National Program of Cancer Registries (NPCR)

Program Evaluation Toolkit

August 2023

First Edition

Acknowledgements

Sofia Huster (PPEO Evaluation Fellow and CSB Evaluation Sub-group member) created this toolkit with guidance and input from CSB evaluation lead, Dr. Paran Pordell. Additionally, Evaluation Sub-group members Corinne Fukayama and Emily Nethercott provided feedback on toolkit content, including registry evaluation plan section examples. The CSB Evaluation Sub-Group would like to acknowledge CDC’s Comprehensive Cancer Control Branch, Asthma and Community Health Branch, and Division of Tuberculosis Elimination whose existing evaluation toolkits served as useful resources as this toolkit was drafted. We would also like to thank Dr. Vicki Benard, Joe Rogers, Dr. Manxia Wu, Netta Apedoe, and Dr. Lisa Richardson for their continued support of CSB evaluation efforts.

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NPCR Evaluation Toolkit Overview

This document provides resources and guidance to cancer surveillance programs, their partners, and collaborators for planning and implementing evaluation activities. Specifically, this toolkit is relevant for states and territories funded by the National Program of Cancer Registries (NPCR). It may serve as a roadmap for conducting evaluation based on the *CDC Framework for Evaluation of Public Health Programs*.

Purpose:

The Cancer Surveillance Branch (CSB) is part of the Centers for Disease Control and Prevention's (CDC's) Division of Cancer Prevention and Control (DCPC). The Operations Research and Technical Assistance Team (ORTAT) within CSB developed this toolkit to help funded recipients meet the evaluation requirements established in the DP22-2202 and subsequent NPCR cooperative agreements. This document was created to supplement existing NPCR resources including the Evaluation Plan Guide and Evaluation Plan Template provided to NPCR recipients to aid in the creation of DP22-2202 evaluation plans. The Evaluation Toolkit intends to support ongoing recipient evaluation efforts, even as registry programs evolve and recipient priorities change.

Use(s):

This toolkit introduces evaluation principles, describes evaluation techniques, and provides practical templates and tools that can be used throughout evaluation planning. Recipients can refer to this resource throughout the evaluation cycle based on their program needs and priorities. The document is designed to be reviewed in its entirety or to be utilized for a specific evaluation topic of interest. For those who are interested in specific sections of the toolkit, please click on the topic using the Table of Content links above. When using this resource, recipients should consider the following guidance[1]:

- *Don't reinvent the wheel*
    - This guide provides several tools and templates that can be used to plan and conduct evaluation activities, so recipients can avoid "reinventing the wheel".
- *Adapt as needed*
    - We recognize that each recipient has a unique program context and needs. This guide is not a prescriptive resource and can be modified as needed to suit each recipient's program. Feel free to use the templates provided!
- *Treat your evaluation plan as a living document*
    - Evaluation plans are meant to represent current thinking. Therefore, as priorities, internal and external factors change, evaluation plans can be revised as needed. Revisit your evaluation plan and this resource throughout program implementation.
- *Be flexible*

  - This toolkit describes how to evaluate your program using the steps from the *CDC Evaluation Framework*; however, it is important to remember that evaluation is not a linear process. Evaluation is an iterative process and will most likely require moving back and forth between framework steps or working on more than one step at a time.

Outline:

This resource guide comprises four main sections:

1. **<u>Planning for an Evaluation</u>**
    a. **This section introduces the concept of evaluation and key terms.** It includes an outline of the *CDC Framework for Program Evaluation in Public Health*, key issues to consider before beginning evaluation activities, and tips for successful evaluation planning.
2. **<u>NPCR Evaluation Requirements</u>**
    a. **This section describes DP22-2202 evaluation requirements and recommendations from the CDC team.**
3. **<u>Developing an Evaluation Plan: Evaluating Your CCR</u>**
    a. **This section applies the CDC Framework to NPCR recipient program evaluation. It includes tools, templates, and real-world examples from NPCR recipients to help cancer registries construct and conduct evaluation planning.** NPCR program evaluation requirements are incorporated throughout this section.
4. **<u>Additional Resources</u>**
    a. **This section presents a list of additional evaluation resources (including previous NPCR documents), training opportunities, and evaluation tools.** This toolkit was developed as a resource to help NPCR recipients meet program evaluation requirements. However, this toolkit is not intended to be an all-inclusive evaluation resource. Evaluation is a complex area of expertise in public health and all aspects cannot be covered in a single document.

Planning for an Evaluation

AFTER READING THIS SECTION, YOU WILL BE ABLE TO:

- DEFINE PROGRAM EVALUATION
- DESCRIBE THE CDC FRAMEWORK FOR EVALUATION IN PUBLIC HEALTH
- UNDERSTAND KEY ASPECTS OF EVALUATION PLANNING

Evaluation is an essential practice in public health. Are your efforts a worthwhile use of time and resources? Are you making the difference you want to make? How can you improve? These are just some examples of the questions that evaluation can help you answer. ***Evaluation*** gathers necessary information to monitor program implementation, account for program effectiveness, and identify ways to improve programs and their operations[2]. The National Program of Cancer Registries (NPCR) is committed to integrating evaluation throughout the program to monitor program activities, outputs, and outcomes, and hold cancer registry programs accountable.

Program evaluation is a tool NPCR recipients can use to document what they do, learn how well they are doing it, and improve their efforts in cancer prevention and control[3]. Throughout this guide, the term *program* is used to describe the object of evaluation, which in this case is Central Cancer Registries (CCRs) funded by NPCR.

Of the four purposes of evaluation[4], this toolkit focuses on:

- **Improving the program and its services**: Evaluation can inform program improvement efforts by gathering credible evidence to analyze which aspects of a program are working well, and which are not.
- **Building knowledge and expertise**: Through identifying what works and doesn't, evaluation can add to the knowledge base and identify promising practices that can be adapted for use in future settings.

Evaluation is an expansive field with numerous resources. We will reference a variety of resources throughout this toolkit and include a longer resource list in the **Additional Resources** section.

Additionally, throughout this guide we will be referencing examples from current NPCR Recipient Evaluation Plans that can serve as a snapshot for what CCR evaluation planning looks like in action.

The CDC Framework for Program Evaluation in Public Health

This toolkit is aligned with the ***CDC Framework for Program Evaluation in Public Health*.** The framework was developed to guide public health professionals in program evaluation. "It is a practical, nonprescriptive tool, designed to summarize and organize the essential elements of program evaluation."[5] ***The framework*** is a set of six steps and four groups of standards for conducting successful evaluations of public health programs (Figure 1).

Figure 1: CDC Framework for Program Evaluation in Public Health[6]

The ***six steps*** listed in the framework serve as critical components that can be used to tailor an evaluation for a program at a particular point in time. There is an order to the steps, as earlier steps provide the foundation for subsequent progress. However, since steps are interdependent, they might be encountered in a nonlinear sequence. It is highly recommended that recipients refrain from finalizing decisions until previous evaluation steps have been adequately addressed. The steps are described below:

1. **Engage partners and collaborators**
    a. The evaluation cycle begins by engaging collaborators (can also be described as partners). ***Evaluation collaborators*** are people or organizations that are invested in the program, interested in the results of the evaluation, or have an interest in what will be done with evaluation results. Collaborators must be engaged as early as possible to ensure that the evaluation addresses their concerns and values. The scope and level of collaborator involvement will vary for each program evaluation.
2. **Describe the program**
    a. The program description conveys the program's ***mission*** and ***objectives***. It sets the frame of reference for all subsequent aspects of the evaluation plan. Note that in this step, you are describing the program and not the evaluation. Included aspects in the program description are need, expected effects, activities, resources, stage of development, context, and logic model.
3. **Focus the evaluation design**
    a. Focusing the evaluation design involves determining the most important evaluation questions and the most appropriate design for the evaluation, given

time and resource constraints. For our purposes, every program element does not need to be evaluated. Instead, the right focus for an evaluation depends on the length of time the program has been in place, what priority questions are being asked, who is asking them, and what is being done with the results. Some items to consider when focusing an evaluation are ***purpose, users, use, questions, methods, and roles*.**

4. **Gather credible evidence**
    a. After describing the program and focusing the evaluation, the next step is to gather credible and relevant data that will answer evaluation questions. Evidence gathering should include consideration of the following: ***indicator development, data sources, data collection methods, and logistics*.**
5. **Justify conclusions**
    a. This step involves ***analyzing the data*** you have collected, ***making observations or recommendations*** about the program based on analysis, *and* ***justifying the evaluation findings*** by comparing the evidence against collaborator values and standards. When conclusions are linked to the evidence gathered and compared to previously set standards, they are justified. This promotes understanding of findings among collaborators and strengthens their inclination to act on the evaluation results.
6. **Ensure use and share lessons learned**
    a. Sharing evaluation findings with key collaborators in a timely, consistent, and unbiased matter is a key step in evaluation. Sharing findings with key organizations and individuals allows results to be used to demonstrate program effectiveness, conduct accountability, justify funding, and improve programs.

The framework steps can be used to guide recipients through the process of program evaluation. These six steps are informed by a set of evaluation standards, which can inform choices of evaluation activity options within each framework step. There are a total of 30 framework standards, but they are clustered into four groups listed in the center of the framework in Figure 1:

- **Utility:** Utility standards ensure that information needs of evaluation users are satisfied.
- **Feasibility:** Feasibility standards ensure that the evaluation is viable and pragmatic.
- **Propriety:** Propriety standards ensure that the evaluation is ethical (i.e., conducted with regard for the rights and interests of those involved and affected).
- **Accuracy:** Accuracy standards ensure that the evaluation produces findings that are considered correct[3].

NPCR Evaluation Requirements

Planning for Program Evaluation

Why is it important to evaluate programs?

- Evaluation is a requirement of CDC-funded programs.
- The evaluation process helps:
    - Monitor progress toward program goals
    - Identify problem areas before resources are wasted
    - Celebrate program achievements
    - Determine opportunities for program improvement
- Evaluation findings can help justify the need for further funding and support.

How do you develop an evaluation plan?

The NPCR component of the DP22-2202 NOFO specifies that each recipient is responsible for developing a formal evaluation plan. Developing and implementing this evaluation plan is essential to effective program management.

All NPCR Recipients Are Required to Have an Evaluation Plan

As specified in Strategy 5 of DP22-2202's NPCR component, recipients are required to develop and implement a formal evaluation plan and report on it annually.

During the 5-year funding period, NPCR recipients must provide an Evaluation and Performance Measurement Plan that demonstrates how they will fulfill the requirements described in the CDC Evaluation and Performance Measurement and Project Description sections of the NOFO (pages 31-34). Recipients can use the performance measures to help inform CCR evaluation priorities, questions, potential data sources, and areas for improvement.

Plans should include:

- **Identification of cancer registry partners and collaborators** who are involved in evaluation activities and/or have interest in the evaluation findings
- A **logic model** specific to the recipient's cancer registry program (can use NPCR logic model as a template)
- Priority areas for evaluation and specific **evaluation questions** that will be addressed during the 5-year performance period
- Available **data sources**, the feasibility of collecting appropriate program monitoring and evaluation data, and other relevant information

- **Performance measures (PMs) -** can use existing NPCR PMs and create custom PMs
- **Data analysis methods** and plan that describes how data collected will be analyzed using traditional qualitative, quantitative, or mixed methods
- **Use of** monitoring data and **evaluation results** for continuous program and data quality improvement

The CCR recipient is required to provide a program evaluation plan that describes clear monitoring and evaluation activities. The plan must follow the CDC Evaluation Framework and include:

- An overview
- Intended use and users of evaluation results
- Program description
- Evaluation focus
- Data collection plan
- Data analysis plan
- Dissemination plan and use of evaluation findings to make program improvements
- Evaluation timeline

Plan strategies, activities, and outcomes should address some of the following areas:

a. Evaluation of timeliness, quality, and completeness of data
b. Current status and improvements of electronic capture of cases
c. Submission of data in accordance with NPCR standards
d. Effective collaborations with NCCCP, NBCCEDP, and other chronic disease programs
e. Planning and implementation of data modernization initiative (DMI) strategies
f. Planning and implementation of innovation projects

These topics are addressed in detail in the NPCR Evaluation Plan Guide and the next section of this Toolkit: “Evaluating your CCR”. Capturing each of these topic areas in a single document such as an evaluation plan can help your evaluation run smoothly. An Evaluation Plan Checklist is provided on the next page to serve as a resource to consult when creating and editing your evaluation plan. The components of the evaluation checklist are aligned with NPCR evaluation plan guidance, requirements, and the CDC Evaluation Framework.

Tool #1: NPCR Evaluation Plan Checklist

- ☐ **Plan Overview**
    - ☐ Provide a high-level summary of evaluation questions
    - ☐ Describe the general approach to the evaluation
- ☐ **Intended use and users of evaluation results** **(Step 1)**
    - ☐ Specify the purpose of the evaluation
    - ☐ Identify cancer registry partners and collaborators involved in the evaluation or interested in evaluation findings
    - ☐ Identify who has access to results for decision-making or other uses
- ☐ **Program Description** **(Step 2)**
    - ☐ Include a logic model (can be NPCR logic model)
    - ☐ Describe activities, populations of focus, and beneficiaries impacted by programmatic activities
- ☐ **Evaluation Focus** **(Step 3)**
    - ☐ Include priority areas for evaluation and evaluation questions
    - ☐ Include a brief description of how evaluation questions were determined and prioritized
- ☐ **Plan for Collecting Data** **(Step 4)**
    - ☐ Include a summary of methodology (quantitative, qualitative, mixed methods) aligning with the evaluation questions
    - ☐ Specify indicators, data sources, and feasibility of collecting data
    - ☐ Identify who has data collection responsibilities
    - ☐ List specific performance measures (can be taken from NPCR Program Standards)
- ☐ **Plan for Analysis and Interpretation** **(Step 5)**
    - ☐ Describe collaborator and partner involvement
    - ☐ Indicate the process for drawing appropriate evaluation conclusions
    - ☐ Identify who has data analysis responsibilities
- ☐ **Plan for Dissemination and Use of Findings** **(Step 6)**
    - ☐ Detail communication strategies, audience, and format
    - ☐ Indicate who has dissemination responsibilities
    - ☐ Detail how audience feedback and action steps will be documented and monitored
- ☐ **Evaluation Timeline**
    - ☐ Provide a timeline for data collection, analysis, and evaluation dissemination
    - ☐ Describe using evaluation results for continuous program and quality improvement

Performance Measurement Requirements

The performance measures (Appendix 1) are required for reporting under DP22-2202. Recipients may create additional, customized indicators or performance measures to monitor their program progress based on individual registry evaluation plan priorities and questions. Recipients will be asked to provide progress updates on the following performance measures (PMs) and customized performance measures as part of Annual Progress Report (APR) requirements in February. At minimum, recipients must report on NPCR PM progress (outlined in the Program Standards) into the Award Management Platform (AMP) as part of routine program monitoring.

CCR Evaluation Reporting Requirements

In addition to the evaluation plan submitted as part of the NOFO application, NPCR requires each recipient to submit:

- Performance measure progress (discussed above) by APR due date
- Quarterly updates on evaluation progress in the form of summary bullets as part of ongoing communication with their program consultant
- An evaluation progress summary as part of each annual submission (see 1-page template on pg. 14)
- A mid-term evaluation plan (if revised) and detailed progress report at the year 3 midpoint (see mid-term report template on pg. 15-16)
- A final, comprehensive evaluation report in year 5 (see final eval. report template on pg. 17-18)

Tool #2: Annual Evaluation Progress Summary Report Template

Note: Page number maximum is 2 pages. Please use the blank space next to sections 1-3 to document your evaluation progress.

Section 1: Evaluation Overview Provide 1-2 sentences on the evaluation purpose and context. Includes: • What is being evaluated? • What informed the focus of your evaluation?	
Section 2: Describing the Evaluation *(1 paragraph)* Explain your progress on addressing the evaluation questions. Summarize the evaluation design and where you are in the timeline of data collection and analysis. Includes: • Evaluation questions (answered and unanswered) • Evaluation activities that are planned and implemented	
Section 3: Major Findings, Achievements and Areas for Improvement *(2 paragraphs)* This should be the focus of your summary report. Briefly summarize key findings from your evaluation in the past year. If this is your progress report for Year 2, 3, 4 or 5, discuss how findings are similar or different from previous results. Include minor and major achievements to date. Lastly, discuss any areas for improvement in	

program implementation based on findings. Includes: • Evaluation question results • Comparison of results against previous findings • Minor and major achievements to date • Areas for improvement	

Tool #3: Mid-Term Evaluation Plan and Progress Report Template (Year 3)

Note: Page number maximum is 12-15 pages, plus appendices.

Section 1: Executive Summary	Provide a short overview of the evaluation purpose, background, questions, methods, and preliminary results, and conclusions. Includes: • What is being evaluated? • Why is the evaluation being conducted? • What are the major preliminary findings? *Hint: Do this section last.
Section 2: Background	Describe the program that is being evaluated and the background to the evaluation including purpose, use, collaborators, and other helpful context. Includes: • Origin of the program • Program aims • Collaborators • Logic model • Purpose of the evaluation • Impacted population
Section 3: Description of the Evaluation (Questions, Methods)	Explain your progress on addressing the evaluation questions. Describe the design of the evaluation and timing of data collection, methods, and data collection instruments. List where you are in your anticipated timeline for your evaluation. Are you on track? What challenges have you encountered throughout evaluation implementation? The Data Collection and Analysis Reporting table is a great resource to display information in this section. Includes: • Evaluation design • Description of evaluation methods (e.g., focus groups, surveys, observation, etc.) • Data analysis procedures • Evaluation timeline • Challenges encountered

Section 4: Tentative Findings	Present evaluation findings in a way that the audience can easily understand. Display and discuss findings by including graphs, tables, and charts alongside a narrative description. Report against specific performance measures and indicators for your program where appropriate. The Data Collection and Analysis Reporting table is a great resource to display information in this section. Includes: • Evaluation question results • Comparison of findings against performance measures/indicators • Quantitative data (charts, tables, graphs) • Qualitative data (tables, illustrative quotes)
Section 5: Discussion and Recommendations	Discuss and interpret your evaluation findings. Reflect on the lessons learned thus far from your evaluation and propose feasible recommendations for the implementation, monitoring, and evaluation of your CCR. Includes: • Program achievements and gaps • Describe issues identified by the team during the evaluation • Recommendations for the program and future evaluation activities
Section 6: Conclusion and Action Plan	Briefly summarize the key lessons learned from the first 3 years of program implementation and evaluation efforts. Elaborate on what specific changes will be made to your evaluation going forward with the findings from this mid-term report.
Section 7: Appendices	Include supporting materials in appendices. Includes: • Evaluation tools, checklists, discussion guides, surveys, etc. • Sources of information (key informants, documents reviewed, other data sources)

Tool #4: Final, Comprehensive Evaluation Report Template (Year 5)

Note: Page number maximum is 20 pages, plus appendices.

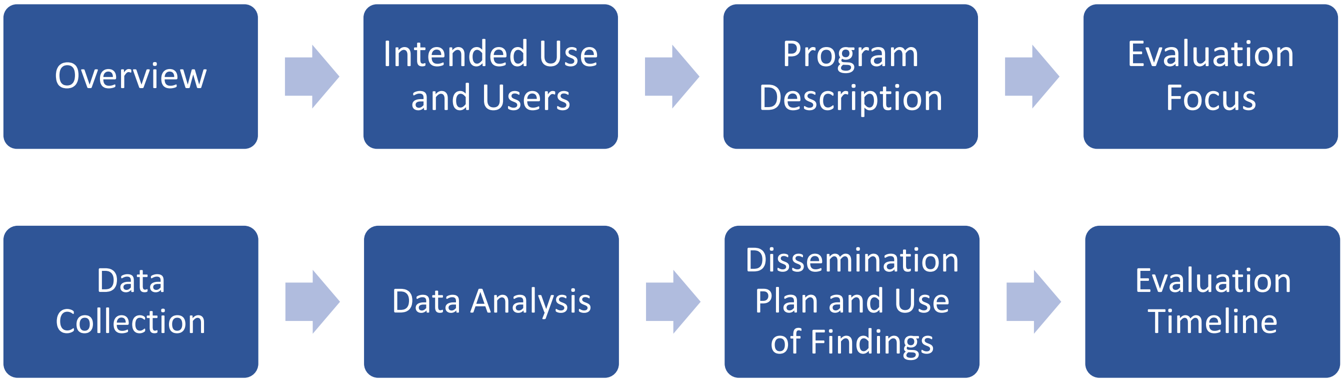
Section 1: Executive Summary	Provide a short overview of the evaluation purpose, background, questions, methods, results, and conclusions. Includes: • What was evaluated? • Why was the evaluation conducted? • What are the major findings? *Hint: Do this section last.
Section 2: Background	Describe the program that is being evaluated and the background to the evaluation including purpose, use, collaborators, and other helpful context. Includes: • Origin of the program • Program aims • Collaborators • Logic model • Purpose of the evaluation • Impacted population
Section 3: Description of the Evaluation (Questions, Methods)	Explain the approach you took to answer the evaluation questions. Describe the design of the evaluation and timing of data collection, methods, and data collection instruments. The Data Collection and Analysis Reporting table is a great resource to display information in this section. Includes: • Evaluation design • Description of evaluation methods (e.g., focus groups, surveys, observation, etc.) • Who took part in the evaluation (numbers and characteristics) • Data analysis procedures • Limitations of the evaluation

Section 4: Results	Present evaluation findings in a way that the audience can easily understand. Display and discuss findings by including graphs, tables, and charts alongside a narrative description. Report against specific performance measures and indicators for your program where appropriate. Address all evaluation questions, and if a question could not be answered, describe why. The Data Collection and Analysis Reporting table is a great resource to display information in this section. Includes: • Evaluation question results • Comparison of findings against performance measures/indicators • Quantitative data (charts, tables, graphs) • Qualitative data (tables, illustrative quotes)
Section 5: Discussion and Recommendations	Discuss and interpret your evaluation findings. Reflect on the lessons learned from your evaluation and support recommendations with specific findings. Provide recommendations that are action-oriented, practical, specific, and define who is responsible for the action. Includes: • Alternative explanations for the results • Evaluation limitations • Program achievements and gaps • Unexpected results • Recommendations for the program and future evaluation activities
Section 6: Conclusion	Briefly summarize what the evaluation found and any “take home messages”.
Section 7: Appendices	Include supporting materials in appendices. Includes: • Evaluation tools, checklists, discussion guides, surveys, etc. • Sources of information (key informants, documents reviewed, other data sources)

Developing and Implementing an Evaluation Plan – Evaluating Your CCR

AFTER READING THIS SECTION, YOU WILL BE ABLE TO:

- RECOGNIZE AND UNDERSTAND THE CONTENT OF AN EVALUATION PLAN
- APPLY THE STEPS OF THE CDC FRAMEWORK TO DEVELOP AN EVALUATION PLAN



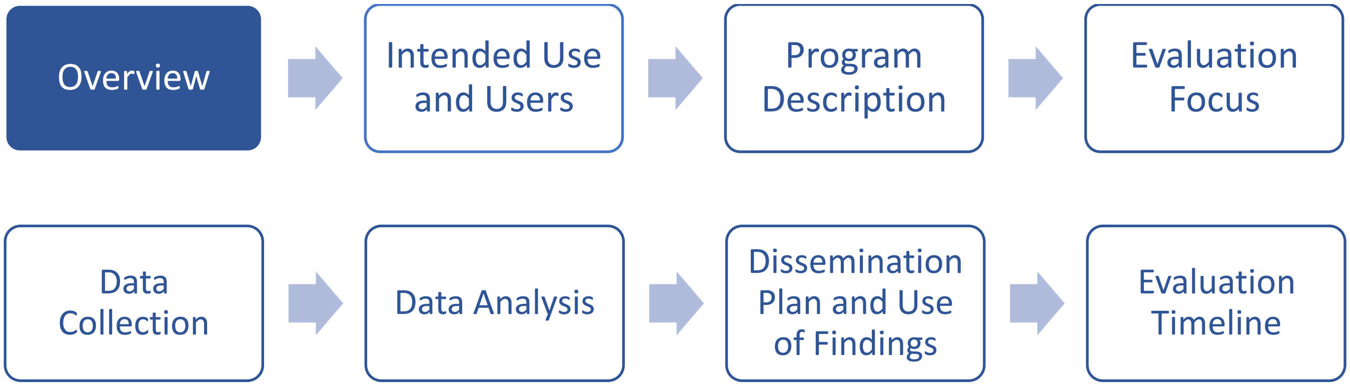
This section is designed to provide practical tools and templates for evaluating your cancer registry activities.

This section presents tools and templates under the following topic headings recommended by NPCR. Step X in parentheses indicates the step each section applies to in the CDC Evaluation Framework. Note that the overview and evaluation timeline are not directly aligned with the Framework but are recommended by the NPCR program.

- Overview
- Intended Use and Users (Step 1)
- Program Description (Step 2)
- Evaluation Focus (Step 3)
- Data Collection (Step 4)
- Data Analysis (Step 5)
- Dissemination Plan and Use of Findings (Step 6)
- Evaluation Timeline

Each section opens with a brief description of the topic, followed by tools, templates and examples from registries' DP22-2202 evaluation plans that can be used to apply the information to your program.

Overview



The overview presents a high-level summary of evaluation questions and a general approach to the evaluation. This includes the goal, focus and scope of the registry evaluation. It is important to go into evaluation planning with ideas in mind around what will be evaluated, how and why. The sections that follow in this toolkit help delve into the specifics, but the overview sets the stage for the evaluation plan. It may be helpful to revisit the evaluation plan overview section after completing all sections of the evaluation plan, if you do not have a clear, systematic approach in mind for the evaluation[7].

Goal: The goal of the evaluation needs to be agreed upon by all collaborators, including registry staff and internal and external partners. Evaluation can be used for a variety of purposes, some of which include:

- Guiding decisions about ongoing program improvement
- Identifying emerging needs, gaps, and priorities
- Facilitating accountability and transparency
- Informing policy and practice by contributing to the broader evidence base

The evaluation plan goal is the outcome you want to achieve due to completing the evaluation. Do you want to understand how a new program initiative is functioning? Do you want to understand how the quality of your program data has changed over time and why? Identifying a clear goal for the evaluation plan is necessary to guide the evaluation plan and measure its success.

Focus: A well-focused evaluation is critical to generate meaningful information for your program. Because evaluation efforts are always limited by resources and time, questions need to be prioritized. It is better to have 3-5 key questions that you can answer in-depth than to have a long list of questions that generate superficial answers. ***The evaluation focus*** briefly introduces the key questions your evaluation plan will seek to answer and helps lay out the path to reach your evaluation goal.

Scope: The scope of the evaluation is the breadth, depth or reach of it. ***The scope*** builds off the evaluation focus to determine the timelines, resources and methods that will be used to answer evaluation questions and thus achieve the program's goal.

Application: The Maine Cancer Registry Plan Overview

I. Evaluation Plan overview:

Scope

The Maine Cancer Registry (MCR) Evaluation plan for program period 2022-2027 will follow the CDC Framework for Program Evaluation with the aim of promoting standards of utility, feasibility, propriety, and accuracy. The Maine Cancer Coalition Data Team, which serves as MCR Advisory group, provided input and feedback into the proposed evaluation design during a quarterly meeting in December 2021. The evaluation will be conducted in collaboration with partners and stakeholders with an iterative approach that allows opportunities for continuous quality improvement, learning, and adaptation. The evaluation will be carried out by internal MCR staff and will be mindful of the staff time and resources. It will aim to complement, rather than duplicate, efforts of other cancer program partners within MaineCDC and the Maine Cancer Coalition.

Focus

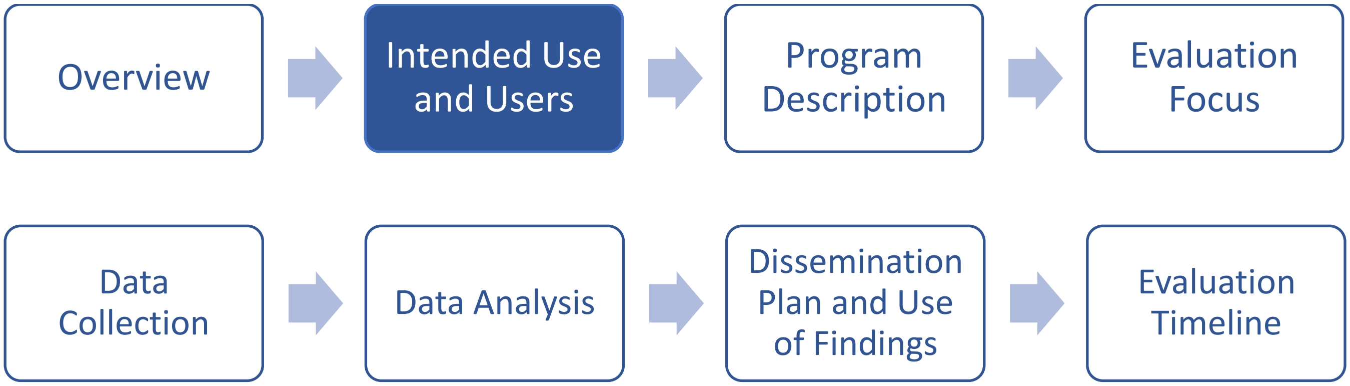
MCR proposes to pursue a combined process and outcome evaluation with two overarching evaluation questions as the primary focus. These questions align with the NPCR logic model, strategies, program standards, and performance metrics under RFA-DP22-2202.

- To what extent has MCR enhanced data quality, completeness, use and dissemination of population-based cancer surveillance data? (NPCR logic model Strategy 1)
- To what extent has MCR data supported efforts to assess cancer burden, examine health disparities and inform program efforts to address social determinants of health? (NPCR Logic Model Strategy 2)

Goal

The goals of MCR's evaluation are two-fold. The first goal is to monitor progress toward interim performance measures and to document successes and challenges towards achieving MCR's short-term and long-term outcomes. The second goal is to identify areas for additional interventions to improve and enhance MCR's performance and long-term impact.

Intended Use and Users (Step 1)



AFTER READING THIS SECTION, YOU WILL BE ABLE TO:

- IDENTIFY KEY INDIVIDUALS OR GROUPS THAT SHOULD BE INVOLVED IN YOUR NPCR EVALUATION
- DETERMINE HOW AND WHEN TO ENGAGE COLLABORATORS IN YOUR EVALUATION

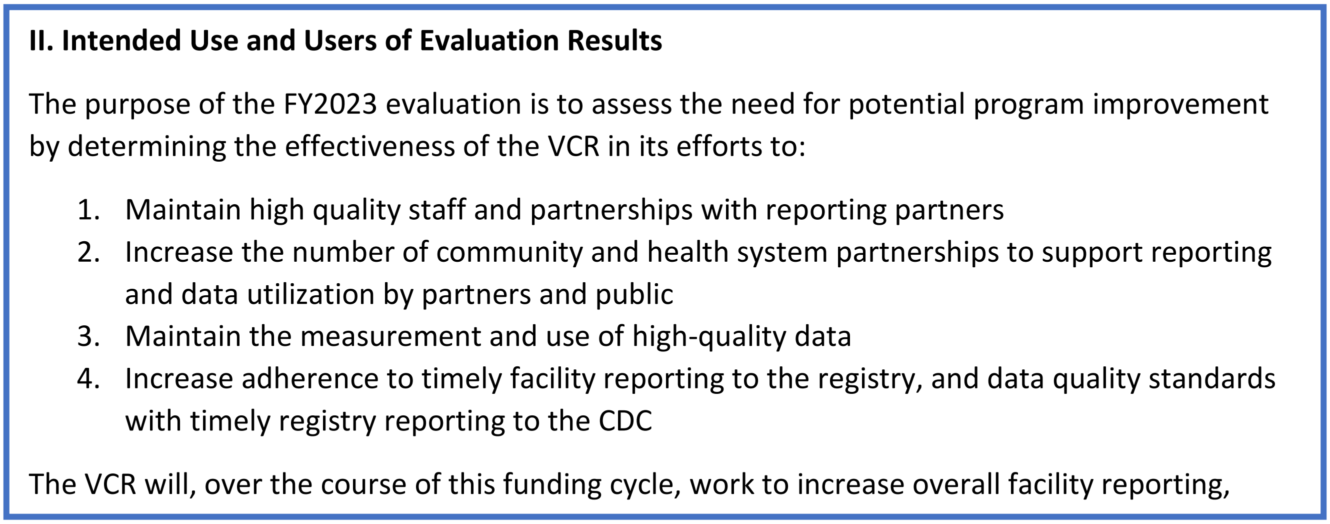
Intended use and users describes *how* the evaluation plan will be used (i.e., its purpose) and *who* will participate and use the evaluation plan, referred to as collaborators. ***Collaborators*** are individuals that have a vested interest in the program and/or are affected by the evaluation being carried out. Collaborators are interested in the results of the evaluations and may use the results of the evaluation in a variety of ways. There are three key types of collaborators[1,3]:

- **Primary collaborators:** Individuals involved in program operations (e.g., collaborators, funders, program staff, etc.)
- **Secondary collaborators:** Those served or affected by the program (e.g., cancer patients, family members, hospitals, opponents, staff of related or competing organizations, etc.)
- **Tertiary collaborators**: individuals not directly affected by the program, but interested in the results (e.g., legislators and other cancer programs)

Articulating your Evaluation Purpose

To identify what collaborators are involved in your program, it is important to articulate a clear evaluation purpose that will help inform how your evaluation will be used. Ask yourself, what are you trying to get out of your evaluation? Revisit the program goal you identified in the overview section. See below for an example from the Virginia Cancer Registry that clearly articulates the purpose. A well-defined purpose will inform their identified collaborators.

Application: Virginia Cancer Registry's Intended Use and Users



II. Intended Use and Users of Evaluation Results

The purpose of the FY2023 evaluation is to assess the need for potential program improvement by determining the effectiveness of the VCR in its efforts to:

1. Maintain high quality staff and partnerships with reporting partners
2. Increase the number of community and health system partnerships to support reporting and data utilization by partners and public
3. Maintain the measurement and use of high-quality data
4. Increase adherence to timely facility reporting to the registry, and data quality standards with timely registry reporting to the CDC

The VCR will, over the course of this funding cycle, work to increase overall facility reporting,

Identifying Internal and External Collaborators

Once you have articulated your evaluation purpose, you can identify key individuals or groups that should be engaged throughout the CCR evaluation. A collaborator assessment can be a helpful tool to think through which collaborators or partners have a stake in the evaluation, what evaluation components are of interest to them, what roles they can play throughout the evaluation, and how they will use evaluation results[1]. A collaborator assessment can be completed with key program staff, an established evaluation advisory committee, or previously identified evaluation collaborators.

What Roles Can Collaborators Play in Our Program Evaluation?

Collaborators can contribute throughout all phases of the evaluation: planning, implementing, and using/sharing findings. Based on collaborator skills and interests, they may be engaged in the evaluation as:

- Members of the evaluation advisory committee
- Data sources (participants in interviews and surveys or actual source for data (e.g., BRFSS))
- Data collectors
- Data analysts
- Interpreters of findings
- Writers and presentation developers (of final reports, manuscripts, briefs, etc.)
- Presenters who share findings with community partners and policymakers

It is important to remember that engagement of collaborators throughout the program evaluation will vary. Some collaborators may only be involved in evaluation planning, while others' engagement may solely involve implementation or sharing findings[1].

The following **Collaborator Assessment Tool** can help you apply this information to brainstorm key individuals that have a stake in the evaluation, their interest or perspective, their role in the evaluation, how they will use evaluation results and some strategies for collaborator engagement.

Tool #5: Collaborator Assessment Tool

Evaluation Collaborators	Interest or Perspective	Role in the Evaluation	How will Results be Used	How to Engage
List key individuals or groups who have a stake in the evaluation and or who will use the evaluation results – one per row	*Identify and document each collaborator's evaluation interest – one per row*	*Identify their role in the evaluation – one per row*	*Describe how evaluation collaborators will use the evaluation results – one per row*	*Description of strategy or way in which collaborators will be engaged and how frequently they will be engaged – one per row*

Adapted from the Stakeholder Assessment Worksheet in the Comprehensive Cancer Control Branch Program Evaluation Toolkit [1] and the Stakeholder Assessment and Engagement Plan in Learning and Growing through Evaluation: Asthma Program Evaluation Guide [3].

See below for an example from the Virginia Cancer Registry of their description of collaborator engagement in their Intended Use and Users Evaluation Plan Section.

Application: Virginia Cancer Registry Example:

II. Intended Use and Users Continued

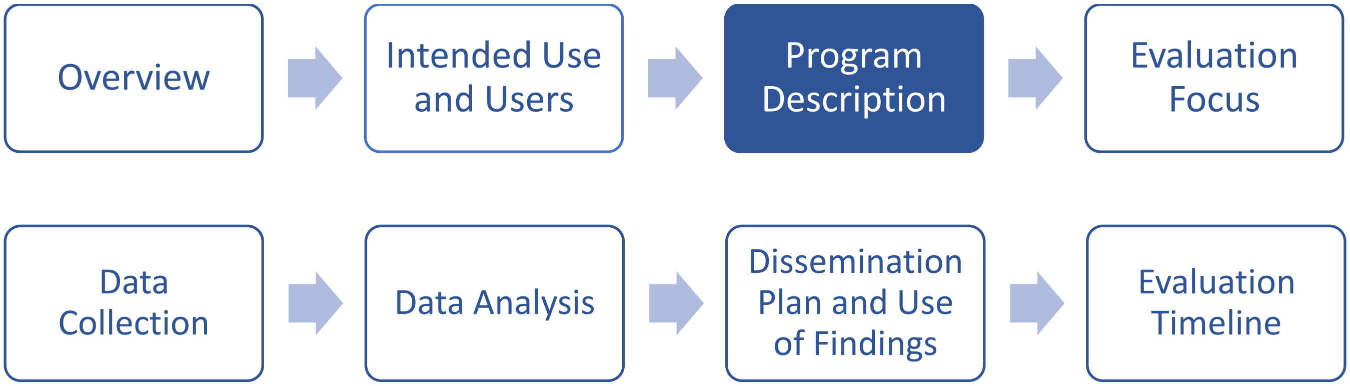
Upon award, the VCR will assess key collaborator interest into the program evaluation (e.g., VACCCP, NAACCR, VA providers, ACS, CACV, VABCCEDP) through tailored questionnaires soliciting input on perceived areas of interest for VCR program evaluation, how this information would be relevant or beneficial to and utilized by the respective program, and overall perceived program success as assessed by the collaborator's individual relationship to the VCR. The VCR will use the findings to modify or include additional goals and items of focus for the evaluation based on collaborator needs and preferences. VCR is reliant on collaborators to report timely and high-quality cancer data and is required to submit data to the CDC during the annual Call for Data. The VCR's collaborations with VACCCP and VABCCEDP are essential, as the programs rely on registry data to inform initiatives and to target areas in Virginia with high disparities and cancer burden. Data and results from the full program evaluation will be reviewed by key collaborators to ensure that outcomes and conclusions drawn from the data are accurate, valid, and can be used to inform the VCR whether or not progress is being made towards short-term outcomes.

This evaluation will investigate VCR's ability to meet NPCR Program Standards and will specifically identify components of the VCR that are performing optimally and should be expanded or replicated in future initiatives, and areas of program operations that require adjustment and improvement. In addition, this evaluation will help determine the funding needs of the VCR and focal points for allocation of resources for the following years. By engaging in these strategic health system partner collaborations while leveraging the existing expertise of key individuals and organizations, the program goals of increased electronic reporting, increased program data utilization, maintenance of data quality standards, decreased disparities in cancer incidence and mortality, and decreased overall cancer incidence and mortality will be attained. The table below (***Tool #6***) lists the collaborators that will be engaged, as well as their role and presumed benefit from investment in the evaluation, which may be amended as a result of what is learned during the collaborator engagement process. Gleaning collaborator interest early in the evaluation process will help focus evaluation efforts on specific activities, outputs, or outcomes shown on the program logic model.

Tool #6: Cancer Registry Evaluation Partner Identification Table

Collaborative Entity/Stakeholder	Role	Intended Uses of Results
1. VCR Internal Staff	Internal reviewers of evaluation plan and methods	Utilization of results/feedback improve processes, prioritize evaluation findings for program improvement
2. Virginia Department of Health Chronic Disease Programs	Implementation Partner	Utilization of surveillance data to inform planning, implementation and evaluation
3. Virginia Breast and Cervical Cancer Early Detection Program (VABCCEDP) and Virginia Comprehensive Cancer Control Program (VACCCP)	Implementation Partner	Utilization of surveillance data to inform planning, implementation and evaluation
4. Cancer Action Coalition of Virginia (CACV)	Implementation Partner	Utilization of surveillance data to inform planning, implementation and evaluation
5. Statewide Reporting Partners	Data Collection Source/Coordination of timely and complete reporting	Increased training opportunities, and resources to facilitate reporting, identification and resolution of barriers to reporting requirements
6. Centers for Disease Control and Prevention (CDC)	Federal Funding Agency	Evaluate the success of VCR to meet data quality standards, provide resources to address program opportunities/weaknesses

Program Description (Step 2)



After reading this section, you will be able to:

- Clearly describe your program and what you are evaluating
- Develop and apply a program Logic Model

The Program Description section describes your program in detail and frames the rest of the evaluation plan. Therefore, it is helpful to involve collaborators to formulate a clear description of the program and its intended effects to evaluate program effectiveness[5]. Aspects included in this section are the program need, context, stage of program development and program logic model.

Need: Describe why the program is needed. Include a description of the problem the program addresses including the magnitude of the problem (i.e., the cancer burden), populations effected, and how the problem has changed overtime.

Context: Describe the setting and history of the program including any political, social, or economic considerations, and efforts of competing organizations.

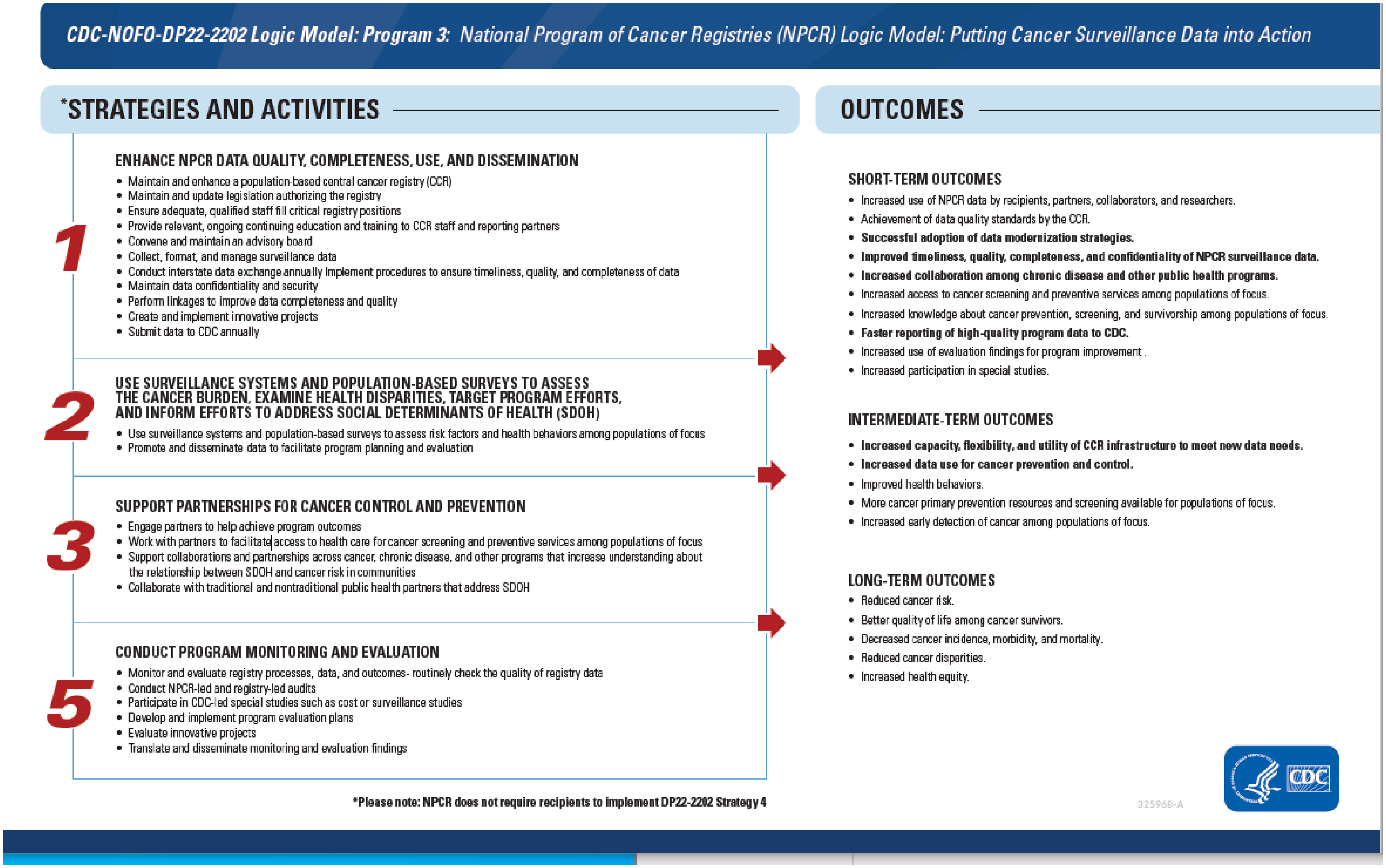
Expected Effects: Describe what the program must accomplish to be considered successful. This may range from specific immediate results to broad long-term impact.

Program Logic Model: A logic model synthesizes program elements together to illustrate how program steps lead to results. Elements within a logic model typically include inputs (e.g., staff), activities (e.g., collect and manage cancer data), outputs (e.g., cancer data collected), and results ranging from short-term (e.g., increased use of data) to long-term effects (e.g., decreased cancer incidence) (Tool #7). Registries are encouraged to adapt the National Program of Cancer Registries (NPCR) logic model (Tool #8) to fit your program.

Tool #7: Registry Logic Model Template

Inputs	Activities	Outputs	Short-Term Outcomes	Intermediate-Term Outcomes	Long-Term Outcomes
Resources invested in the program to accomplish activities	*Steps taken to carry out the program to produce desired outcomes*	*Direct, tangible results from program activities (work products)*	*Desired results of the program (1-2 years)*	*Desired results of the program (3-5 years)*	*Desired results of the program (6+ years)*

Tool #8: National Program of Cancer Registries (NPCR) Logic Model



CDC-NOFO-DP22-2202 Logic Model: Program 3: National Program of Cancer Registries (NPCR) Logic Model: Putting Cancer Surveillance Data into Action

*STRATEGIES AND ACTIVITIES

1

ENHANCE NPCR DATA QUALITY, COMPLETENESS, USE, AND DISSEMINATION

- Maintain and enhance a population-based central cancer registry (CCR)
- Maintain and update legislation authorizing the registry
- Ensure adequate, qualified staff fill critical registry positions
- Provide relevant, ongoing continuing education and training to CCR staff and reporting partners
- Convene and maintain an advisory board
- Collect, format, and manage surveillance data
- Conduct interstate data exchange annually Implement procedures to ensure timeliness, quality, and completeness of data
- Maintain data confidentiality and security
- Perform linkages to improve data completeness and quality
- Create and implement innovative projects
- Submit data to CDC annually

2

USE SURVEILLANCE SYSTEMS AND POPULATION-BASED SURVEYS TO ASSESS THE CANCER BURDEN, EXAMINE HEALTH DISPARITIES, TARGET PROGRAM EFFORTS, AND INFORM EFFORTS TO ADDRESS SOCIAL DETERMINANTS OF HEALTH (SDOH)

- Use surveillance systems and population-based surveys to assess risk factors and health behaviors among populations of focus
- Promote and disseminate data to facilitate program planning and evaluation

3

SUPPORT PARTNERSHIPS FOR CANCER CONTROL AND PREVENTION

- Engage partners to help achieve program outcomes
- Work with partners to facilitate access to health care for cancer screening and preventive services among populations of focus
- Support collaborations and partnerships across cancer, chronic disease, and other programs that increase understanding about the relationship between SDOH and cancer risk in communities
- Collaborate with traditional and nontraditional public health partners that address SDOH

5

CONDUCT PROGRAM MONITORING AND EVALUATION

- Monitor and evaluate registry processes, data, and outcomes- routinely check the quality of registry data
- Conduct NPCR-led and registry-led audits
- Participate in CDC-led special studies such as cost or surveillance studies
- Develop and implement program evaluation plans
- Evaluate innovative projects
- Translate and disseminate monitoring and evaluation findings

***Please note: NPCR does not require recipients to implement DP22-2202 Strategy 4**

OUTCOMES

SHORT-TERM OUTCOMES

- Increased use of NPCR data by recipients, partners, collaborators, and researchers.
- Achievement of data quality standards by the CCR.
- **Successful adoption of data modernization strategies.**
- **Improved timeliness, quality, completeness, and confidentiality of NPCR surveillance data.**
- **Increased collaboration among chronic disease and other public health programs.**
- Increased access to cancer screening and preventive services among populations of focus.
- Increased knowledge about cancer prevention, screening, and survivorship among populations of focus.
- **Faster reporting of high-quality program data to CDC.**
- Increased use of evaluation findings for program improvement .
- Increased participation in special studies.

INTERMEDIATE-TERM OUTCOMES

- **Increased capacity, flexibility, and utility of CCR infrastructure to meet new data needs.**
- **Increased data use for cancer prevention and control.**
- Improved health behaviors.
- More cancer primary prevention resources and screening available for populations of focus.
- Increased early detection of cancer among populations of focus.

LONG-TERM OUTCOMES

- Reduced cancer risk.
- Better quality of life among cancer survivors.
- Decreased cancer incidence, morbidity, and mortality.
- Reduced cancer disparities.
- Increased health equity.

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See below for an example of Program Description section and Logic Model from the New Hampshire State Cancer Registry.

Application: New Hampshire Cancer Registry Example

Program Description

Anticipated Effects and Changes of the Registry

The NHSCR is a key component of the NH Cancer Program's goals to reduce cancer incidence, morbidity and mortality, improve the quality of life for cancer survivors, and reduce cancer disparities. Key to this is ensuring timeliness, quality, completeness, and confidentiality of NH surveillance data, consistent with data quality standards established by the NPCR, as well as successful adoption of data modernization strategies to ensure data are reported securely and processed to a high-quality dataset that can be used to reduce the burden of cancer. The ultimate, and most important, effect of the registry is that the data are utilized nationally by NPCR and by NAACCR (e.g. Cancer in North American, CiNA), and locally by the Cancer Program within NH DPHS, the Cancer Collaboration, and partners (including researchers, other chronic disease programs, and community-based organizations, and health care providers) to inform planning and implementation of cancer screening and prevention and control programs, with prioritization of these activities on populations experiencing the greatest health inequities. Over the next 5-year period, NHSCR will focus on the following:

- Enhancing NHSCR operations with a focus on data modernization, automation, security, electronic reporting, and the production and analysis of excellent quality data;
- Using data to understand cancer incidence and mortality in NH, to identify areas of high rates and disparities, and to investigate health events such as cancer clusters;
- Using registry data to benefit public health by expanding and deepening collaborations with DHHS and external partners and by promoting data use for program planning, implementation, and evaluation;
- Developing interventions for cancer control with internal and external partners, including the release of public health messages on cancer prevention through multiple media; and
- Promoting data use for cancer research nationally and locally and for interventions in New Hampshire.

Key Registry Activities Being Evaluated

Over the next five years, key activities of the NHSCR include:

- **Strategy 1: Enhance NHSCR data quality, completeness, use, and dissemination:** Ensure that staffing, training, and hardware and software infrastructure exist to ensure optimal registry operations; engage in data modernization efforts; automate routine processes such as ePath reporting and death clearance; conduct ongoing review and improvement of data security; continue to train central registry and hospital registry staff to optimize data quality; identify new reporting sources and improve data quality from physician reporting program; maximize electronic reporting; and make registry data available on the NH data portal, and produce reports and data briefs, with a focus on identifying subgroups at risk, cancer risk factors, and areas for intervention.

- **Strategy 2: Use surveillance systems and population-based surveys to assess the cancer burden, examine health disparities, target program efforts, and inform efforts to address social determinants of health (SDOH):** Support the CCCP and partners to use registry data to inform and evaluate community level interventions including those related to physical activity and nutrition, breast and cervical cancer screening, and cancer survivorship; convene the Data Users Group (DUG) as part of the NH CCC to help develop, monitor and update the State Cancer Plan and to develop resources for local partners to help drive data-informed public health decision-making; enhance the NH WISDOM Data Portal to add indicators and dashboards, including a screening disparities dashboard; and engage in publicly-focused communications and outreach activities to publicize the registry data and its uses, and to raise awareness of the things people can do to avoid cancer.
- **Strategy 3: Support partnerships for cancer control and prevention:** utilize monthly coordination meetings across all cancer program components and bi-monthly meetings across chronic disease programs in NH DHHS to identify collaborative opportunities; support development of the updated NH Cancer Control Plan; work with the DUG as it implements the surveillance activities identified in the CCCP workplan; participate in groups that can link with registry; lead the NHSCR Advisory Board. Continue to develop and identify new partnerships to support registry data comprehensiveness and quality, such as that with Vital Records and Hospice.

The logic model outlines these activities and their effects more specifically.

Impact on Beneficiaries

Successful implementation of key registry activities will ensure that beneficiaries—the people of New Hampshire, including cancer patients and survivors—will benefit from interventions and services decisions that are made based on accurate and complete information about cancer morbidity and mortality in the state. The NHSCR is expected to support key decision-makers within and outside of NH DHHS to develop screening programs and evidence-based interventions to address cancer in the state. As noted in the logic model, the expected long-term outcomes of this work are that NH residents have reduced cancer risk, the state experiences a decline in cancer incidence, morbidity and mortality, and that there are reduced cancer disparities and greater health equity.

Contextual Factors

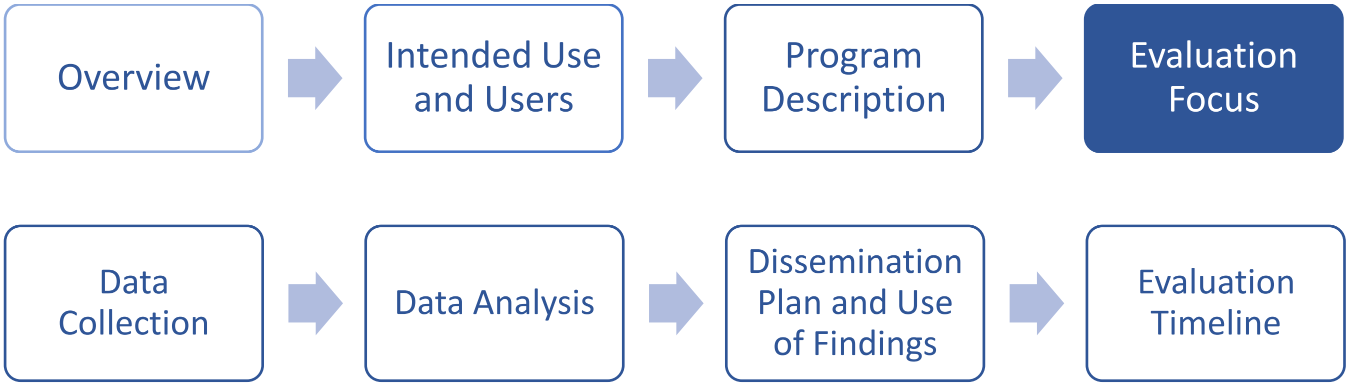
The NHSCR, as noted, is a partnership between the Cancer Program at NH DPHS and the data collection team at Dartmouth College. The NHSCR team also enjoys the benefits of a close relationship with the Norris Cotton Cancer Center (NCCC), the only NCI-designated comprehensive cancer center in Northern New England. The NHSCR Director (Dr Rees) is a member of the NCCC Cancer Population Sciences Research Program, the Associate Director for Community Outreach and Engagement, and a member of the Executive Council that provides strategic advice to NCCC Director Dr Leach. This public-private partnership has existed for over two decades and the combination of public health expertise and resources at DPHS with NCCC expertise and resources has for years been highly effective not only for data collection, but also for NHSCR data use, research, and cancer control efforts.

Tool #9: NHSCR Logic Model

NH STATE CANCER REGISTRY

Inputs	Strategies & Activities	Outputs	OUTCOMES		
			Short-term	Intermediate	Long-term
Key Staff -NHSCR Team (Dartmouth and NH DPHS) -QA/QC Manager **Funding** -Federal -Leveraged funding/funded efforts from programs with shared goals **Data Partners** -Registrars -Other Registries - VA, Hospice, NDI, Vital Statistics **Partners** -Norris Cotton Cancer Center -NH Cancer Programs -NH DES, NH EPHT -CLAB -WISDOM Team -Researchers **Technology** -RMCDS -Dartmouth IT	**Strategy 1: Enhance NHSCR data quality, completeness, use, and dissemination** • Maintain and enhance a population-based state cancer registry • Maintain and update legislation authorizing the registry • Maintain adequate, qualified staff • Ensure adequate hardware and software including security standards • Train central registry & hospital registry staff to optimize data quality • Collect & manage all reportable data in accordance with NPCR requirements • Conduct interstate data exchange annually • Participate in required NPCR PEI and DQE and other activities • Build on NPCR DMI work to use and promote electronic reporting • Implement procedures to ensure timeliness, quality, &completeness of data • Perform data linkages for quality improvement & research (eg VPR) • Convene and maintain an Advisory Committee • Submit cancer data to NPCR annually • Develop data tables and reports about cancer incidence and mortality; share data with partners, collaborators, and researchers **Strategy 2 : Use surveillance systems and population-based surveys to assess the cancer burden, examine health disparities, target program efforts, and inform efforts to address SDOH** • Convene Data Users Group • Provide cancer surveillance data in easily accessible format and guidance on interpretation and use • Disseminate and promote use of data • Strengthen public messaging **Strategy 3: Support partnerships for cancer control and prevention** • Collaborate with NPCR, NBCCEDP, NCCCP, Cancer Collaboration and other chronic disease programs • Collaborate with programs & partners to support implementation of EBIs & facilitate access for cancer screening & preventive services among populations of focus • Collaborate with traditional and nontraditional public health partners that address SDOH **Strategy 5: Conduct program monitoring and evaluation** • Develop and implement evaluation plan • Monitor and evaluate registry processes, data, and outcomes • Conduct NPCR-led and registry-led audits (DQE) • Participate in CDC-led special studies (PEI submission) • Use and disseminate evaluation findings	Infrastructure in place for data collection Fully staffed and operating NHSCR; # and roles of staff Professional development opportunities/ trainings per year/ staff trained Cancer data processed and collected Quality control procedures implemented Completeness and data quality compliance reports completed Data confidentiality & security maintained Disaster plan created and updated NHSCR Policies & Procedures Manual and System Security & Integrity Manual reviewed and updated Data linkages performed Changes to NHSCR procedures resulting from data modernization Advisory Committee meets 2x a year De-identified cancer data submitted to NPCR and NAACCR DUG meets quarterly Registry analyses and products Dashboards developed/updated Data available on WISDOM Regular meetings across Cancer Program and of Cancer Collaboration Collaborative partnerships Data shared with partners implementing EBIs Evaluations completed Development of action steps based on evaluation findings	Improved timeliness, quality, completeness, and confidentiality of NHSCR surveillance data Achievement of data quality standards by the NHSCR Successful adoption of data modernization strategies Increased use of NHSCR data by recipients, partners, collaborators, and researchers Increased access to quality and timely cancer incidence and mortality data for stakeholders through WISDOM and targeted cancer reports Faster reporting of high-quality program data to CDC-NPCR Increased collaboration among chronic disease and other public health programs to identify, examine, and reduce cancer-related health disparities Increased access to cancer screening and preventive services among populations of focus Increased knowledge about cancer prevention, screening, and survivorship among populations of focus Increased use of evaluation findings for program improvement	Increased capacity, flexibility, and utility of the NHSCR infrastructure to meet new data needs Increased access to and use of data for cancer prevention and control Focus cancer data activities on identifying targeted groups for cancer screening Improved health behaviors More cancer primary prevention resources and screening available for populations of focus Increased early detection of cancer among populations of focus	Reduced cancer risk Better quality of life among cancer survivors Decreased cancer incidence, morbidity, and mortality Reduced cancer disparities Increased health equity

Evaluation Focus (Step 3)



AFTER READING THIS SECTION, YOU WILL BE ABLE TO:

- IDENTIFY SPECIFIC EVALUATION QUESTIONS
- RELATE EVALUATION QUESTIONS TO YOUR LOGIC MODEL AND OVERALL EVALUATION PURPOSE

This section involves focusing your evaluation to identify and prioritize specific questions that will be answered through the evaluation. The logic model should be used to inspire your evaluation questions; however, it may not be feasible to evaluate every aspect of your logic model. Therefore, it is crucial to focus your evaluation to a few key questions.

There are two basic types of evaluation questions: ***process and outcome questions***. ***Process questions*** focus on evaluating the implementation of the program and answer questions such as[3]:

- To what extent are the activities being implemented as intended?
- To what extent were adequate resources available to implement the program?

Outcome questions address whether the program achieved the desired results and answer questions including[3]:

- To what extent were program outcomes, objectives, and goals achieved?
- What aspects of the program generated the most benefit?

Remember that NPCR recommends the evaluation should address some of the following areas, which can help inform question development:

- Evaluation of timeliness, quality, and completeness of data
- Current status and improvements of electronic capture of cases
- Submission of data in accordance with NPCR standards

- Effective collaborations with NCCCP, NBCCEDP, and other chronic disease programs
- Planning and implementation of data modernization strategies
- Planning and implementation of innovation projects

How can evaluation questions be prioritized?

From the potentially long list of questions that you generate, it is recommended that you select your ***3-5 highest priority evaluation questions***. There are a variety of considerations for prioritizing your evaluation questions. Not only should the evaluation serve the needs of collaborators, but it should also be feasible and produce accurate and relevant findings. Consulting the factors below can help you select and prioritize your evaluation questions[1,3,8]:

- **Process and outcome:** CDC recommends that you incorporate both process and outcome evaluation questions. Process questions provide information on how the program is implemented, while outcome questions assess the program's effect. Both are important to make recommendations about the program's future direction.
- **Logic model:** Since your logic model outlines the elements of the program and desired outcomes, it is necessary to consult it as you brainstorm evaluation questions. Think about key aspects of the logic model you want information on: CCR administration, NPCR data standards, collaborations, etc. Use tool #7 below to connect the program component from the logic model to the evaluation question, users, and use.
- **Collaborator interests:** Revisit the collaborator assessment (tool #5) and/or use tool #10 below to identify which collaborators would be interested in using findings generated from the proposed evaluation question. Additionally, think about how the findings from the evaluation question can be used by collaborators.
- **Resources:** Lastly, consider the resources you have to answer the evaluation question. Although collaborators may want to address certain evaluation questions, they may not be feasible to answer due to resource limitations.

Tool #10: Prioritizing Evaluation Questions

Program Component	Evaluation Type	Evaluation Question	Evaluation Users	Evaluation Use	Resources
Which component of the program is being evaluated? Refer to the logic model items	*Process or outcome evaluation*	*What question will the evaluation answer?*	*Who will use evaluation findings?*	*How will the results of this evaluation question be used?*	*What resources are needed to answer the evaluation question?*

Adapted from the Evaluation Focus Table from the Central Cancer Registry Evaluation Plan Template [9].

See below an example from the New Jersey Cancer Registry (NJCR) of the Evaluation Focus section of their evaluation plan.

Application: New Jersey Cancer Registry Example

III. Focus of the Evaluation

A. Priorities

As stated previously, this evaluation will assess NJSCR's progress in meeting the NPCR Program Standards and other state-specific objectives and if the DMP requires updates. However, in Year 1, we plan to focus on three priorities:

Priority 1: The feasibility of submitting 12-month data earlier as part of the annual November NPCR Call-for-Data;

Priority 2: NJSCR's ability to improve the collection of race and ethnicity, with a specific focus on improving the capture of race and ethnicity for Blacks, Asians, Hispanics and Native Americans; and,

Priority 3: NJSCR's progress toward creating a culture of inclusivity and equity as a program as well as in our service to the cancer registry community and the citizens of New Jersey.

Priority 1 was chosen because of the ongoing "crunch time" crises that happen each year around the time of submission; and the extra hours that staff work in the two months between the November and January submissions, often leading to burnout and low morale. By evaluating our process for the 12-month data submission and submitting it at the same time as the 24-month data in November, we may be able to "normalize" time staff spend throughout the year processing data and alleviate burden and stress among staff. By normalizing the workflow throughout the year, management and supervisors will be able to set productivity levels that are more predictable, flexible, and realistic.

Priority 2 was chosen because of the ongoing challenges of meeting the NPCR program standard for race (NAACCR Item #160), especially for 12-month data. Race and ethnicity are critical variables for the production of statistics and investigations of racial/ethnic disparities. Partner agencies also use race/ethnic data to evaluate their programs and decision-making. Although NJSCR has been able to meet NPCR's benchmark for race (<3% for 24-month data, <5% for 12-month data), it has been more challenging over time as providers have become more hesitant to collect race data at the point of service and non-hospital electronics sources fail to include race when submitting data (e.g. labs). We also learned that New Jersey tribal organizations are not federally recognized and therefore members of NJ tribes are not eligible for Indian Health Services (IHS). As a result, NJSCR's linkage with HIS may not improve the identification of Native Americans in our cancer population. By evaluating race/ethnicity data and identifying opportunities to help improve the efficiency of coding race/ethnicity, we will be able to not only improve the quality of the data by reducing unknowns but also improve New Jersey’s cancer statistics.

Priority 3 was chosen because inclusion and equity are new initiatives in this NOFO and also new to NJSCR. Making it a part of our formal evaluation plan will ensure that we prioritize it to the same degree as other program priorities.

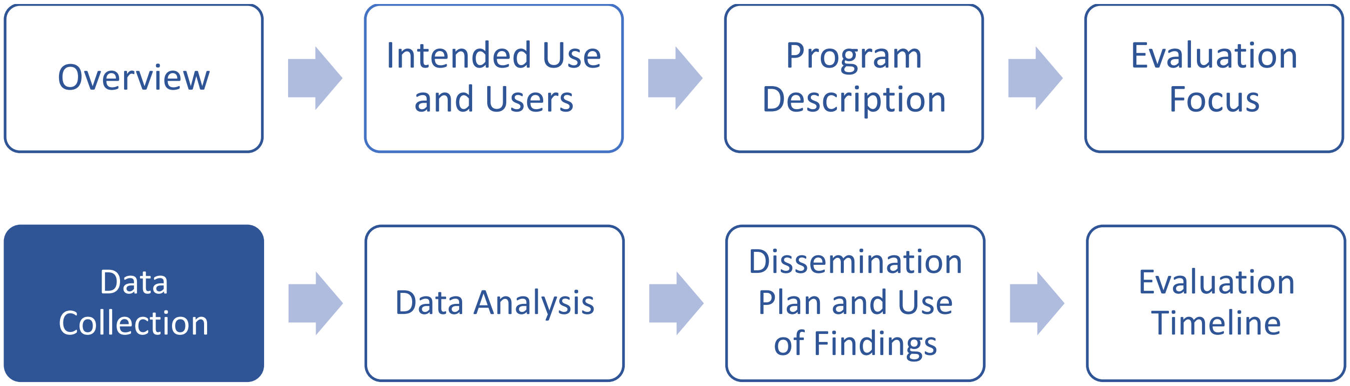
B. Focus Questions

The table below describes the specific questions that drive our evaluation design and focus.

Tool #11: Worksheet of Evaluation Questions associated with Evaluation Priorities

Line No.	Program Component	Evaluation Type	Evaluation Question	Evaluation Use
	Which component of the program is being evaluated?	**Process or Outcome Evaluation**	**What question will the evaluation answer?**	**How will the results of this evaluation question be used?**
1	12-month data submission, improving timeliness	Process	What would be required to submit 12-month data two months earlier in November (instead of January)?	Standardize processes to submit 12-month earlier to CDC and re-evaluate staff monthly productivity goals.
2	Data collection and improving data quality	Process and Outcome	How can we improve the collection of race and ethnicity data?	Implement standard processes to collect race and ethnicity data more efficiently and consistently, reducing the number of unknowns.
3	Inclusion and Equity	Process and Outcome	Can we implement strategies to promote inclusion and equity in our program?	Implement inclusion and equity strategies on a regular basis, integrating it into our standard procedures and strategic planning.

Data Collection (Step 4)



After reading this section, you will be able to:

- Identify indicators and/or performance measures for evaluation questions
- Describe data collection sources and methods to answer your evaluation questions

In the ***data collection*** section, or CDC Evaluation Framework Step 4: Gather Credible Evidence, you will work with your collaborators to identify indicators, identify data sources and methods, and list program targets.

Indicators and Performance Measures

Indicators are measures of a program's performance. After identifying evaluation questions, the next step is to determine indicators for each evaluation question. Note that an evaluation question may have more than one indicator. Indicators should be tied to program objectives, the logic model, and the evaluation questions. Indicators should be specific, measurable, attainable, relevant, timely, IT-ready, and equity-informed (S-M-A-R-T-I-E).[11] Be sure to define the metric (e.g., number), population (e.g., staff), object (e.g., completion of training), and timeframe (e.g., during the funding cycle) for each indicator if possible[8]. Program ***performance measures*** can and should also be used as indicators for evaluation questions. CCR evaluation plans should include NPCR performance measures and any custom indicators that measure program performance.

Program Targets

Program targets are identified for each indicator to determine how you will measure success. Targets will be used as a benchmark to evaluate your program's performance[8]. Program targets may not exist for all evaluation questions, but many are implicit and provided in the program standards. Tool #12 below provides an example of sample evaluation questions, indicators, and targets for a CCR evaluation plan.

Tool #12: Evaluation Questions, Indicators and Program Targets

Evaluation Question	Indicators	Program Targets
To what extent has the CCR built a strong partnership?	Type and number of sectors represented	Representation from at least one cancer screening organization, one SDOH partner, and one tobacco control partner
	Number of meetings with each type of partner	At least one meeting with each type of partner
To what extent has the CCR promoted electronic reporting among facilities?	PM 8: Percentage of labs reporting data electronically using HL7 2.5.1 or other standard HL7 format	Increase the percentage of labs reporting electronically in the designated HL7 format by 3% each year
	PM 9: Percentage of hospitals reporting electronically to the CCR each year	Increase the percentage every year to meet the standard of 100% of hospitals reporting electronically by the end of the 5-year performance period
	PM 10: Percentage of non-hospital facilities reporting electronically to the CCR each year	Increase the percentage every year to meet the standard of at least 80% of these facilities reporting electronically by the end of the 5-year performance period

Adapted from the Example Indicators for Partnership, Plan and Program Evaluation Questions from the Comprehensive Cancer Control Branch Program Evaluation Toolkit and the Indicators and Program Benchmark for Evaluation Questions Table from “A Guide to Developing a TB Program Evaluation Plan” [7].

Data Sources and Methods

Once you have identified indicators for your evaluation questions, the next step is to describe how you will collect the necessary data for each indicator. Consider the following for each evaluation question and its indicators[8]:

- What methods will you use to collect the data?
- Where will you collect data from? (Data sources*)
- How often will you collect data?
- Who is responsible for collecting the data?
- How will you store the data once it is collected?

***Data sources** are where you will go to collect information on your indicators. They generally constitute quantitative (e.g., numerical observations) and qualitative data (e.g., descriptive observations). Note that more than one data source may provide information for each indicator.

Examples of data sources for CCR evaluations may include:

- NPCR Data Evaluation Reports and other data collected by CCRs
- Interviews or focus groups, including notes from discussions with program staff or other key personnel
- Program documents such as partnership meeting rosters, meeting attendance records, etc.

Other data sources may need to be developed to answer your evaluation questions. These ***data collection tools*** may include surveys, interviews, and focus group guides. Ensure that these tools collect information in the most straightforward way possible and collect only the information you need. In your evaluation plan describe the tools you are using and their purpose and attach them to the appendices.

Tool #13 provides a template to lay out your data collection methods, including data sources and how, when and who will be responsible for data collection.

Tool #13: Data Collection Plan[8]

Indicator	Data Sources	Data Collection		
		Who	When	How

See below for an example from the Pacific Regional Central Cancer Registry (PRCCR) of their data collection methods and plan.

Application: PRCCR Example

The evaluation/performance measurement plan design utilizes quantifiable data (case tracking, numbers, percent complete, etc.), performance reports generated by NPCR (data submission reports, Performance Evaluation Instrument (PEI), annual NPCR-CSS Data Evaluation Reports (DER), any Data Quality Evaluation (DQE) and any NPCR-sponsored or -mandated other audits) as well as qualitative feedback from monthly monitoring conversations or reports with each jurisdiction registrar and discussions at the Advisory Committee meetings and registrar training sessions. *With the exception of most electronic reporting and performance measures related to electronic reporting/data modernization*, it is otherwise feasible for PRCCR to collect evaluation and performance data as noted below. Key program partners (i.e., the jurisdiction registrars and CCC coordinators) will participate in gathering data for reports. Registrars will be integrally involved in all activities, including self-reflection on how to improve their performance and progress will be monitored via semi-monthly virtual meetings. The bulk of the data analysis will be conducted by the central PRCCR staff (PI – Buenconsejo-Lum; Program Manager – Baksa; PRCCR registrar – Lymona Refugia; PRCCR statistician – Youngju Jeong). Most of the data analyses will be descriptive statistics, and trend analysis and simple forecasting methods applied to the currently available clean data. Local (jurisdiction) CCC coordinators and BCCEDP program managers will participate in Question 1 & 3/Strategy 3 activities. A continuous quality improvement (CQI) process will utilize the information from the data sources noted in Table 2 below.

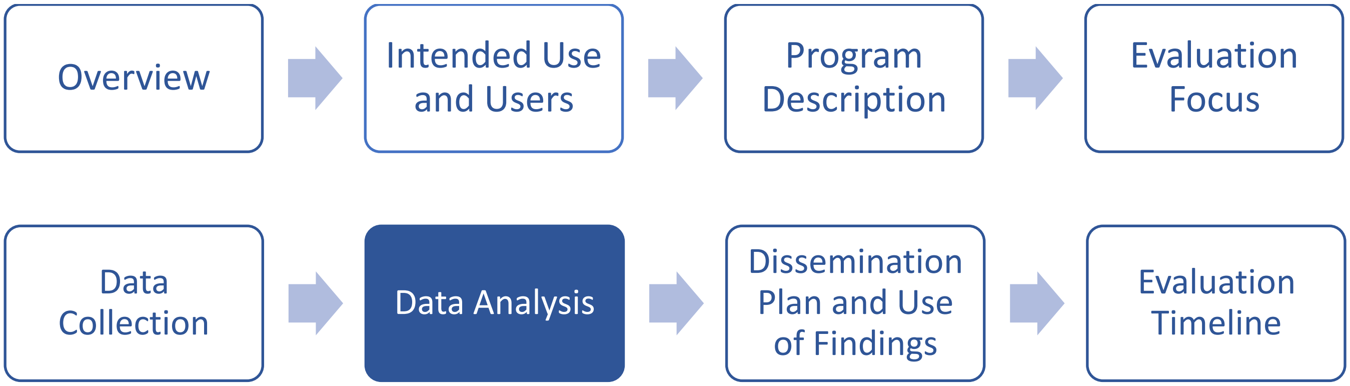
If issues are found, then relevant systems will be reviewed to determine a resource-appropriate solution. Because we are working with 6 disparate USAPI jurisdictions, some local (i.e., jurisdiction-level) processes are not under our direct control. Despite this, over the past 18 years, we have worked with local leadership (Ministers/Secretaries or Directors of Health, Chiefs of Medical Staff at the hospitals) and their appropriate staff to resolve or partially resolve a variety of issues. The registrars, comprehensive cancer control program coordinators and Cancer Council of the Pacific Islands (CCPI) [advisory board] leaders also help to explain the importance of various requirements that are critical to registry operations. Example of these include physical security of medical records, local computer and network security, patient confidentiality, secure transmission of protected health information, better coordination between the hospital medical records department, cancer registry, and the off-island referral offices, local insurers, local private clinics or hospitals.

Tool #14: PRCCR Evaluation Plan Details

Evaluation Question	Data Indicators (I) and Targets (T)	Data Sources & Timing	Data Collection Method	Data Analysis & Use for CQI
Question 1: To what extent has PRCCR presence, collaboration, and support led to improved collection, dissemination, and use of high-quality cancer data, across the U.S. Affiliated Pacific Islands?	**I:** (PM2) PRCCR secures necessary registry management and operations staff per NPCR Manual and NOFO requirements **T:** - Maintain a minimum of 6 subcontracts throughout the project cycle. (FSMN, Guam, PNI, KSA, RMI, ROR) - At least 75% of PRCCR key staff positions (PD, IT, ETC, QA) are filled annually.	UH financial management system, Q2 of each year	Internal UH Review	PI and Program Mgr review monthly reports, and if there are items that require attention, they will investigate/find the appropriate action to be taken.
	I: (PM7) PRCCR creates a remediation plan to address reporting challenges due to staff turnover, software issues, or other reasons for reporting delays within 60 days and shares its expectations with the reporting facility. **T:** Regional remediation plan draft reviewed and finalized during the PY-01 Advisory Board meeting	CCPI (Advisory Board) meeting minutes of the review/approval of the plan. Usually in Q2 and Q4	Program Mgr will compile the meeting minutes of the CCPI meeting	PI and Program Mgr will analyze communications for at least the following: -Type of data requested (cancer type if available) -Average time required to compile/send out data reports in workdays -Type of feedback provided by partner on the data report (neg/neutral/pos) -Lessons learned from feedback -Were all relevant data requests answered in a satisfactory matter? (we will use the follow-up/clarification request info, collected) -Were all incoming concerns answered/relevant problems addressed

Question 2: To what extent has the program established mechanisms, that ensure, that PRCCR: -meets the program standards of timeliness, quality, and completeness and other NPCR standards -achieves the National Data Quality Standard, and -improves in the Advanced National Data Quality Standard completeness?	**I:** (PM13) PRCCR's annual data submission adheres to the data quality criteria for 12- and 24-month data, as set by the NOFO, APR, or any CDC/NPCR/DER standard **T:** On-time data submission for both 24mo and 12mo data submissions following standards **I:** (PM22) PRCCR meets data completeness each year based on observed-to-expected cases, which are: **T:** - PRCCR-submitted 24-month data meets 95% completeness. - By Year 3 (2025), all jurisdictions will increase their case completion rate for the Advanced National Data Quality Standard [12-mo] from 20% to 30% - By year 5 (2027), 1 of 6 jurisdictions will meet the Advanced National Data Quality Standard [12-mo] (50% completeness)	Monthly data submission and tracking reports (internal timeliness, quality and completeness) -monthly NPCR data submission reports; annually Review of errors reports by QA and ETC -Ad-hoc/continuous review, as bundles are processed	Program Mgr, PI track; review reports & feedback from PRCCR, cancer registrars; case submission data	Individualized TA (to selected jurisdictions), monitoring and/or remediation plan developed as needed. These are guided by the 24/12 data submission feedback report from CDC. PI, QA/Central Registrar and ETC strategize (QA processes, training plan) based on feedback on data submission

Data Analysis (Step 5)



After reading this section, you will be able to:

- Specify data analysis methods for your evaluation plan questions
- Develop a data analysis plan
- Interpret and justify conclusions

In this section, you will describe your data analysis methods and plan for interpreting the evaluation data.

Data Analysis

Data analysis methods include describing what techniques you will use to analyze your evaluation data. This includes:

- Data software or source
    - SAS, Stata, NVivo, MAXQDA, SPSS; BRFSS, HP2030, USCS, etc.
- Statistical methods (if any):
    - Quantitative: descriptive statistics, inferential statistics, etc.
    - Qualitative: content analysis, thematic analysis, etc.
- Stratifications (if any)
- Types of tables or figures

Tool #15 is a template that can be used to describe your analysis plan and connect it to your data collection methods.

Tool #15: Data Analysis Plan

Evaluation Question	Indicators	Data Sources	When collected?	How will you analyze the data?	Who will analyze the data?

Adapted from the Analysis Plan from “Developing an Evaluation Plan” [10] and the Data Analysis Plan from “Learning and Growing through Evaluation: Asthma Program Evaluation Guide” [3].

Interpretation

Once your data analysis is completed, you will interpret your findings by comparing them against the indicators and program targets you previously established. It is important to involve the collaborators in this process, as they may bring different perspectives and explanation for the evaluation findings. Revisit your collaborator assessment to help you determine which collaborators should be invited to your meeting to interpret the findings. In the evaluation plan, describe who will be involved in interpreting the findings, and the procedures you will use to do so.

Below is an example from the Utah Cancer Registry of their evaluation plan data analysis section and plan.

Application: Utah Cancer Registry Example

VI. Plan for Analysis and Interpretation

Tool #16 outlines variables/indicators, analyses, and any considerations for data interpretation or synthesis. Multiple stakeholder groups as represented on the Utah Cancer Advisory Committee may play a role in guiding the design of evaluation projects, interpreting the findings, and guiding dissemination plans. These include hospitals/data contributors, researchers, providers, and patients. Collaborating partners at UDOH and from the Utah Cancer Action Network coalition will play a role in interpretation and dissemination of findings and assessing their use.

Data analysis will be conducted by the Evaluator/Analyst, Program Director, or Biostatistician. Analytic methods will vary according to the project, but will include summary descriptive statistics, statistical tests for pre-post comparisons of means/medians, and measures of agreement between variables, e.g. Cohen's kappa. As we work on each project and develop full protocols, we will refine our analysis plans and incorporate more complex analyses as needed.

Tool #16: Data Analysis and Synthesis Table

Questions (See Table B for details)	Analysis to perform	Synthesis or interpretation considerations
A. APCD	Descriptive statistics, Thematic analysis	As a new data source, may encounter difficulties incorporating APCD data and identifying cases
B. APHL/ AIMS	Descriptive statistics	May need to make assumptions about whether we would have otherwise received a paper path report or not for cases newly identified in e-path
C. Electronic data workflow	Descriptive statistics, pre-post comparison	No concerns, data from single source
D. Race and ethnicity variables	Cross-tabulations, measures of agreement, e.g., sensitivity and specificity	Unsure how race and ethnicity are collected at facilities, it likely varies.
E. Data dissemination	Descriptive statistics, thematic analysis	None apparent at this time
F. Evaluation process	Descriptive statistics, thematic analysis	None apparent at this time.

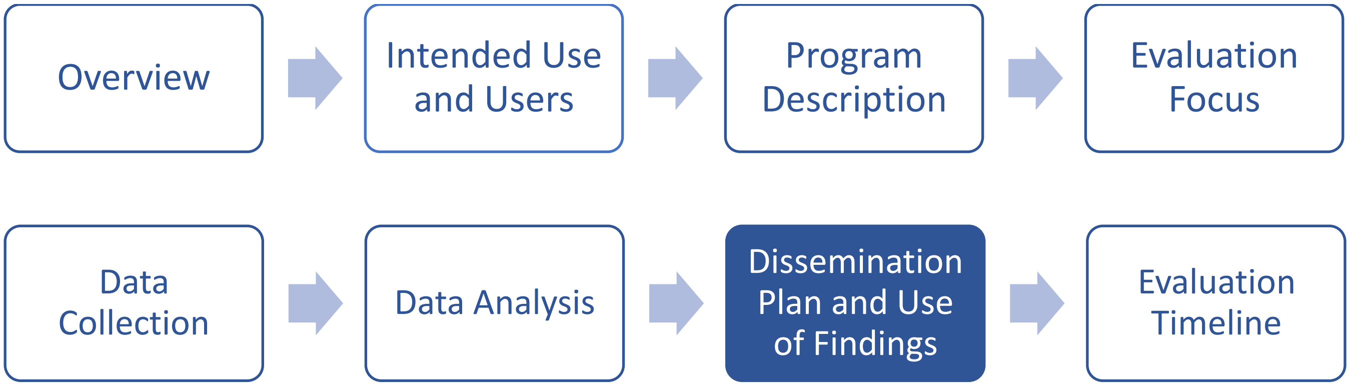
It can also be helpful to keep track of data collection and analysis activities as they occur throughout your evaluation. The table below combines details from the evaluation plan data collection and data analysis section to condense it into a table that can be used for evaluation reporting.

Tool #17: Data Collection and Analysis Reporting

Evaluation Question	**Indicators**	**Count/Percent**	**Data Sources**	**Data Collection Methods**	**Data Analysis**	**Status of Data Collection**	**Notes**
What you wanted to know?	*A specific measurable characteristic that shows progress toward achieving your specified objective*	*The actual amount or percent achieved at the end of the reporting period*	*Where did you collect the data?*	*How did you collect the data?*	*What type of analysis did you conduct?*	*What is the status of data collection? (not started, in progress, complete)*	*Provide any notes on the status*

Adapted from the Data Collection Example from "Developing an Evaluation Plan" [10].

Dissemination Plan and Use of Findings (Step 6)



AFTER READING THIS SECTION, YOU WILL BE ABLE TO:

- DETERMINE HOW AND WITH WHOM EVALUATION RESULTS WILL BE USED AND SHARED
- CREATE A REPORTING AND DISSEMINATION PLAN

This section describes how information from the evaluation plan and its findings will be used and shared. This part of the plan should describe what medium(s) will be used to disseminate evaluation findings, who will be responsible for disseminating findings, and how the findings will be used. The purpose of conducting program evaluation is to generate information to improve program performance. Therefore, it is essential to disseminate and use findings to achieve the evaluation plan purpose.

Disseminating Evaluation Findings

The dissemination process involves communicating evaluation methods and findings to appropriate audiences in a timely, relevant manner. The first step in this process is determining what information you want to communicate. Consider what action you want the audience to take based on the information you provide. Are you sharing your findings to keep the audience informed or do you want them to take action?[3] Answering these questions will help you tailor your dissemination plan.

Additionally, there are a ***variety of formats*** in which to disseminate evaluation findings. Findings can be shared in a formal or informal manner, and may include the following channels:[1]

- Email
- Newsletters

- Written reports
    - Detailed evaluation report
    - Executive summary to the evaluation report
- Briefings
- Presentations
- Planning sessions
- Website

Additionally, these options may be presented in electronic or paper formats. NPCR Evaluation Report templates are an excellent starting point and provide a structured format to help recipients document and share findings with evaluation collaborators. Specific information can also be pulled from the detailed reports to create tailored end products for specific audiences.

Determining Audience(s)

In writing this section of your plan, consult the collaborator assessment tool you developed earlier to ensure that you address collaborators needs and share findings appropriately. Additionally, you may want to promote your program and share results with the general public. However, it is important to consider that communication methods will differ for different audiences.[3] As mentioned earlier, ***consider what findings collaborators are most interested in and their preferred way to receive information.*** For example, funders may want to review a detailed evaluation report, while SDOH program collaborators may only be interested in health disparity data analysis and findings. Further, the audience will likely vary and change throughout the evaluation process. At various points in time during the evaluation, it may be appropriate to include program managers, funders, and other cancer programs.

Ensuring Use

Another key aspect of the dissemination plan is ***ensuring use***. It is important to develop mechanisms early on to ensure that findings are used to support program improvement efforts. That way, changes and improvements can be made throughout the evaluation process. Some of the mechanisms that can help ensure evaluation findings are used to improve your program include[1]:

- ***Using regularly scheduled meetings*** with evaluation collaborators to share evaluation findings, develop recommendations, and generate an action plan
- Include a ***review of evaluation findings and recommendations*** in regularly scheduled staff meetings
- Engage collaborators at ***advisory committee meetings*** in identifying ways they can apply evaluation findings to their organizational practices
- ***Document efforts*** program staff and partners are making to implement recommendations

Tool #18 below provides a template for developing a communication and dissemination plan.

Tool #18: Communication and Dissemination Plan

Key Audience	Communication Objectives	Product	Channel	Timeline	Responsible Person
Who is this communication for?	*How do we want the key audience to use this information?*	*What is the product?*	*What is the format of this product?*	*When will this product be shared?*	*Who will ensure the product reaches the audience within the established timeframe?*
CDC NPCR	Inform what's working well and what needs to be adjusted Promote Progress	Annual Evaluation Report Mid-term Evaluation Report Final Evaluation Report	Upload evaluation report to AMP	Annually Year 3 Year 5	Program Director or Coordinator

Adapted from the Dissemination Strategy Matrix from the Comprehensive Cancer Control Branch Program Evaluation Toolkit [1] and the Communication and Reporting Plan from the Learning and Growing through Evaluation: Asthma Program Evaluation Guide [3].

See below for an example from the Delaware Cancer Registry of their Dissemination Plan and Use of Findings Evaluation Plan Section.

Application: Delaware Cancer Registry Example

DCR will use the program evaluation plan to ensure that Program Standards continue to be met and share the results with collaborators. As program evaluation activities are conducted, the DCR will prepare reports to share with these collaborators. The type and format of these reports will depend on the evaluation area and will likely be in the form of Microsoft Office product output (Word, Excel, PowerPoint). An Epidemiology Working group will be formed among program Epidemiologists, NCCCP Program Director, NBCCEDP Program Director to discuss data needs and dissemination of reporting information.

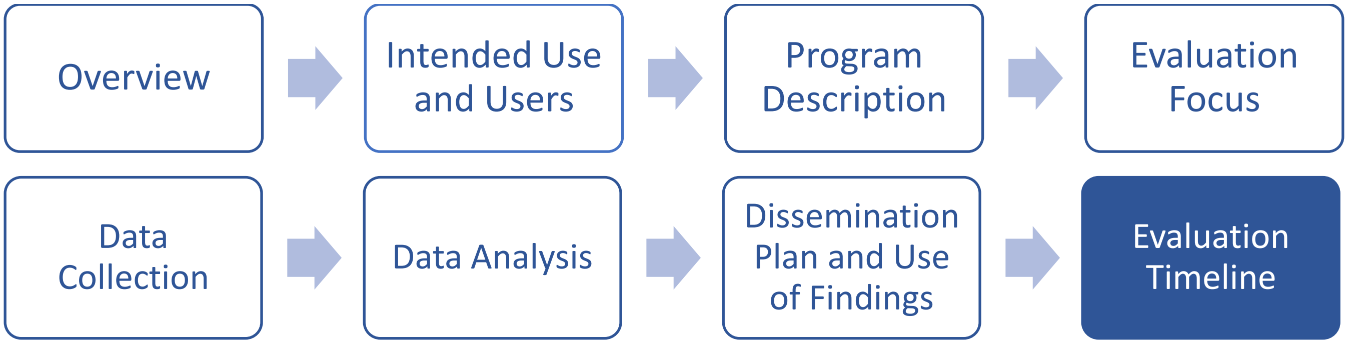
- Annual comprehensive report on cancer will be released, along with a compendium on cancer incidence within census-tracts, which is a legislative requirement in Delaware
- Bimonthly release of data briefs on specific cancer topics
- Quarterly release of community profile data to NCCCP and NBCCEDP to help target community outreach efforts
- The CDC Project Officer will be briefed on the status of program evaluation activities during monthly conference calls, and a report will be presented annually.
- Other collaborators will be informed of evaluation activities during meetings of the Delaware Cancer Consortium, Delaware Cancer Registry Advisory Committee (DCRAC).

The Program Director will be responsible for maintaining a log of audience feedback and next steps from the CDC and a log detailing when and with whom evaluation reports have been shared. The Communication and Reporting Plan below presents possible formats and timing of various communications throughout the evaluation plan cycle using the CDC as an example audience. Report formats and messengers will be finalized at each stage during the process.

Tool #19: Delaware Communication and Reporting Plan

Purpose of Communication	Possible Formats	Possible Messenger	Timing/Dates
Data Usage: Release of Delaware Cancer Incidence and Mortality Report and Census-tract Compendium Report	DPH Press Release; PDF posted on DPH Cancer Control webpage	Epidemiologist	Annually
Data Usage: Release of data briefs on specific cancer topics	DPH Press Release; Webpage; PDF Handouts	Epidemiologist	Bimonthly
Data Usage: Release of data to NBCCEDP and NCCCP programs to guide outreach efforts, community profiles	Microsoft Word; PDF Handouts	Epidemiologist/NCCCP Program Director/NBCCEDP Program Director	Quarterly
Annual Progress Report	Microsoft Word	Program Director	Annually
Provide synopsis of NPCR annual evaluation plan report	Brief presentation/Report	Epidemiologist	Annually/October Meeting of DCRAC

Evaluation Timeline



AFTER READING THIS SECTION, YOU WILL BE ABLE TO:

- DEVELOP A TIMELINE TO GUIDE EVALUATION ACTIVITIES

Developing a timeline for evaluation activities can help guide you throughout evaluation plan implementation. Having a timeline to refer to can also ensure that all collaborators are informed of what evaluation activities are happening at what time. Additionally, displaying all evaluation activities in one place can help your evaluation team determine if there may be resource constraints when there are too many activities happening at one time[8]. Tool #20 is a table that can be useful to display the timeline of your ***evaluation activities***. These may include activities for evaluation planning (e.g., drafting a logic model), data collection, data analysis, dissemination, etc. Note that including categorization for evaluation activities is optional.

Tool #20: Evaluation Timeline Table

Evaluation Activity	Timing of Activities for [Year X]			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Evaluation Planning				
Data Collection				
Data Analysis				
Dissemination				
	Timing of Activities for [Year X]			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter

Adapted from the Illustrative Timeline for Evaluation Activities from “A Guide to Developing a TB Program Evaluation Plan” [8].

Below is an example from the Nebraska Cancer Registry of their evaluation timeline.

Application: Nebraska Cancer Registry Example

Tool #21: Nebraska Evaluation Timeline

Evaluation Activity	When	Who
Data impact – review of cancer program outcomes.	Collect: Monthly Analyze: Quarterly Share: Quarterly	Epidemiologist for Women's and Men's Health Program (WMHP) *NCR Epidemiologist NCR Statistician **NCLT
Survey of programs annually -r/t satisfaction and usefulness of data provided	Collect: February-March Analyze: March-April Share: April	NCR Program Manager NCR Informatician Survey Tool
Electronic data exchange progress	Collect: Monthly Analyze: Monthly Share: Quarterly	NCR Informatician Westat Monthly Management Report
Re-abstraction and DQE activities.	Collect: Annually Analyze: Monthly Share: Monthly (progress) and Annually (results)	Westat Data Quality Assurance Coordinator Monthly Management Report
Number of reports, data linkages completed for each program or organization.	Collect: Monthly Analyze: Quarterly Share: Annually	NCR Epidemiologist WMHP Epidemiologist NCR Statistician Staff Assistant
Performance of data and system backups.	Collect: Monthly Analyze: Monthly Share: Monthly	NCR Informatician NCR Program Manager Information Technology
Operations manual reviewed/updated	Collect: April and October Analyze: April and October Share: April and October	Westat Project Manager
DMI participation tracking and reporting of progress	Collect: Monthly Analyze: Quarterly Share: Quarterly	NCR Informatician
Perform PEI	Collect: As directed by CDC Analyze: As directed by CDC Share: Before the due date as directed by CDC	NCR Program Manager NCR Epidemiologist

*NCR = Nebraska Cancer Registry **NCLT = Nebraska Cancer Leadership Team (CCCP/WMHP/NCR/Westat/Program Epi's/Chronic Disease)

Additional Resources

Centers for Disease Control and Prevention (CDC)

- CDC Framework for Program Evaluation in Public Health
  - Morbidity and Mortality Weekly Report (MMWR) available at: https://www.cdc.gov/mmwr/PDF/rr/rr4811.pdf
  - Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide available at: https://www.cdc.gov/eval/guide/index.htm
- CDC Resources for Culturally Competent Evaluation
  - Guide to promote cultural responsiveness when using the CDC Framework: https://www.cdc.gov/asthma/program_eval/cultural_competence_guide.pdf
  - Cultural Competence Tip Sheet: https://www.cdc.gov/asthma/program_eval/cultural_competence_tip_sheet.pdf
- Division for Heart disease and Stroke Prevention Webcasts & Webinars on evaluation basics and hot topics: https://www.cdc.gov/dhdsp/pubs/webcasts.htm
- Division of Tuberculosis Elimination program evaluation handbook: https://www.cdc.gov/tb/programs/evaluation/tbevaluationhandbook_tagged.pdf
- Division of Environmental Hazards and Health Effects Evaluation webinar series: https://www.cdc.gov/asthma/program_eval/evaluation_webinar.htm
- Division of Adolescent and School Health Program Evaluation Toolkit: https://www.cdc.gov/HealthyYouth/evaluation/index.htm

National Program of Cancer Registries (NPCR)

- Evaluation Plan Guide (Can be requested from PC or accessed on AMP)
- Central Cancer Registry Evaluation Plan Template (Can be requested from PC or accessed on AMP)
- NPCR Recipient Evaluation Plan Promising Practices Webinar and Slides (Can be requested from PC or accessed on AMP)

The American Evaluation Association (AEA)

- AEA Website: https://www.eval.org
- American Evaluation Association's Guiding Principles for Evaluators: https://www.eval.org/About/Guiding-Principles
- American Evaluation Association Statement on Cultural Competence in Evaluation: https://www.eval.org/About/Competencies-Standards/Cutural-Competence-Statement

W. K. Kellogg Foundation

- Evaluation handbook: https://www.wkkf.org/~/media/62EF77BD5792454B807085B1AD044FE7.ashx

- Logic Model Development Guide: https://wkkf.issuelab.org/resource/logic-model-development-guide.html

MEASURE Evaluation

- MEASURE website: https://www.measureevaluation.org/
- Resources including online tools, curricula, publications, and other useful training information on evaluation: https://www.measureevaluation.org/resources.html

References

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3. Centers for Disease Control and Prevention. 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, January 2021.
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8. Centers for Disease Control and Prevention. A Guide to Developing a TB Program Evaluation Plan. Centers for Disease Control and Prevention, National Center for HIV, STD, and TB Prevention, Division of Tuberculosis Elimination.
9. Centers for Disease Control and Prevention. Central Cancer Registry Evaluation Plan Template. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Cancer Prevention and Control.
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Appendices

Appendix 1: NPCR Performance Measures

NPCR short-term outcomes

1. ***Successful adoption of data modernization strategies***
   - **PM 8:** Percentage of labs reporting data electronically using HL7 2.5.1 or other standard HL7 format (measure for e-path reporting).
     - **Target:** Increase the percentage of labs reporting data electronically in the designated HL7 format by 3% each year.
     - **Target:** Increase the percentage every year to meet the standard of 100% of hospitals reporting electronically by the end of the 5-year performance period.
   - **PM 9:** Percentage of hospitals reporting electronically to the CCR each year.
   - **PM 10:** Percentage of non-hospital facilities reporting electronically to the CCR each year.
     - **Target:** Increase the percentage every year to meet the standard of at least 80% of these facilities reporting electronically by the end of the 5-year performance period.
   - **PM 22:** CCR meets a percent completeness each year based on observed-to-expected cases (see PM 13).
     - **Target:** CCR-submitted 12-month data meets 90% completeness.
2. ***Improved timeliness, quality, completeness, and confidentiality of NPCR surveillance data***
   - **PM 11:** CCR creates and routinely uses management reports that monitor data reporting, completeness, and quality, attaches templates with the APR submission, and provides a brief explanation of these tools in the narrative.
   - **PM 12:** Interstate data exchange occurs at least annually between CCR and designated states or territories and quarterly (if feasible) between CCR and neighboring states.
   - **PM 13:** CCR's annual data submission adheres to the following data quality criteria for 12- and 24-month data, as measured via the data evaluation report (DER):
     - There are 3% or fewer death-certificate-only cases.
     - There is a 1 per 1,000 or fewer unresolved duplicate rate.
     - The maximum percentage missing for critical data elements are:
       - 2% age 2% sex 3% race 2% county
     - 99% pass a CDC-prescribed set of standard edits for 12-month data, and 97% pass a CDC-prescribed set of standard edits for 24-month data.
   - **PM 14:** CCR increases case reporting by at least 2% each year for urologists, dermatologists, and gastroenterologists, as required by law, to demonstrate continuing progress and improvement by the end of the 5-year performance period.
   - **PM 15:** CCR increases case reporting by at least 2% each year for medical oncologists, radiation oncologists, and hematologists, as required by law, to demonstrate continuing progress and improvement by the end of the 5-year performance period.

- **PM 16:** CCR performs linkage with state or territory death files at least once every year and incorporates results on vital status and cause of death into the registry database.
- **PM 17:** CCR links with the National Death Index at least once every year and incorporates results on vital status and cause of death into the registry database.
- **PM 18:** CCR links with the state or territory breast and cervical cancer early detection program at least once every year to identify potentially missed cases, reconcile differences between the two systems, and update appropriate data fields to capture post-linkage information.
- **PM 19:** CCR links with the Indian Health Service (IHS) Administrative Database at least once every five years. However, CCRs within IHS Contract Health Service Delivery Area counties link their records with patient registration records from IHS at least once every year.
- **PM 25:** Baseline and annual participation

3. ***Increased collaboration among chronic disease and other public health programs***
    - **PM 28:** Registry advisory committee meets at least twice per year to discuss CCR data reporting, quality, analysis, use, staffing, special projects, and partnerships.
    - **PM 29:** Registry advisory committee or cancer coalition develops at least one data quality improvement initiative each year.
4. ***Faster reporting of high-quality program data to CDC***
    - **PM 6:** CCR conducts bi-weekly or monthly check-ins with reporting facilities to ensure timely reporting of cancer cases.
    - **PM 7:** CCR creates a remediation plan to address reporting challenges due to staff turnover, software issues, or other reasons for reporting delays within 60 days and shares its expectations with the reporting facility.
    - **PM 8:** Percentage of labs reporting data electronically using HL7 2.5.1 or other standard HL7 format (measure for e-path reporting).
        - **Target:** Increase the percentage of labs reporting data electronically in the designated HL7 format by 3% each year.
    - **PM 9:** Percentage of hospitals reporting electronically to the CCR each year.
        - **Target:** Increase the percentage every year to meet the standard of 100% of hospitals reporting electronically by the end of the 5-year performance period.
    - **PM 10:** Percentage of non-hospital facilities reporting electronically to the CCR each year.
        - **Target:** Increase the percentage every year to meet the standard of at least 80% of these facilities reporting electronically by the end of the 5-year performance period.

NPCR Intermediate-term outcomes

1. ***Increased capacity, flexibility, and utility of CCR infrastructure to meet new data needs***

- **PM 2:** CCR secures necessary registry management and operations staff per NPCR Manual and NOFO requirements (core required positions: PD/PI or OM, 1 FTE 100%; ETC, 1 FTE 100%; QA/QC manager, 1 FTE 100%; and IT staff, 0.25 FTE 25%).
    - **Target:** At least 75% of required CCR staff positions are filled on an annual basis.
- **PM 3:** CCR reviews Operations Manual twice per year, updates sections as needed, and provides an update in the APR narrative.
- **PM 4:** CCR reviews data management plan (DMP) once per year and updates as needed.
- **PM 5:** CCR maintains a list of reporting facilities that is verified and updated once per year.
- ***See PMs 6-10 above, which also apply to this intermediate outcome***
- **PM 30:** The CCR adopts the number of quality assurance measures required to meet Advanced National and National Data Quality Standards annually.
    - **Target:** CCR implements at least three quality assurance measures to meet Advanced National and National Data Quality Standards.

2. ***Increased data use for cancer prevention and control***
    - **PM 27:** CCR creates a target number of cancer surveillance publications, burden reports, presentations, and data briefs and disseminates them to NPCR and other entities annually.
        - **Target:** CCR creates and disseminates at least one comprehensive cancer surveillance report that includes age-adjusted incidence rates, stage at diagnosis, and age-adjusted mortality rates for the diagnosis year using SEER site groups stratified by age, sex, race, ethnicity, and/or geographic area.
        - **Target**: CCR presents analysis findings to at least two state or territorial groups and one national group each year (NPCR counts as a national group).
          Target: CCR collaborates on at least one summary surveillance report outside of cancer registry, such as environmental health, immunization, nutrition and physical activity, substance abuse (alcohol, marijuana, opioid use), HIV/AIDS, or sexually transmitted infections.
        - **Target:** CCR creates five one-page cancer surveillance data briefs each year.