rely on numerical data to draw conclusions and compare results. However, these methods are less able to capture unknowns about a particular topic or context and have less flexibility to be adaptive.

Qualitative data methods rely on words to gather deeper insights on topics or concepts that are not well understood. They are also useful when an understanding/study of evaluation participants' experience is needed to provide context on a topic. However, qualitative data are unable to offer comparability.

Tip: Engage with interest holders on the most appropriate methods that will ensure your evaluation gathers credible evidence.

Choosing the appropriate data collection method may be influenced by several factors (Mwita, 2022):

- Resource availability (e.g., time, cost, staffing)
- Ethical considerations
- Size and scope of the evaluation
- Validity (e.g., how well the evaluation measures what's intended)
- Reliability (e.g., ability to replicate findings)

In determining the type of data to collect, evaluators and interest holders can explore data that is already available that may be able to answer the evaluation questions. Available data may include surveillance data, census data, or other datasets.

In some cases, an evaluator may use a mixed methods approach, purposefully integrating both qualitative and quantitative methods. Using a mixed methods approach can improve the accuracy of results by providing deeper insights and understanding on the "why" behind concepts, topics, or context more comprehensively (Kidder DP, Fierro LA, Luna E, et al., 2024). Ensure the data collection method selected to be used is culturally responsive to produce trustworthy and accurate data. See **Table 4.1** for a description of common data collection methods and some scenarios on when to use them and <u>use Worksheet 4A</u> to assess which data collection methods and data sources are best to use in your evaluation.

Tip: Engage interest holders to develop culturally responsive data collection methods.

Table 4.1: Data Collection Methods

Data Collection Method	Туре	Description	When To Use
Survey or Questionnaire	Quantitative	Collection of data by gathering standardized information from all respondents. Typically involves various sampling methods and techniques. Surveys can be in person or virtual through various methods such as interviews, phone, mail-in, text, email, website, or social media.	 When you need to collect information quickly. When you want to monitor changes or trends over time. When you want to identify individual's knowledge, attitudes, or behaviors.
Interviews	Qualitative	Structured conversations to gather information. Interviews can be conducted individually or in group settings, in person, telephone, video, or groupf settings.	When you need rich, detailed information. When you need deeper understanding of individuals' experiences, motivations, or emotions on a particular topic or issue. When you need deeper understanding of the context

Data Collection Method	Туре	Description	When To Use
Observations	Qualitative	Conducted by watching or listening	When you need to explore
		to behaviors. There are several considerations for conducting observation, including ethics, sampling methods, and objectivity.	 a new topic. When you need to understand individuals' behavior or context as it occurs naturally. When you need to discover silent norms and values.
Focus Groups	Qualitative	Interactive discussion involving small groups of participants (often around 6-8) on specific topics under the guidance of a trained moderator.	 When you need to explore a new or specific topic of which little is known. When you need to gain a range of views about issues in a single data collection.
Case Study	Qualitative	In-depth exploration of individuals, groups, events, programs, sites, or locations. Relies on various sources of information such as interviews, observations, documents, etc.	 When you want to gain concrete, in-depth knowledge about a specific topic. When conducting extensive research is not feasible
Document or Record Reviews	Qualitative	Assessing existing documents to gain historical understanding of the program, participants, etc.	 When you need to gather background information on the program. When you need answers to specific evaluation questions related to "what".

Source: Hennink M, Hutter I, Bailey A. Qualitative Research Methods. SAGE Publications. 2011

Identify Relevant Indicators

Indicators differ from measures and metrics. They:

- Are measurable statements that measure a construct or concept (e.g., knowledge of health risks of smoking or awareness of smoking campaign)
- Help evaluators understand whether interventions or programs have achieved progress
- Help programs identify areas for improvement and make decisions based on credible evidence
- Help ensure that the evaluation is credible and effective
- Align with the evaluation focus area and evaluation questions

The program roadmap or logic model contains the activities and outcomes, which can be helpful for guiding indicator development as well as the expectations established with the interest holders. These include **activity indicators**, which measure the qualities of program implementation efforts and associated **output indicators** that measure products of the program activities, as well as **outcome indicators** measuring whether the program effects were achieved. Similarly, indicators will have an associated measure/metric that directly aligns to it and quantifies it. Use <u>Worksheets 4B</u> and <u>4C</u> to assess selecting relevant indicators.

Developing Indicators

- Identify and define the expected changes or outcomes that the program is hoping to achieve.
- Choose indicators that are directly related to the evaluation purpose and questions. Clearly outline
 how the outcome or activity will be measured to make sure that the program constructs align with
 the measures.
- Use <u>Specific</u>, <u>Measurable</u>, <u>Achievable</u>, <u>Relevant</u>, <u>Timebound</u>, <u>Inclusive and Equity (SMARTIE)</u> criteria to develop the indicator and ensure there is sufficient specificity and detail to facilitate accurate data collection (CDC, 2024).
- Align the indicators with the evaluation questions to ensure there are appropriate measures to answer the questions.

Determine Appropriate Data Sources, Data Quantity, and Data Quality

When selecting data sources, consider the relevance of the source to the purpose of the evaluation. **Primary data** are new data specifically collected for that evaluation, and **secondary data** are existing, previously collected data. Using multiple sources of data enhances the credibility of the evaluation by incorporating varying perspectives.

Data quantity refers to the amount of data that needs to be collected to answer the evaluation questions. Data quality refers to the appropriateness and integrity of data used in the evaluation (Kidder DP, Fierro LA, Luna E, et al., 2024). In considering data quantity and quality, evaluators may:

- Assess the amount of data needed to answer the evaluation questions sufficiently (i.e. what information is important to know based on Step 3)
- Balance the amount of data to be collected with avoiding burden on the respondents or those involved in data collection
- Ensure that the sample size is sufficient to do a detailed analysis

Data collection protocols that are thorough and clear with well-defined indicators will improve the likelihood that the evaluation will collect quality data. Additionally, the data collection instrument design, procedures, trainings, source selection, coding, and error checking are other factors that also affect high quality data.

Data collection plans may need to be updated or modified during an evaluation, and documenting these data collection changes will be a useful resource when reviewing, analyzing, and interpreting data. See **Table 4.2** for considerations when checking for data quality.

Table 4.2: Assessment of Data Quality

Criteria	Questions
	Are there errors or inaccuracies?
	Are the data collection methods reliable?
Accuracy	How were the data validated?
	Were there any limitations or biases?
	How did you minimize inaccuracies?
	Are there missing data or gaps in the data?
Completeness	Were the procedures for data collection designed in a way that made sure the information
	captured is complete?
	Do the data align with previous records related to the focus and are there inconsistencies?
Consistency	Were protocols for data collection consistently followed across all sources?
Consistency	Were there sufficient data checks?
	If there were discrepancies, were the data resolved or explained to justify the discrepancy?

Criteria	Questions
	How often are the data collected and updated?
Timeliness	Were the data collected according to the timeline established in the evaluation plan?
	Were there delays in data collection? How were the delays addressed?
	Do the data relate back to the objectives/goals of the evaluation?
Relevance	Were there any adjustments made to data collection methods at any point during
Relevance	collection? Did they enhance relevance to the objectives?
	Were interest holders effectively engaged to ensure data are relevant for all parties?

Source: Kidder DP, Fierro L, Luna E, et al. CDC Program Evaluation Framework, 2024. *MMWR Recomm Rep.* 2024;73(No. RR-6):1-37. doi: http://dx.doi.org/10.15585/mmwr.rr7306a1. Retrieved from https://www.cdc.gov/mmwr/volumes/73/rr/rr7306a1.htm?s_cid=rr7306a1_w

While data quality and quantity are important, also consider the cultural context and norms when making decisions regarding gathering data. Evaluators ensure persons providing data know and understand their rights, any risks, and how data will be handled, stored, and used. Evaluators also gather data that is secure, confidential, and compliant with program standards. Working collaboratively with interest holders on data collection and data security procedures will help align the procedures with cultural norms and the project setting (Kidder DP, Fierro LA, Luna E, et al., 2024).

Develop Data Collection Instruments and Implement Data Collection

Data collection instruments lay the foundation for data and information gathering. This section explores key steps in developing data collection instruments such as:

- Defining the data needs
- Determining if there are existing instruments that can be adapted to fit the evaluation context or if there is a need to develop new instruments
- Developing a protocol guide for the instrument use to ensure consistency and completeness of data
- Developing questions or prompts that align with the previously selected indicators
- Developing the format of response options for the items (such as open-ended, multiple choice, or ranking)
- Piloting the data collection instruments with interest holders to make sure the questions are clear
- Revising the data collection instrument based on feedback from the pilot test
- Finalizing the data collection instrument
- Training the data collection team on how to use the instruments and any associated protocols
- Developing a data management plan
- Developing a quality assurance plan
- Monitoring the data collection process

Once these steps are completed, the evaluator can dive into implementation and data collection. Use **Worksheets** <u>4D</u>, <u>4E</u>, <u>4F</u>, and <u>4G</u> to create a data collection implementation plan to ensure the collection of meaningful insights in a timely manner.

Tip: Simplicity is key! Use language that is clear and concise. Test the data collection instruments so you can be sure any challenges are addressed early before full implementation.

Case example: Evaluation Plan Matrix for Colorectal Cancer Control Screening Program (CRCCP)

Using an evaluation matrix brings all the components discussed above together in one table to make it easier for the evaluator and interest holders to see how the evaluation questions, indicators, measures, data collection sources, and methods align with the evaluation focus from Step 3. **Table 4.3** provides an example using the case example of Colorectal Cancer Control Program (CRCCP)'s evaluation matrix. Also, see table 7 in the MMWR. Use Worksheet 4H as a template for an evaluation matrix that can be adapted to fit program needs.

Table 4.3: CRCCP Evaluation Plan Matrix

Evaluation Focus Area (Step 3)	Evaluation Questions (Step 3)	Evaluati on Type (Step 3)	Indicator (Step 4)	Measures (Step 4)	Data Collection Source (Step 4)	Data Collection Method (Step 4)	Data Collection Timing (Step 4)
Establishing partnerships with health systems/clinics	What is the annual and overall reach of CRCCP?	Process	Partnerships established with health systems and clinics	# health systems recruited # clinics recruited # clinic patients aged 45-75 # primary care providers within clinics Geographic location of clinics mapped with population density overlay	Clinic data U.S. Census data	Survey	At baseline and annually
Establishing partnerships with health systems/clinics	Are recipients partnering with clinics serving populations of need with low colorectal cancer (CRC) screening rates?	Process	Reach of CRCCP among clinics serving priority populations	#/% clinics located in high burden areas #/% of clinics located in counties with high CRC incidence and death rates #/% clinics that are Federally Qualified Health Centers (FQHCs) #/% clinics with uninsured populations >20% Avg. clinic baseline screening rate	Clinic data US Cancer Statistics Small Area Health Insurance Estimates Social Vulnerability Index	Survey	At baseline and annually

Evaluation Focus Area (Step 3)	Evaluation Questions (Step 3)	Evaluati on Type (Step 3)	Indicator (Step 4)	Measures (Step 4)	Data Collection Source (Step 4)	Data Collection Method (Step 4)	Data Collection Timing (Step 4)
Implementing evidence- based interventions (EBIs)	How are EBIs implemented in the clinics?	Process	Implementa- tion of EBIs	Descriptions of EBI delivery protocols Avg. # ways patient reminders sent per clinic Avg. # ways provider reminders sent per clinic #/% clinics reducing structural barriers in more than one way Avg. frequency of provider assessment and feedback per clinic	Interview and focus group transcripts Clinic data	Focus groups and Interviews Survey	At baseline and annually
Implementing EBIs	What are the costs and cost effectiveness of EBIs being implemented by CRCCP recipients?	Process	Cost effectiveness of EBIs	 EBIs implemented Costs of implementing EBIs Screening prevalence changes 	Cost data Clinic data	Cost collection tool Survey	Periodic

Adapted from: Division of Cancer Prevention and Control Program. (2020). "CRCPP Evaluation Stakeholder engagement" table in the CDC Evaluation Plan: DP20-2002 Cancer Control Program. Internal Report (CDC): Unpublished

Applying the Cross-Cutting Actions and Evaluation Standards

There are several key questions that an evaluator can use to ensure successful integration of the <u>cross-cutting actions</u> and application of the <u>evaluation standards</u> during Step 4 of the framework. <u>Use Table 8</u> in the <u>CDC Program Evaluation Framework, 2024</u> to determine if you have effectively applied the cross-cutting actions and evaluation standards.

Step 5: Generate and Support Conclusions

Key Takeaways for Step 5

- Focuses on generating answers to the evaluation questions. These answers are presented as evaluation conclusions that align with the questions in Step 3 and demonstrate how the conclusion is supported by the data collected in Step 4.
- The key products for this step are 1) Data analysis and interpretation plan, and 2) Recommendations based on analytic findings.

Overview and Importance

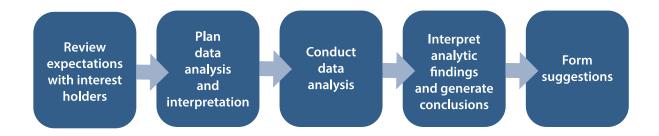


Figure 2: Key Steps for Implementing Step 5

Step 5 involves generating evaluation conclusions, which are answers to the evaluation questions supported by the data collected in Step 4. This step involves the following:

- Reviewing the evidence expectations identified previously
- Planning data analysis
- Conducting data analysis
- Interpreting the analytic findings
- Forming recommendations

Data analysis and interpretation in this step transform the raw data into meaningful and actionable recommendations. As you begin Step 5, refer to the expectations of interest holders established in Step 4. Specifically, engage interest holders in:

- Discussing the analysis plan (may include quantitative and qualitative analysis techniques)
- Interpreting analyses
- Drawing evaluative conclusions
- Testing the feasibility of potential recommendations to ensure conclusions are responsive to the context and underlying data
- Clearly planning for how and when you will involve interest holders in each of these activities.

Implementing Step 5 with Illustrative Examples

Review Expectations with Interest Holders

The expectation setting with interest holders that happened in Step 4 can be the basis for developing the data analysis plan. Review what the interest holders stated regarding:

- What evidence will be used to answer the evaluation questions
- What expectations they have about the type, quality, and quantity of data needed
- What indicators and measures are most important
- What changes, trends, or patterns suggest the program is on track or doing well

Planning Data Analysis

A data analysis plan includes how and by whom the data would be organized, analyzed, and synthesized. A plan that is feasible, appropriate, and aligns to the evaluation questions and data collection methods identified in earlier steps is more likely to produce findings that will be used by the interest holders. Evaluators will want to collaboratively engage interest holders to obtain agreement on the techniques for analysis and interpreting findings before data collection begins to promote transparency.

Develop the data analysis plan early because it will outline the series of choices you will make. The plan will also include the program's context, external factors, and implementation changes. Prepare your data analysis plans before data collection begins to ensure the data collected can be analyzed and meets the needs of interest holders, including program leadership. Involve interest holders in reviewing these plans and the expectations for success established in Step 4.

Tip: Questions to consider while planning for evaluation data analysis include the following:

- Who will do the analysis?
- What method(s) will you use to analyze the data? (for example, descriptive statistics, inferential statistics, content analysis, thematic analysis)
- What skills and expertise are required for the analysis methods selected?
- Do those responsible for the analysis have the necessary skills and expertise? If not, how could they obtain these skills?
- How will the results of the analysis be validated?

Table 5.1 is a sample template to document which data will be analyzed, how, when, and by whom. Align the data analysis plan to the evaluation questions, indicators, and data collection methods identified in Steps 3 and 4. To prepare for analysis, you can prepare templates that specify the data expected for each analysis and prepare a codebook for qualitative data. See Worksheet 5A in the Appendix for a corresponding worksheet to complete for your evaluation.

Table 5.1: Sample data analysis plan

Evaluation Question	Data to be Analyzed	Analysis to be Performed	Person(s) Responsible	Due Date

Conducting Data Analysis

As you begin the data analysis process, follow the data analysis plan, and document your progress along the way. Engage interest holders throughout the data analysis process and incorporate their perspectives. Analyze the data within the program's context, considering external factors and implementation challenges which may affect interpretation of the findings.

Your evaluation may include quantitative and qualitative data sources, in which case you will conduct quantitative and qualitative analyses. Common steps for quantitative and qualitative analysis are described below.

Common steps for quantitative data analysis

- Clean and pre-process raw data for accuracy and consistency. Check for missing data, standardize data formats, and make any other corrections needed.
- Import data into a statistical software program such as SAS, STATA, SPSS, R, or Excel.
- Analyze data based on the indicators defined in Step 4.
- Calculate descriptive statistics to describe, summarize, and compare key characteristics about the data (totals, frequency counts, percentages). For some indicators, data will need to be stratified or grouped based on variables of interest first.
- Explore distributions and variations within the data. Analyze trends, patterns, and relationships within the data.
- Draw conclusions from the findings.
- Conduct advanced statistical analyses for evaluation questions looking to determine the
 association between program activities and the intervention or desired outcomes (changes
 in knowledge, attitudes, behavior, health status, or systems changes).

Common steps for qualitative data analysis

- Transcribe recordings from interviews or focus groups and/or enter narrative comments from surveys or field notes into a word processing or qualitative analysis software such as nVivo, Excel, MAXQDA, or ATLAS.ti.
- Review and annotate the data to understand and familiarize yourself with the content. This could involve reading interview transcripts or listening to recordings.
- Organize the data: for instance, by date, by data collection type, or question asked.
- Code the text to identify and label key themes (trends or ideas that appear throughout) that correspond to your evaluation questions.
- Group text by key themes.
- Review the themes and codes for refinement and to identify any sub-themes that emerge.
- Draw conclusions from the findings.
- More advanced qualitative analysis techniques include the use of multiple coders, calculation of interrater reliability, and within-or between-case analysis.

Adapted from: Centers for Disease Control and Prevention. Evaluation Brief 19: Analyzing Qualitative Data for Evaluation. Evaluation Brief 20. Analyzing Quantitative Data for Evaluation.

Case example: Evaluation Data Analysis Plan for Colorectal Cancer Control Screening Program (CRCCP)

An example of a data analysis plan can be found in Table 5.2. The CRCCP evaluation team identified multiple quantitative and qualitative analysis methods to analyze the primary and secondary data and to answer their evaluation questions, and Table 5.2 shows the connection among the evaluation questions, indicators, methods, and techniques.

Table 5.2: Data Analysis Plan for the CDC Colorectal Cancer Control Screening Program (CRCCP)

Evaluation	Evaluation	Measures	Data	Data	Data Analysis
Questions (Step 3)	Type (Step 3)	(Step 4)	Collection Source	Collection Method	(Step 5)
(Step 5)	(Step 3)		(Step 4)	and	
			` ` ′	Timing	
				(Step 4)	
What is the	Process	• # health systems recruited	Clinic data	Survey, at	Quantitative
annual and		• # clinics recruited		baseline and	(frequencies,
overall reach of		• # clinic patients aged 45-75	U.S. Census	annually	percentages,
CRCCP?		• # primary care providers within clinics	data		CICi
		Geographic location of clinics mapped with population density overlay			GIS mapping
How are EBIs	Process	Descriptions of EBI delivery protocols	Interview	Focus groups	Qualitative (thematic
implemented in		Avg. # ways patient reminders sent per	and focus	and	analysis)
the clinics?		clinic	group	Interviews,	, ,
		Avg. # ways provider reminders sent	transcripts	periodic	Quantitative
		per clinic			(frequencies,
		 Avg. frequency of provider assessment 	Clinic data	Survey, at	percentages,
		and feedback per clinic		baseline and	
		• #/% clinics reducing structural barriers		annually	
		in more than one way			
What are the	Process	EBIs implemented	Cost data	Cost	Quantitative (e.g.,
costs and cost		Costs of implementing program activities		collection	per patient screened,
effectiveness of		Screening prevalence changes	Clinic data	tool, periodic	average cost per fecal
EBIs being				Curron	test completed, incremental cost
implemented by CRCCP				Survey, periodic	effectiveness ratio)
recipients?				periodic	effectiveness ratio)
What is the	Outcome	# cancers averted	Clinic data	One-time	Simulation modeling
long-term		• # lives saved		special study	
impact of the		# late-stage cancers averted	Patient-	– survey,	
CRCCP on lives			level	disease	
saved?			screening	model	
			data		
			Notural		
			Natural disease		
			history		
			model		
			model		
		1	1	1	

Interpreting Analytic Findings

The interpretation process is where meaning is made from the analytic results. When reviewing results, consider how the findings compare to the expectations for success outlined with interest holders in Step 4. Findings also can be reviewed alongside the existing evidence base or applicable scientific theories or models.

A shared interpretation process allows evaluators and interest holders to collaborate and discuss the strengths, limitations, and interpretations of the findings within context. Seek perspectives from various interest holders, especially those directly impacted by the program and familiar with the program context. The evaluator may have to balance interpreting findings with including interest holder perspectives as this will influence the interpretation of findings. When different but equally well-supported conclusions exist, each could be presented with a summary of its strengths and weaknesses. The culmination of this step is generating evaluative conclusions.

Tip: Involve "cultural interpreters" in the data interpretation process. These are interest holders who are part of the data interpretation process to verify that data represents what was captured as well as the context.

Source: Hood, S., Hopson, R., Kirkhart, K. (2015). Culturally Responsive Evalua. on. 10.1002/9781119171386.ch12.

There are several ways to conduct a collaborative process of reviewing analytic results, translating findings, and validating the interpretation, including:

- Using data dashboards to share and generate discussion on interim findings
- Establishing collaborative interpretation activities such as data walks
- Hosting roundtable discussions
- Facilitating data storytelling (for instance, by using narratives and visualizations to convey insights from data)
- Re-purposing project meetings to discuss findings throughout the evaluation

Case Example of a Data Gallery Walk

Purpose and goals: To collectively review data from a community health assessment of two communities, examine differences, and generate insights and action steps.

Participants: Youth co-investigators

Format of activity: Participants rotate between 3 health topic stations to review display posters showing bar charts of health indicators, maps, and quotations from the community health assessment. An additional open-ended station will provide participants an opportunity to propose additional community health needs. Use discussion questions in small group discussions about the data.

Data point: Percentage of adults 18 years and older reporting poor mental health in past 30 days in each community.

Possible discussion questions: What are some ways to interpret these data? What questions do these data recall? What surprises you about these data? What patterns do you see in the data? What gaps? What do you find interesting in these data? What assumptions might these data help to test? What other data would you want to have a fuller picture of the current context? Whose perspective is reflected in these data? Whose is missing?

Source: Springer, et al., Exploring Models for Youth Engagement in Community Health Planning: The Youth-led Community Health Learning Initiative

It is important to think through the best approaches for your evaluation's unique interest holders, and the format may vary between different groups of interest holders. At the end of the process, answers to the following questions may be generated.

- How do the findings compare to the expectations for success established among interest holders prior to data collection?
- Do any changes need to be made because of the evaluation findings?

<u>See Worksheet 5B</u> in the Appendix for a template to guide the planning of a collaborative discussion of evaluation results (such as data walks, data gallery walks, data parties, data chats, and dashboard reviews).

Forming Recommendations

After interpreting the analytic results of the evaluation and forming evaluative conclusions, the next step is to outline recommendations for action. Ensure recommendations are clear and concise, evidence-based, and grounded in the program context. Facilitating recommendation discussions with interest holders allows you to gauge the feasibility of putting them into action. Prioritize and outline which recommendations are more critical and feasible to address first, who will address them, on what timeline, and provide multiple options for action when possible. Establish a process to document and share recommendations with interest holders, as well as a process to follow up on progress. Use Worksheet 5C in the Appendix to plan and implement actionable recommendations based on your evaluation results.

Applying the Cross-Cutting Actions and Evaluation Standards to Step 5

As with the other steps, integration of the <u>cross-cutting actions</u> and the <u>evaluation standards</u> are important to increase the likelihood the evaluation results are credible and produce actionable findings. <u>Use Table 9</u> in the <u>CDC Program Evaluation Framework, 2024</u> to assess integration of the cross-cutting actions and evaluation standards for step 5.

Step 6: Act on Findings

Key Takeaways for Step 6

- Engage interest holders to translate evidence into actionable decision-making.
- Key products of this step are 1) the anticipated use of the evaluation findings by interest holders, 2) communication, reporting and dissemination strategy, and 3) relevant evaluation product(s) on which the interest holders can act.

Overview and Importance



Figure 3: Key Steps for Implementing Step 6

Facilitating the use of evaluation findings includes planning, collaboration, and commitment from the evaluators and interest holders to act on these findings and recommendations. Since evaluation findings do not translate into action automatically, this step is an essential element in the evaluation cycle.

The components of this step are:

- 1. Planning how the findings will be used
- 2. Preparing the findings for use
- 3. Facilitating the insights into actions

Implementing Step 6 with Illustrative Examples

Planning the Findings for Use

Planning for how the evaluation findings and recommendations will be used happens throughout the evaluation process. For example, when evaluators collaborate with interest holders to develop the evaluation design, questions, and indicators (Steps 3 and 4), they also consider the use of evaluation findings. Questions to consider at each step of the evaluation process to prepare for use of the evaluation findings include the following:

- Who will use the findings?
- What data, insights, or recommendations will be used?
- When will they be used?
- How will they be used?

<u>Use Worksheet 6A</u> to anticipate how evaluation findings will used. Consider which formats will resonate the most with various audiences. For example, some interest holders may like the visual aspect and near real-time results found in data dashboards, while others may prefer reading through a more detailed

report that provides more information on methods and background. Regardless of the format type, tailor communication products to the audience, use plain language, and be culturally relevant.

Tip: Strategies to encourage evaluation use

- Integrate evaluation at the beginning of the program and identify ways to promote learning and use of evaluation findings throughout the program.
- Develop a strong relationship between the evaluation team and the program team through consistent communication and collaboration.
- Facilitate trust with interest holders and program recipients through transparency, engagement, and open communication.
- Identify leaders who will champion evaluation use.
- Cultivate an environment that promotes evaluation capacity building and a team culture receptive to feedback.

Source: McWhorter, A. Case Study on Evaluation Use.

Preparing the Findings for Use

Planning ways to communicate evaluation findings and updates throughout each step of the evaluation process helps to build trust between the evaluators and interest holders. This could involve planned periodic discussions to share updates, seek feedback, or to review interim findings.

Existing structured approaches that encourage use of findings throughout the evaluation process include the **Knowledge to Action** (Centers for Disease Control and Prevention, 2014) and **Data to Action Frameworks** (Zakocs et al., 2015). **Table 6.1** lists steps and considerations for how to complete a rapid feedback cycle, based on the Data-to-Action Framework.

Table 6.1: Data-to-Action Rapid Feedback Cycle Considerations

	Steps	Considerations
1.	Clarify intent	Draft a short protocol that explains:
		Purpose
		Intended users
		Questions to be answered
		Low-cost data collection strategies
		Staff roles
2.	Collect "good	Collect and analyze data quickly.
	enough" data	
3.	Produce brief	Draft a brief memo that highlights the major findings with a narrative and visuals. Distribute the
	memo	memo after the data have been collected and analyzed.
4.	Engage in reflective	Engage with intended users about the findings. Center the discussion around these three
	debrief	questions:
		What are we learning?
		What are the implications for the project?
		What actions are required?
5.	Make decisions	Informed by the discussion in Step 4, make decisions to:
		Gather more information before taking actions,
		Take no action, or
		Take action: make adjustments to the program

Adapted from: Zakocs R, Hill JA, Brown P, Wheaton J, Freire KE. The Data-to-Action Framework: A Rapid Program Improvement Process. Health Educ Behav. 2015 Aug;42(4):471-9. doi: 10.1177/1090198115595010. PMID: 26245935; PMCID: PMC5990006.

Case Example: Colorectal Cancer Control Screening Program (CRCCP) Evaluation Uses

The CRCCP evaluation focused on the timely and meaningful use of evaluation findings to inform continuous program improvements, maximize accountability to interest holders, and demonstrate program effectiveness. Use of evaluation findings was a priority and varied by interest holders. In **Table 6.2**, the evaluation team anticipated potential uses of evaluation findings by interest holders with the understanding that some interest holders may develop new uses for evaluation findings that help to inform program policies, program implementation, resource allocation, and replication of promising practices.

Table 6.2: Case Example - Anticipating Evaluation Use by Interest Holder

Interest Holder	Use of Evaluation Findings
Federal agencies (e.g. Department of Health and Human Services and the U.S. Congress)	 To assess CRCCP reach to priority populations and primary outcome of interest-changes in CRC screening rates. Cost and Cost-effectiveness of CRCCP strategies and activities that may impact funding allocation. Success stories of individuals that may promote the benefits of the program
CDC leadership (Center for Chronic Disease and Health Promotion, Division of Cancer Prevention and Control Leadership)	 Monitor recipient progress and performance for purposes of program improvement, accountability and decision- making. Recipients spend rates and return on investment study results to inform future funding decisions and practices.
Division of Cancer Prevention and Control program managers	 Inform technical assistance (TA) and guidance to funded recipients and monitor recipient progress that may lead to improved recipient implementation of activities and performance. These interest holders will use dashboards populated with various program data (e.g., budget, partnerships, reach, EBI implementation, screening rates, follow up care) to monitor progress and inform their TA. They will use this information to learn about individual recipient challenges, successes, and TA needs.
CRCCP funded recipients	 The evaluation team will provide recipients with information on program reach, implementation activities, and program effectiveness. CDC will work with recipients to conduct an annual clinic data review process to examine data quality and program progress. Information will be used to improve data quality, programs, and accountability.
National partners	 The Evaluation Team will publish results of various analyses that will be of interest to national partners (e.g., American Cancer Society, National Association of Community Health Centers). Interested in return-on-investment studies and studies of specific strategies identified as promising practices that may influence broader replication in the field.
General public	Providing information on who was served and what was achieved to demonstrate effective and efficient use of public dollars.

Adapted from: Division of Cancer Prevention and Control Program. (2020). CRCCP Evaluation Plan: DP20-2002 Cancer Control Program. Internal CDC report: unpublished

<u>Worksheet 6B</u> in the Appendix provides a tool to plan the dissemination of various information from your evaluation with various audiences. Some considerations include which format will resonate most with the audience, desired timing, and the best person to deliver the message.

There are several considerations to keep in mind when deciding how to promote the results of the evaluation. **Table 6.3** outlines common communication components to consider. If you are required to develop a final report for the evaluation refer to the common components of an evaluation report in **Table 6.4**.

Tip: Ways to Share and Disseminate Findings

- Dashboards
- Data visualizations
- Infographics
- Social media
- Briefs and one-pagers
- Podcasts
- Success stories
- Newsletters
- Brochures
- Presentations
- Posters
- Evaluation report

Table 6.3: Communication Components to Consider When Developing Messages to Promote Results

Communication	Definition
Components	
Timing	The timeframe for when the message will be delivered.
Style	The type of communication style that will be used when delivering the message. Communication styles can be mixed and must be tailored to each audience.
Tone	The tone of voice or tone of writing sets the mood for the message and how it will influence the audience. Tone of voice includes the pitch, volume, speed, and body language that is used when delivering a message verbally. Tone of writing is how the writer expresses their attitudes and feelings through word choice and syntax.
Source	The individual who sends the message.
Format	The method that will be used to share the message with the audience. Examples are listed in Table 5 of the CDC Program Evaluation Framework, 2024.
Channel	The way that the message will travel between the sender and receiver. The channel can be either spoken or written, depending on the message format that was chosen.
Context	The setting where the message will be delivered and the expectations of those who will receive the message. For example, if you are delivering the message in a community center with interest holders from the community, you must determine ahead of time their expectations like how to dress, words to include/exclude, if a translator is needed, if the visuals are culturally appropriate, etc.

Table 6.4. Common Components of an Evaluation Report

Component	Explanation			
Title page	Title page should include the following:			
	Title that identifies the type of evaluation and what was evaluated			
	Date (month and year)			
	Authors listed with affiliations			
Acknowledgements	No more than half a page with a list of contributors, their affiliation, and how they			
	contributed			
Abstract or Executive Summary	Describe the evaluation questions, methods, key findings, and recommendations (200-			
	300 words)			
Table of Contents	Table with the main report sections and page numbers for those sections			
Evaluation Purpose and	Overview of the program being evaluated (1 page), the evaluation purpose (1 page), and			
Evaluation Questions	the evaluation questions (1 page). In this section, you will also want to identify the			
	framework that was used to guide the evaluation (such as the CDC Evaluation			
	Framework) and how it was used.			
Methods	This section must describe the evaluation methods and analysis that were used, the			
	rationale, and the strengths and weaknesses of those methods (1-3 pages).			
Key Findings, Conclusions,	This section must include the key findings based on the data and aligned with the			
Interpretation, and	evaluation questions (3-4 pages), the interpretation of those findings (1-3 pages), and			
Recommendations	actions that are based on the findings and conclusions (1-3 pages).			
References	Include any references cited in the text using the appropriate citation style for your			
	paper (such as AMA or APA) accordingly.			
Appendix or Annex (if needed)	Determine if an appendix or annex are needed. Examples of what to include:			
	Detailed evaluation timeline with the roles listed for each evaluation team			
	member.			
	Detailed description of the evaluation tools that were used to collect data.			

Facilitating Insights to Action

Evaluators serve as facilitators for interpreting the findings, uncovering, and applying insights, and preventing misuse. Evaluators are also in the position to identify how to encourage interest holders to use the evaluation findings and how to support the users after they receive the evaluation findings. Possible questions that evaluators can consider are listed in **Table 6.5**. See **Worksheet 6C** for a template.

Table 6.5: Questions that Evaluator(s) can consider when facilitating a follow-up plan with interest holders

- What support do you think you need to understand and apply the findings to your work?
- Following the review of the evaluation results, how much time would you need before you act on the findings and recommendations?
- Who will serve as the champion for the findings and recommendations and prevent misuse?
- How much influence do you expect the evaluation findings to have?
- How have past evaluations been used?
- What types of data and findings are needed to support decision-making, and what types of data and findings are viewed by leadership as credible?
- Who needs to be involved for the evaluation to be influential?
- How will the interest holders know afterwards if the evaluation was used as intended?

Adapted from: International Development Research Center. (2012). Identifying the Intended User(s) and Use(s) of an Evaluation. Retrieved from identifying the Intended User(s) and Use(s) of an Evaluation. Retrieved from identifying the Intended User(s) and Use(s) of an Evaluation. Retrieved from identifying the Intended User(s) and Use(s) of an Evaluation. Retrieved from identifying the Intended User(s) and Use(s) of an Evaluation. Retrieved from identifying the Intended User(s) and Use(s) of an Evaluation. Retrieved from identifying the Intended User(s) and Use(s) of an Evaluation.

Also refer to the Action Plan (<u>Worksheet 5C</u>) developed during Step 5 to generate discussion and plan follow up on the evaluation findings and recommendations.

Applying the Cross-Cutting Actions and Evaluation Standards to Step 6

<u>Use Table 10</u> in the <u>CDC Program Evaluation Framework, 2024</u> for questions to consider when applying and integrating the <u>cross-cutting actions</u> and <u>evaluation standards</u> to this step. Applying the evaluation standards to Step 6 will increase the likelihood that findings are used throughout the evaluation process and prevent misuse.

Toolkit Appendix: Worksheets

Step 1: Assess Context

Worksheet 1A. Evaluability Assessment

Evaluability	Evaluability Statement	Not at all	Somewhat	True	Not
Component		true	true		applicable
Program Intent	The program logic is clear,				
and Logic	rational, and understandable.				
Model					
Program Intent	There are no apparent gaps.				
and Logic					
Model					
Program Intent	There is shared understanding				
and Logic	among program leadership and				
Model	staff about core elements of the				
	program and the context in				
Drogram	which the program operates.				
Program Plausibility	Program expectations are realistic.				
Data	Existing data are valid,				
Accessibility	reliable, and readily				
Data	Alexidadate can be feasibly				
Accessibility	collected.				
Data	There are systems in place to				
Accessibility	track performance measures				
Program	There are sufficient resources				
Readiness	(personnel, funding, etc.) for				
	the evaluation.				
Program	The timing of the evaluation is				
Readiness	commensurate with the				
	timeframe for the program and				
	when implementation or				
	outcomes can be measured.				

Directions: Indicate to what extent each statement is true. Use this template as a starting point for conducting evaluability assessments. The questions listed are not an exhaustive list but can be used as a guide.

Adapted from: Zandniapou, L, JBS International. 2014. "Impact Evaluability Assessment Tool". Washington, DC: Corporation for National Service.

Worksheet 1B. Identifying Interest Holder Priorities

	Step 2	Step 3	Step 4	Step 5	Step 6
Interest Holder	What is most	What	Does the interest	How would	How does the
	important to	evaluation	holder prefer	the interest	interest
	the interest	question(s)	specific types of	holder	holder
	holder about	does the	data (qualitative,	define	anticipate
	the program	interest	quantitative)? If	success for	using the
	and the	holder	so, what type	this	results of this
	outcomes it is	want	and what do you	program?	evaluation?
	expected to	answered	prefer about that		How would
	produce?	and why?	data?		you like to
					learn about
					the evaluation
					findings (e.g.,
					report,
					presentation)?
1					
2					
3					

Directions: Complete this table by identifying the interest holder in the first column and then answering the questions for steps 2-6. You also could share this with the interest holder and have them complete the table. Feel free to add additional rows to accommodate the number of interest holders. Remember to weave in the cross-cutting actions and evaluation standards into how an evaluation is designed and implemented and considered by interest holders when completing this table.

Worksheet 1C. Interest Holder Planning Matrix

	Level of Involvement	Level of Involvement	Level of Involvement	Level of Involvement	Level of Involvement
Interest Holder	Inform We will keep you informed of the evaluation's progress and findings.	Consult We will keep you informed, listen to you, and provide feedback on how your input influenced the evaluation.	Involve We will work with you to ensure your concerns are considered and reflected in options considered, make sure you get to review and comment on options, and provide feedback on how your input is used in the evaluation.	Collaborate We will incorporate your advice and suggestions to the greatest extent possible and give you meaningful opportunities to be part of the evaluation decision- making process.	Empower This is your evaluation. We will offer options to inform your decisions. You will decide and we will support and facilitate implementing what you decide.
1 Name and Evaluation Step					
2					
3					
5					

Directions: Complete the matrix by filling in the name of each Interest Holder, and the step(s) that they would like to be involved in. Use an "X" to mark their level of involvement. Revise this document, as needed.

Adapted from: Bryson J M, Patton M Q, Bowman R A (2011). Working with evaluation stakeholders: A rationale, stepwise approach and toolkit. Evaluation and program planning, 34(1), 1-12.

Worksheet 1D. Template for Place-Based Context

Place-Based Context Areas	
Programmatic Features	Responses
What is the program, and why was it	
developed?	
Who funds the program? How is the program	
funded?	
Who is involved in the development and	
implementation of the program?	
What is the user's commitment to the program?	
What are the demographics of the user group,	
including income, education, gender, race or	
ethnicity, and other identities?	
Who has authority and decision-making power?	
How is this process done?	
Programmatic Environment	Responses
What is the history of the community, program,	
organization and of the program within it?	
What are the strengths of this context? Are	
there any conditions or circumstances that are	
problematic?	
How are power and privilege distributed across	
the program?	
What are organizational learning/evaluation	
norms for the organization?	
What are the spoken or unspoken norms about	
evaluation at the organization?	
What are the spoken or unspoken norms about	
identifying and using data for action at the	
organization?	
How does the organizational mission either	
support or oppose evaluation?	

Directions: Read through each question in the first column and provide your response in the second column. Feel free to modify this table, as needed.

Worksheet 1E. Template for Individual and Organizational Evaluation Capacity

	Beginner	Intermediate	Expert
	Has basic knowledge	Has practical and	Recognized as an
	and limited experience	applied experience	authority
Individual Evaluation			
Capacity			
How knowledgeable is			
the evaluator, or			
evaluation team, about			
the different			
evaluation approaches			
and methods?			
How much experience			
does the evaluator, or			
evaluation team, have			
with developing			
evaluation tools and			
templates for use by			
the organizations?			
How much experience			
does the evaluator, or			
evaluation team, have			
with analytical and			
with analytical and facilitation skills?			
	None	Some	Many
	None There are no resources	Some Resources can be	Many Any resource can be
			Any resource can be accessed and is
facilitation skills?	There are no resources	Resources can be	Any resource can be
facilitation skills? Organizational	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
facilitation skills? Organizational Evaluation Capacity	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
facilitation skills? Organizational Evaluation Capacity What financial	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
Organizational Evaluation Capacity What financial resources are available	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
Organizational Evaluation Capacity What financial resources are available for the evaluation?	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
Organizational Evaluation Capacity What financial resources are available for the evaluation? What human resources	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
Organizational Evaluation Capacity What financial resources are available for the evaluation? What human resources (such as time and	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
Organizational Evaluation Capacity What financial resources are available for the evaluation? What human resources (such as time and personnel) are	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
Organizational Evaluation Capacity What financial resources are available for the evaluation? What human resources (such as time and personnel) are available for the	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
Organizational Evaluation Capacity What financial resources are available for the evaluation? What human resources (such as time and personnel) are available for the evaluation?	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
Organizational Evaluation Capacity What financial resources are available for the evaluation? What human resources (such as time and personnel) are available for the evaluation? What is the	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
Organizational Evaluation Capacity What financial resources are available for the evaluation? What human resources (such as time and personnel) are available for the evaluation? What is the organizational culture	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
Organizational Evaluation Capacity What financial resources are available for the evaluation? What human resources (such as time and personnel) are available for the evaluation? What is the organizational culture with respect to	There are no resources	Resources can be accessed but are	Any resource can be accessed and is
Organizational Evaluation Capacity What financial resources are available for the evaluation? What human resources (such as time and personnel) are available for the evaluation? What is the organizational culture	There are no resources	Resources can be accessed but are	Any resource can be accessed and is

	None	Some	Many
	There are no resources	Resources can be	Any resource can be
	available	accessed but are	accessed and is
		limited	available for use
Organizational			
Evaluation Capacity			
Are there opportunities			
within the organization			
to reflect on insights			
that arise throughout			
the course of the			
evaluation?			

Directions: Read through each question in the first column and then rank the answer to the question, according to the 3-point Likert scale. Feel free to modify this table as needed.

Worksheet 1F. Cultural Identity Inventory and Assessment

Cultural	Manifestations	Potential	Potential	Vantage	Strength	Continuing
Dimensions		Biases	Biases	Points	or	Learning
					Challenge	
	What values, actions or messages are associated with this cultural dimension? Does this dimension	What privileges do you have? How have you responded?	What have you been denied? How have you responded?	How do you understand this aspect of yourself? How do you think	Is your culture dimension a strength or challenge (or both) to the	What do I need to do to continue to learn about this cultural dimension?
	interact with other dimensions? If so, how?			others view you?	evaluation?	
Gender	,					
identity						
Race or						
ethnicity						
Class						
Sexual						
orientation						
Citizenship						
Religion						
Physical or mental ability						
Other?						

Directions: Complete the table by filling in each column box for the associated cultural dimension. You may add or remove cultural dimensions, as needed.

Adapted from: Wallerstein, N., Duran, B., Oetzel, J.G., Minkler, M. (Eds.). (2018). Community-based participatory research for health: Advancing social and health equity (3rd edition). Jossey-Bass. ISBN-13:978-1119258858

Worksheet 1G. Practicing Reflective Practice

Reflection Question	Relevant Step, Standard, or Cross-Cutting Action	Reflection Note
How might my cultural identity		
influence the evaluation?		
What am I seeing, noticing, or		
feeling?		
What am I learning? Why is this		
important?		
What are the implications for		
practice?		

Directions: Complete the table by filling in the relevant step, evaluation standard, or cross-cutting action in the second column that is related to each question listed in the first column. In the third column, write down your reflections. If you require more space to write, please duplicate this table. Keep in mind that reflective practice should be ongoing, and you do not necessarily have to complete the table at the beginning of an evaluation. Instead, consider revisiting the table and filling it out and/or updating it across multiple timepoints.

Step 2: Describe the Problem

Worksheet 2A. Raw Material for Your Logic Model

Activities What will the program and staff do?	Outcomes What changes do you hope will result in someone or something other than the program and the staff?

Directions: Complete this table with interest holders as a mapping exercise to understand the outcomes and activities of the program.

Worksheet 2B. Program Description "Cheat Sheet"

What activities do/will we do to move target audiences to act? (Note that you have already identified the activities in Worksheet 2A)	Which target audiences need to act?	What kind of action do I need these target audiences to take?	What is the "big public health problem" I'm addressing? (outcome) (Note that you have already identified the outcomes in Worksheet 2A)

Worksheet 2C. If...Then Statements: Reading and Writing a Logic Model.

		Intended Results		
Inputs	Activities	Short-Term Outcomes	Intermediate Outcomes	Long-Term Outcomes
If you have	then you can	If you accomplish your planned activities to the extent intended, then it will result in	and in time will result in	and in our ultimate effects.
With these resources,	we can implement these activities,	which will lead to these changes,	which lead to,	which will in turn lead to.

Directions: Use the Worksheet to practice how to read a logic model and talk through it narratively. Two
different formulations for statement structure are provided in the Worksheet. Try both and see which
makes sense for you and the program/logic model in question. These are not the only ways to construct
statements for your logic model but serve as starting point. Practice by writing statements using Models
2A and 2B from Step 2 of the Toolkit. Example statement formulation: If the program has [input]
and[input], it can (do) [activity] and [activity], which will result in [outcome], which
will in turn result in [outcome], and [outcome].

Worksheet 2D. Logic Model Review Checklist

Prompt	Response
Does your logic model have a title at the top of the page?	
[Optional] Is a short description needed to introduce the program reflected in the logic model? If yes, include under the title towards the top of the page.	
Do you have clear headers for each component of your logic model (inputs, activities, outcomes, context, etc.)?	
Is plain language used throughout? See www.plainlanguage.gov/resources for more on using plain language.	
Are there abbreviations or acronyms? If yes, ensure they appear unabbreviated the first time they appear in the logic model.	
Do you have a narrative accompanying your logic model?	

Directions: When reviewing your logic model draft, consider the following and check to see if they are reflected in your logic model. This checklist is only a starting point for your review. You can also utilize the other resources throughout this toolkit section to draft a program description.

Template 2A: https://www.cdc.gov/evaluation/media/pdfs/2024/12/LMTemplate2A-Action-Guide-12032024-1.pdf

Step 3: Focusing the Evaluation Question and Design

Worksheet 3A. Evaluation Purpose Identification

•	
Intended User and Intended Uses	Response
Intended user(s)	
Important information the intended user(s)	
wants to obtain from the evaluation	
Intended uses of the evaluation findings	
Date evaluation findings are needed	
Feasibility	Response
Stage of program development	
Intensity of the program	
Financial resources needed for the evaluation	
Staff needed for the evaluation	
Percent of time staff can invest in the evaluation	
Context important to the evaluation	
Components of the program (for example, logic	
model) best suited for evaluation	
Evaluation Purpose	Response
Evaluation purpose(s) based on intended users,	
intended uses, and feasibility	

Directions: Provide an answer for each statement in the first column.

Worksheet 3B. Evaluation Questions Criteria Matrix

Does this evaluation question meet	Yes	No	Does not meet criterion	
this criterion?			but merits inclusion	
			because	
Evaluation Question:				
Evaluative				
Does this question provide				
interest holders with answers				
that will be useful to inform next				
steps for the program?				
Pertinent				
Is this question relevant to the				
priorities and information				
interest holders want to obtain				
from the evaluation?				
Is this question directly linked to				
the program's purpose, goals,				
activities, or outcomes (does it				
come from the logic model)?				
Is this question relevant to the				
evaluation purpose?				
Reasonable				
Is this evaluation question linked				
to what the program can				
practically and realistically				
achieve or influence (scope of				
influence and resource				
availability)?				
Is this evaluation question				
appropriate for the program's				
stage of development?				
Specific				
Is the evaluation question				
clearly worded (words are				
clearly defined)?				
Is the evaluation question				
narrow in scope (addresses				
specific program components or				
elements of program				
performance to be				
investigated)?				
Answerable				

		T	1
•	Can the evaluation question be		
	answered objectively with		
	available and attainable data?		
•	Can the evaluation question be		
	answered ethically and		
	respectfully?		
•	Can data for the evaluation		
	question be obtained with		
	accuracy acceptable to interest		
	holders?		
•	Can the question identify health		
	inequities and/or disparities?		
Со	mplete		
•	Does this question, in		
	combination with the other		
	questions proposed for the		
	evaluation, address the		
	evaluation purpose and all		
	program components deemed		
	important by the interest		
	holders?		
•	Does this question, in		
	combination with the other		
	questions proposed for the		
	evaluation, provide enough		
	information which can be acted		
	upon to make program		
	improvements?		

Directions: Read each question in the first column that is underneath each blue highlighted evaluation question characteristic and provide a "yes" or "no" response based on the evaluation questions for your evaluation. Use the last column to provide an explanation of why an evaluation question must still be included even if it doesn't meet the criteria.

Adapted from: Wingate, L., & Schroeter, D. (2007). Evaluation questions checklist for program evaluation.

Step 4: Gather Credible Evidence

Worksheet 4A. Identifying Data Collection Sources/Methods

Question	Response
What is the purpose of this data collection?	
Who will use the data?	
What data collection methods and data sources	
are credible and culturally responsive to the	
interest holders?	
Do we have appropriate resources? Funding?	
Staff? Training and background knowledge?	
How long will the data collection period be?	
When will results be needed?	
How often will we need to collect data?	
What ethical considerations are there?	
Are there existing data that can answer the	
evaluation questions? If so, what are the data	
sources?	

Directions: Answer the questions in the first column to help determine the data sources and methods needed for the evaluation.

Worksheet 4B. Setting Expectations about Indicators

	Excellent – define	Good – define	Adequate – define	Poor – define	Notes
Indicator 1					
Indicator 2					
Indicator 3					

Directions: Use the headers to define what constitutes an indicator being excellent, good, adequate, or poor. Determine where the indicators identified in the evaluation belong within the defined range. Add more rows to accommodate for the number of indicators for your evaluation.

Worksheet 4C. Selecting Relevant Indicators

Key Objective/Focus	Evaluation Question	Identify Key	Indicator Justification
Area		Performance Indicator	

Directions: List the objective or focus area that the evaluation will address. Once you have identified the focus area, list the associated evaluation questions identified in step three and then identify indicators associated with the focus areas and questions. Write indicators so that they effectively help evaluators measure progress towards the objective or program success. Once you have identified the indicators, it may be helpful to provide a brief justification for how the indicator aligns with the evaluation focus areas. If you are finding it difficult to justify, then that may indicate that you need to rework the indicator.

Worksheet 4D. Data Collection Plan; Milestones for Data Collection Activities

Phase 1	Phase 2	Phase 3	Phase 4
Example:			
Week One: Administer			
emails for survey/focus			
group participation			
Week Three: Conduct			
the focus group			

Directions: Please indicate any key milestones or deadlines that you have for data collection activities. Add more rows as necessary.

Worksheet 4E. Data Collection Plan; Allocation of Resources

Personnel	Resources Needed	Budget
Example: Facilitator	Example: Equipment to Record	Example: Incentives for
	the Session	Participants

Directions: Please outline how you will allocate resources and list any resources that you will need to accomplish implementation, who will be needed to implement, and what you will need to budget for implementation. Add more rows as necessary.

Worksheet 4F. Contingency Plan for Data Collection

What are the potential implementation risks to data collection?	How do you plan to mitigate?	Who will be responsible?

Directions: Please use the first column to identify the implementation risks then use the second two columns to create a contingency plan for mitigating those risks for data to remain valid. Add more rows as necessary.

Worksheet 4G. Communications Plan for Data Collection

Communication Frequency	Communication Methods
Example: Weekly check-ins with the interest holders	Example: Virtual Meetings via Teams

Directions: Please create a communication plan and indicate how often you will communicate with key partners and team members and what the best method of communication will be. Add more rows as necessary.

Worksheet 4H. Evaluation Matrix

Concept/ Construct	Evaluation Questions	Indicator(s)	Measure / Metric	Data Collection Source	Data Collection Method	Data Collectio n Timeline	Data Analysis
Which concept will you evaluate?	What do you want to know?	What data will you need to address the evaluation questions?	How do you plan to measure these data? What will be the baseline?	Where will you get this data from?	How will you get this data?	When will you collect this data?	How will you organize and interpret the data collected?

Directions: Please use the information from the previous worksheets to complete the evaluation matrix.

Step 5: Generate and Support Conclusions

Worksheet 5A. Data Analysis Plan

Evaluation Question	Data to be Analyzed	Analysis to be Performed	Person(s) Responsible	Due Date

Directions: For each data point to be analyzed, identify the analysis to be performed, person(s) responsible, and due date.

Adapted from: Wilce, M., et al. Planting the Seeds for High-Quality Program Evaluation in Public Health. Atlanta, GA: Centers for Disease Control and Prevention.

Worksheet 5B. Collaborative Interpretation of Evaluation Results

Purpose and goals (what do you hope to achieve or learn from the process)	
Target participants (which interest holders will you engage in this activity)	
Format of activity (i.e., data walk with posters, data chat, dashboard review)	
Logistics decisions (any logistics decisions aimed at making participating easier on the participants attending)	
Data point 1 (which data point will you discuss, and how will it be visually displayed)	
Discussion questions for reviewing data point 1 (which questions will you ask participants to guide the discussion toward your learning goals)	
Data point 2	
Discussion questions for reviewing data point 2	
Data point 3	
Discussion questions for reviewing data point 3	
Data point 4	
Discussion questions for reviewing data point 4	

Directions: This worksheet can be used to plan a collaborative discussion of analytic results with interest holders. Some options for format include data walks, data gallery walks, data parties, and data chats. This is a coordinated event where interest holders come together collaboratively to discuss and make meaning of analytic results and discuss implications for practice.

Adapted from: Murray, B., Falkenburger, E., Saxena, P. (2015). Data Walks: An Innovative Way to Share Data with Communities. Urban Institute.

Worksheet 5C. Forming Actionable Evaluation Recommendations **Program:**

Evaluation Purpose:

Evaluation Result (Describe the evaluation result that needs action):

Plan for Action							Act and Monitor Progress	
Change Needed	Activities to Implement Change	Person Responsible	Resources Required	Due By	Indicators that Change is Implemented	Data Sources	Indicators to Monitor Success of Change	Data Sources
Describe key change(s) you want to achieve based on this finding.	List activities that need to be carried out to make the change happen in the program.	List the person(s) who will assure each activity occurs.	List resources required for the activity.	Assign a due date by which the activity will be completed.	Describe how you will know that the change is implemented as planned.	Describe what data you will need to have to know change is implemented.	Describe how you will know the change to program is working or not.	Describe the data you will need to measure success.

Directions: Use this worksheet to identify the plan of action needed to inform collaborative recommendation discussion with interest holders. Write the name of the program, evaluation purpose and evaluation result at the top. The descriptions in the columns above can be used as a guide for laying out how what information is important to include. Add more rows as necessary.

Step 6: Act on Findings

Worksheet 6A. Planning for Action with Interest Holders

Interest Holder	Insight	What do you think will be learned?	Who do you think will use these findings?	When will findings be used?	How will the findings be used? *

Directions: Use this worksheet to identify how to facilitate action of the evaluation findings.

Adapted from:

1. International Development Research Center. (2012). Identifying the Intended User(s) and Use(s) of an Evaluation. Retrieved from idrc.pdf (betterevaluation.org)

*Use can be defined as:

- (1). Instrumental Uses: modify the object of the evaluation (for example, make changes to program activities; continue or end the program; change funding allocation; make staffing decisions; inform professional development; fulfill accountability requirements; improve technical assistance; determine recipient training needs; change evaluation strategies or performance measures; and improve evaluation data reporting).
- (2). Conceptual Uses: leads to new understanding; process use (for example, change program support structures; provide feedback to recipients; build evaluation capacity; mitigate risk to the program; and influence approach to other programs).
- (3). Enlightenment Uses: Adds knowledge to the field (for example, develop best or promising practices; publish and present; and model effective working relationships between evaluation and programmatic teams).

Worksheet 6B. Planning for Dissemination for Various Audiences

Information and Purpose	Audience(s)	Possible Formats	Possible Messengers	Timing	Person Responsible

Directions: Use this worksheet to identify the dissemination plan.

Source: Template adapted from Learning & Growing through Evaluation: State Asthma Program Evaluation Guide Appendix D. Strategic Evaluation Plan Outline.

Worksheet 6C. Questions that Evaluator(s) can consider when developing a follow-up plan with Interest Holders

Question	Response
What support do you think you need	
to grasp and apply the findings to	
your work?	
Following the review of the	
evaluation results, how much time	
would you need before you act on	
the findings and recommendations?	
Who will serve as the champion for	
the findings and recommendations,	
and prevent misuse?	
How much influence do you expect	
the evaluation findings to have?	
How have past evaluations been	
used?	
What type of data and findings need	
to support decision making, and	
what type of data and findings are	
viewed by leadership as "credible"?	
Who needs to be involved for the	
evaluation to be influential?	
How will the Interest Holders know	
afterwards if the evaluation was	
used as intended?	

Directions: Use this worksheet to identify important considerations when following up with interest holders to facilitate action on evaluation findings.

Adapted from: International Development Research Center. (2012). Identifying the Intended User(s) and Use(s) of an Evaluation. Retrieved from <u>idrc.pdf</u> (<u>betterevaluation.org</u>)

References

- Kidder DP, Fierro L, Luna E, et al. CDC Program Evaluation Framework, 2024. MMWR Recomm Rep. 2024;73(No. RR-6):1-37. doi: https://dx.doi.org/10.15585/mmwr.rr7306a1. Retrieved from https://www.cdc.gov/mmwr/volumes/73/rr/rr7306a1.htm?s-cid=rr7306a1 w
- Office of Management and Budget. Evidence-Based Policymaking: Learning Agendas and Annual Evaluation Plans. OMB M-21-27 (2021). Retrieved from https://www.whitehouse.gov/wp-content/uploads/2021/06/M-21-27.pdf
- Wanzer, D.L. (2021). What Is Evaluation? Perspectives of How Evaluation Differs (or Not) From Research. American Journal of Evaluation42(1), 28-46. https://doi.org/10.1177/1098214020920710
- Centers for Disease Control. (2021). Updated Guidelines for Evaluating Public Health Surveillance Systems: Recommendations from the Guidelines Workgroup. MMWR Recommendations and Reports,50(RR-13): 1-35. PMID: 18634202.
- Government Accountability Office (GAO). (2021). Program Evaluation Key Terms and Concepts. GAO-21-404SP. Retrieved from https://www.gao.gov/assets/gao-21-404sp.pdf
- Burton, D.C., Cardo, D., et al. (2024). Principles of Health Equity Science for Public Health Action. *Public Health Reports*,139:277-283.
- Association AE. (2011). American Evaluation Association Public Statement on Cultural Competence in Evaluation.
- Centers for Disease Control and Prevention. (1999). Framework for program evaluation in public health. *MMWR: Recommendations and Reports*,48:1-40.
- Snow, B. (2016). Context in Evaluation. *Dr. Beth Snow Blog*. Retrieved from: Context in Evaluation | Dr. Beth Snow (drbethsnow.com)
- Armstead, T., Lee, R. (2013). Evaluability Assessment Guidance for DELTA FOCUS Recipients. Internal report (Centers for Disease Control). Unpublished.
- D'Ostie-RL Dagenais, C., Ridde, V. (2013). An evaluability assessment of a West Africa based non-governmental organizations (NGO) progressive evaluation strategy. *Evaluation and Program Planning*, 36(1), 71-79.
- Farmer, H. (2018, February 24). Conversations to have when designing a program: Fostering
 evaluative thinking. Better Evaluation Blog. Retrieved from: Conversations to have when
 designing a program: Fostering evaluative thinking Blog post on Better Evaluation

- Bryson, J.M., Patton, M.Q., Bowman, R.A. (2011). Working with evaluation stakeholders: A rationale, step-wise approach and toolkit. *Evaluation and Program Planning*,34(1):1-12. doi:https://doi.org/10.1016/j.evalprogplan.2010.07.001
- Wallerstein, N., Duran, B., Oetzel, J.G., Minkler, M. (Eds.). (2018). Community-based participatory research for health: Advancing social and health equity (3rd edition). Jossey-Bass. ISBN-13:978-1119258858
- Napier A, Simister, N. (2017). Participatory Learning and Action. Intrac for Civil Society. Retrieved from Participatory-learning-and-action.pdf (intrac.org)
- Centers for Disease Control and Prevention. (2020). *Colorectal Cancer Control Program (CRCCP) Evaluation Plan.* Internal report (Centers for Disease Control): unpublished
- Fitzpatrick, J.L. (2012). An introduction to context and its role in evaluation practice. *New Directions for Evaluation*, 135:7-24.
- Kirkhart, KE. (2010). Eyes on the prize: Multicultural validity and evaluation theory. *American Journal of Evaluation*,31(3):400-413.
- Buetti, D., Bourgeois, I., Jafary, M. (2023). Examining the competencies required by evaluation capacity builders in community-based organizations. *Evaluation and Program Planning*, 97, 102242. https://doi.org/10.1016/j.evalprogplan.2023.102242
- Miranda-Hartsuff, P., Hillard, T., Walters, H., Snipes, A., Reddock, E., Santos, E., Elam P. (2023).
 Chapter 2: Positionality, Reflexivity, and Strengthening the Process of Conducting Culturally Responsive Racially Equitable Evaluations (CREE) as Practitioners of Color. In Adedoyin, A.,
 Amutah-Onukagha, N., Jones, C. (Eds.). Culturally Responsive & Equitable Evaluation: Visions and Voices of Emerging Scholars. Congella, Inc. 2024. ISBN:978-1-7935-5864-0
- Symonette H. (2009). Cultivating self as responsive instrument: Working the boundaries and borderlands for ethical border crossing. *Handbook of Social Research Ethics*. (pp.279-294). https://doi.org/10.4135/9781483348971.n18
- Zandniapour, L., JBS International. (2014). Impact Evaluability Assessment Tool. Washington, DC: Corporation for National Service. Microsoft Word -Laying the Goundwork Before Your First Evaluation Tool
- Centers for Disease Control and Prevention. (2021). Comprehensive Cancer Control Branch Program Evaluation Toolkit. https://www.cdc.gov/cancer/ncccp/pdf/CCC-Program-Evaluation-Toolkit-508.pdf
- Meyer, M.L., Louder, C., Nicolas, G. (2022). Creating with, not for people: Theory of change and logic models for culturally responsive community-based intervention. *American Journal of Evaluation*, 43(3), 378-393. DOI: 10.1177/10982140211016059

- Chen, H.T., Pan, H.L.W., Morosanu, L., Turner, N. (2018). Using logic models and the action model/change model schema in planning the learning community program: A comparative case study. *Canadian Journal of Program Evaluation*, 33(1), 49-68. DOI: 10.3138/cjpe.42117
- Barbrook-Johnson, P., Penn, A. (2021). Participatory systems mapping for complex energy policy evaluation. *Evaluation*, 27(1), 57-79. https://doi.org/10.1177/1356389020976153
- Mayne, J. (2015). Useful theory of change models. *Canadian Journal of Program Evaluation*, 30(2), 119-142. DOI: 10.3138/cjpe.230
- Arensman, B., Van-Waegeningh, C., Van-Wessel, M. (2018). Twinning "Practices of Change" With "Theory of Change": Room for Emergence in Advocacy Evaluation. *American Journal of Evaluation*, 39(2), 221-236. https://doi.org/10.1177/1098214017727364
- Newcomer, K., Olejniczak, K., Hart, N. (2022). Learning agendas: Motivation, engagement, and potential. *New Directions for Evaluation*, 63–83. https://doi.org/10.1002/ev.20495
- Jones, N.D., Azzam, T., Wanzer, D.L., Skousen, D., Knight, C., Sabarre, N. (2020). Enhancing the Effectiveness of Logic Models. *American Journal of Evaluation*, 41(3), 452-470. https://doi.org/10.1177/1098214018824417
- Peyton, D.J., Scicchitano, M. (2017). Devil is in the details: Using logic models to investigate program process. *Evaluation and Program Planning*, 65, 156-162.
- Montague, S., Porteous, N.L. (2013). The case for including reach as a key element of program theory. Evaluation and Program Planning, 36(1), 177-183.
 DOI:10.1016/j.evalprogplan.2012.03.005.
- King, J. (2021). Expanding theory-based evaluation: Incorporating value creation in a theory of change. Evaluation and Program Planning, 89, 101963.
 DOI:10.1016/j.evalprogplan.2021.101963
- Wright, D.S., Grunbaum, J.A., Dawkins N, et al. (2011). Ensuring accountability in public health
 prevention research: evaluating the prevention research centers program at the Centers for
 Disease Control and Prevention. Journal of Public Health Management Practice, 17(2), E1-E9
- McColluch C, Davis M, Araujo A, et al. (2022). Lessons learned for public health workforce development: An evaluation of the Centers for Disease Control and Prevention's laboratory leadership service fellowship. *Evaluation and Program Planning*, 95, 1-10. https://doi.org/10.1016/j.evalprogplan.2022.102147
- Centers for Disease Control. (2018). CDC Program Evaluation Framework Checklist for Step 2.
 Checklist for CDC Eval Framework Step 2: Describe the Program
- National Science Foundation. (2002). The 2002 User Friendly Handbook for Project Evaluation. https://www.nsf.gov/pubs/2002/nsf02057/nsf02057.pdf

- Evergreen, S.D. (2014). Presenting Data Effectively: Communicating Your Findings for Maximum Impact . Los Angeles: SAGE. Print.
- Centers for Disease Control and Prevention. Division of Heart Disease and Stroke State Heart
 Disease and Stroke Program Evaluation Guide: Developing and Using a Logic Model. <u>State Heart</u>
 Disease and Stroke Prevention Program Evaluation Guide: Developing and Using a Logic Model
 Evaluation Guide
- Weinschenk, S. (2020). 100 Things Every Designer Needs to Know about People. (2nd ed).
 Hoboken: Pearson Education, Limited Print.
- Lien, A.D., Greenleaf, J.P., Lemke, M.K., Hakim, S.M., Swink, N.P., Wright, R., Meissen, G. (2011).
 Tearless Logic Model. *Global Journal of Community Psychology Practice*, 2(2), 1-12.
 http://www.gjcpp.org/
- Bamberger, M., Mabry, L. (2020). RealWorld evaluation. (Vols. 1-0). SAGE Publications, Inc., https://doi.org/10.4135/9781071909607.
- Salabarría-Peña, Y., Apt, B.S., Walsh, C.M. (2007). Practical Use of Program Evaluation among Sexually Transmitted Disease (STD) Programs, Atlanta (GA): Centers for Disease Control and Prevention.
- Wingate, L., Schroeter, D. (2007). Evaluation questions checklist for program evaluation.
 Retrieved from http://wmich.edu/evaluation/checklists
- Centers for Disease Control. National Asthma Control Program. (2013). Good Evaluation
 Questions. A Checklist to Help Focus Your Evaluation Questions. Retrieved from
 AssessingEvaluationQuestionChecklist.pdf (cdc.gov)
- Shackman, G. (2020). What is Program Evaluation? A Beginner's Guide. The Global Social Change Research Project. Retrieved from What is Program Evaluation? A Beginner's Guide
- The Pell Institute for the Study of Opportunity for Higher Education, the Institute for Higher Education Policy, and Pathways to College Network. (2024). Evaluation Toolkit. Retrieved from Choose an Evaluation Design « Pell Institute.
- University of Washington I-Tech Fostering Healthier Communities. (2024). Training Evaluation Framework and Tools. Retrieved from <u>Evaluation-Design-and-Methods.pdf</u>

- Office of Management and Budget, Executive Office of the President, OMB M-20-12, Phase 4
 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Program
 Evaluation Standards and Practices. 2020; Retrieved from M-20-12 (whitehouse.gov)
- Office of Chief Operating Officer. (2023). Memoranda of Understanding/Memoranda of Agreement. Retrieved from Memoranda of Understanding/Memoranda of Agreement | Services | OCOO (cdc.gov)
- Mwita, K. (2022). Factors to Consider When Choosing Data Collection Methods. *International Journal of Research in Business and Social Science*, 11(5): 532-538.
 DOI:10.20525/ijrbs.v11i5.1842
- Centers for Disease Control and Prevention. National Center for Cancer Control and Prevention.
 (2024). From SMART to SMARTIE Objectives. Retrieved from <u>SMART to SMARTIE Objectives</u>.
- Hennink M, Hutter I, Bailey A. Qualitative Research Methods. SAGE Publications. 2011
- Centers for Disease Control and Prevention. (2021). Learning and Growing through Evaluation:
 Asthma Program Evaluation Guide. Module 1: Planning Evaluations. Atlanta, GA: Centers for
 Disease Control and Prevention, National Center for Environmental Health, Division of
 Environmental Health Science and Practice, Asthma and Community Health Branch.
 http://www.cdc.gov/asthma/program_eval/guide.htm
- Centers for Disease Control and Prevention. (2018). Analyzing Qualitative Data for Evaluation.
 (Evaluation Brief No. 19). U.S. Department of Health and Human Services. Retrieved from: https://www.cdc.gov/healthyyouth/evaluation/pdf/brief19.pdf
- Centers for Disease Control and Prevention. *Analyzing Quantitative Data for Evaluation*. (Evaluation Brief No. 20). U.S. Department of Health and Human Services. Retrieved from: https://www.cdc.gov/healthyyouth/evaluation/pdf/brief20.pdf
- Hood, S., Hopson, R., Kirkhart, K. (2015). Chapter 12: Culturally Responsive Evaluation: Theory, Practice and Future Implications. In Newcomer, K.E., Hatry, H.P., Wholey, J.S. (Eds.), Handbook of Practical Program Evaluation (pp. 281-317). Jossey-Bass. ISBN: 9781119171386.
 DOI:10.1002/9781119171386.ch12.
- Krause, H., Richburg-Hayes, L. (2023). The Data Equity Framework: A Concrete and Systematic Equity-Oriented Approach to Quantitative Data Projects. https://doi.org/10.31235/osf.io/sqt4u
- Murray, B., Falkenburger, E., Saxena, P. (2015). Data Walks: An Innovative Way to Share Data with Communities. Urban Institute. Retrieved from <u>Data Walks: An Innovative Way to Share</u> Data with Communities
- Springer, A.E., Marshall, A.N., Randolph, R., Wilkinson, A.V., Rosenbluth, B., Cortez, A., Greene, M., Ganzar, L.A., Millea, S., Levulett, A., Delgado-Ochoa, M., Sebastian, N. (2022). Exploring

Models for Youth Engagement in Community Health Planning: The Youth-led Community Health Learning Initiative. Progress in Community Health Partnerships: Research, Education, and Action, 16(2), 155–168. Johns Hopkins University Press. https://doi.org/10.1353/cpr.2022.0020

- Wilce, M., Fierro, L.A., Gill, S., Perkins, A., Kuwahara, R., Barrera-Disler, S., Orians, C., Codd, H., Castleman, A.M., Nurmagambetov, T., Anand, M. (2021). Planting the Seeds for High-Quality Program Evaluation in Public Health. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Environmental Health, Division of Environmental Health Science and Practice, Asthma and Community Health Branch. Retrieved from http://www.cdc.gov/asthma/program_eval/PlantingSeeds_eTextbook-508.pdfCenters for Disease Control and Prevention. (2014). Applying the Knowledge to Action (K2A) Framework: Questions to Guide Planning. Atlanta, GA: Centers for Disease Control and Prevention, U.S. Deptartment of Health and Human Services.
- International Development Research Center. (2012). Identifying the Intended User(s) and Use(s) of an Evaluation. Retrieved from idrc.pdf (betterevaluation.org)
- Zakocs, R., Hill, J.A., Brown, P., Wheaton, J., Freire, K.E. (2015). The Data-to-Action Framework: A Rapid Program Improvement Process. *Health Educ Behav*. 42(4):471-9. doi: 10.1177/1090198115595010. PMID: 26245935; PMCID: PMC5990006.