Conducting Quitline Evaluations

A Workbook for Tobacco Control Professionals

National Center for Chronic Disease Prevention and Health Promotion

Office on Smoking and Health

Suggested Citation

Acknowledgments

This workbook was developed by the Centers for Disease Control and Prevention's (CDC) Office on Smoking and Health (OSH) and the North American Quitline Consortium (NAQC) as part of a series of evaluation technical assistance workbooks intended to offer guidance and facilitate capacity building on a wide range of evaluation topics. This workbook is a guide to facilitate the evaluation of quitlines—one method for helping tobacco smokers to quit—and is intended for use by quitline staff and stakeholders, state tobacco control program managers, and evaluators. We encourage users to adapt the tools and resources in this workbook to meet their program's evaluation needs.

Quitlines are telephone-based tobacco cessation services that help tobacco users quit. Services offered by quitlines include coaching and counseling, referrals, mailed materials, training to health care providers, web-based services and, in some instances, free medications, such as nicotine replacement therapy (NRT). In the United States, there are quitlines in all 50 states, the District of Columbia (DC), Guam, and Puerto Rico. The National Network of Tobacco Cessation Quitlines, with its number 1-800-QUIT-NOW, serves as a national portal, routing calls to the callers' state quitline providers. Various stakeholders will have differing interests in quitline evaluation topics. For example, some may be interested in assessing increases in call volumes as a result of a media campaign, whereas others may be interested in assessing quitting success at 7 months for those who enrolled in quitline counseling. This guide will facilitate discussing, planning, and conducting evaluations to meet these various needs with different stakeholders, as well as assessing what is already being implemented and existing data.

A worksheets and tools section is provided in Part II of this workbook for additional technical assistance, and a resource guide is provided for further reading in evaluation and methods.

This workbook (and all the workbooks in this series) applies the CDC Framework for Program Evaluation in Public Health (www.cdc.gov/eval). The framework lays out a six-step process for the decisions and activities involved in conducting an evaluation. Although the framework provides steps for program evaluation, these steps are not always planned or implemented in a linear fashion. They often require an iterative process, and some steps can be completed concurrently. In some cases, it may make more sense to skip a step and return to it later during the planning process. The framework should be used as most appropriate within the specific context of your program.

Table of Contents

Figures

Tables

Acronyms

ATS ....Adult Tobacco Survey

BRFSS... Behavioral Risk Factor Surveillance System

CBPR...Community Based Participatory Research

CDC.. Centers for Disease Control and Prevention

CMI .... Component Model of Infrastructure

ESW .... Evaluation Stakeholder Workgroup

FDA ....Food and Drug Administration

MDS..Minimal Data Set for Evaluating Quitlines

NAQC ....North American Quitline Consortium

NIDRR .... National Institute on Disability and Rehabilitation Research

NQDW .... National Quitline Data Warehouse

NRT...Nicotine Replacement Therapy

OSH...Office on Smoking and Health

PRAMS ....Pregnancy Risk Assessment Monitoring System

STATE System ....State Tobacco Activities Tracking and Evaluation System

TUS-CPS.................................Tobacco Use Supplement of the Current Population Survey

YRBSS ....Youth Risk Behavior Surveillance System

Introduction

Quitlines are telephone-based tobacco cessation services that help tobacco users quit. Services offered by quitlines include coaching and counseling, referrals, mailed materials, training to health care providers, web-based services and, in some instances, free medications, such as nicotine replacement therapy (NRT).[1] Quitlines increase the odds of quitting smoking when compared with minimal interventions, self-help, or no counseling.[2] In the United States, there are quitlines in all 50 states, the District of Columbia, Guam, and Puerto Rico. Quitlines vary in eligibility criteria, counseling, and medication protocols.

To best serve the residents of your state, it is critical to evaluate the quality, effectiveness, and impact of quitline services and related interventions designed to drive callers to the quitline. This workbook is designed to help you think through key evaluation concepts and design quitline evaluations that will improve services and overall cessation efforts.

WHO IS THE INTENDED AUDIENCE FOR THIS WORKBOOK?

This workbook is specifically designed to guide quitline staff, stakeholders, program managers, and evaluators in planning, conducting, and interpreting the results of quitline evaluation activities. This workbook will help interested parties or stakeholders develop: an understanding of what constitutes a quitline evaluation; why a quitline evaluation is important; how to develop an effective evaluation plan in the context of the planning process; and implementation considerations.

This workbook was written by the staff of the Office on Smoking and Health (OSH) at the Centers for Disease Control and Prevention (CDC) and the North American Quitline Consortium (NAQC). Part I of this workbook defines and describes specific considerations for writing an evaluation plan for quitlines, as well as basic implementation considerations. It is not intended to serve as a standalone resource; rather, it is intended to be used with other evaluation resources, such as those listed in the resource section of this workbook (pages 96-106). In addition, it is recommended that this workbook be used with the *Developing an Effective Evaluation Plan*[3] and *Developing an Effective Evaluation Report*[4] workbook guides, which are also in this series (www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation). The exercises, worksheets, and tools found in Part II of this workbook are

> An evaluation plan is a written document that describes how you will monitor and evaluate your program so that you will be able to describe the *What*, the *How*, and the *Why It Matters* for your program, and use evaluation results for program improvement and decision making.[3]

designed to help you think through the concepts discussed in Part I, and to put them into practice. However, these are only examples, and your quitline evaluation will vary on the basis of your program, stakeholder priorities, and context.

WHY EVALUATE QUITLINES?

Evaluation data are vital to engage quitline stakeholders, understand how a quitline is functioning, and identify areas for improvement or change. *Engaged Data* is a core component of functioning program infrastructure, which is portrayed in the Component Model of Infrastructure.[5-7] Functioning program infrastructure is defined as the foundation or platform that supports capacity, implementation, and sustainability of quitline initiatives.[6] Collecting evaluation data should be an integral component of your quitline, and not just a data report at the end of your funding period.

Data gathered during evaluations enable managers, staff, and stakeholders to create the best possible programs; to learn from mistakes; to make modifications, as needed; to monitor progress towards program goals; to judge the success of the program in achieving its short-term, intermediate, and long-term outcomes; and to demonstrate accountability for funding. Timely evaluation data that are of use to stakeholders and decision makers are critical to engaging key partners working toward program goals and objectives, and enabling them to take action in support of the program.

WHAT IS AN EVALUATION PLAN?

An evaluation plan is a written document that describes how you will monitor and evaluate your quitline, as well as how you intend to use evaluation results for program improvement and decision making. The evaluation plan clarifies how you will describe the *What,* the *How*, and the *Why It Matters* for your quitline.

- The *What* reflects the description of your quitline and how its activities are linked with its intended effects. It serves to clarify the quitline's purpose, relationship to other components of a comprehensive tobacco control program, and anticipated outcomes.
- The *How* addresses the process for implementing a quitline and provides information about whether the quitline is operating as it was intended. In addition, *the How* (or process evaluation), with output or short-term outcome information, helps clarify if changes should be made to operating procedures or protocols, or other aspects of the quitline.

- The *Why It Matters* provides the rationale for your quitline and the effect it has on public health. This is also sometimes referred to as the "so what" question of your program. Being able to demonstrate that your quitline has had an impact is critical to sustaining its funding.

An evaluation plan is similar to a roadmap. It clarifies the steps needed to assess the processes and outcomes of a program. An effective evaluation plan is more than a column of indicators added to your work plan. It is a dynamic tool (i.e., a "living document") that should be updated, as needed, to reflect program changes and priorities over time. A quitline evaluation plan serves as a bridge between evaluation and planning by highlighting quitline goals, clarifying measurable quitline objectives, and linking quitline activities with intended outcomes.

WHY IS IT IMPORTANT TO DEVELOP AN EVALUATION PLAN FOR YOUR QUITLINE?

An evaluation plan can clarify the direction of an evaluation on the basis of priorities, resources, time, and skills, and how results will be used to improve quitline access, services, customer satisfaction, and outcomes. The process of developing an evaluation plan with an evaluation workgroup of stakeholders will foster collaboration and a sense of shared purpose. Having a written evaluation plan will foster transparency and ensure that stakeholders agree on the purpose of the evaluation and the use and users of the evaluation results. Moreover, use of evaluation results must be planned, directed, and intentional.[8] A written plan is an effective tool and vital part of a functioning program infrastructure.[5-7]

This workbook will not provide a detailed "how to" description for writing an evaluation plan for your quitline. Although a few reminders are included in this workbook, more in-depth information on writing an evaluation plan can be found in *Developing an Effective Evaluation Plan*.[3] (www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation)

Part I of this workbook is organized by the six steps of the CDC Framework for Program Evaluation.[9] Each chapter will introduce the key considerations to be addressed in that step related to planning and implementing your quitline evaluation. The main points are also illustrated with one or more basic examples. Part II includes exercises, worksheets, tools, and a resource section to help program staff and the evaluation stakeholder workgroup think through the concepts presented in Part I.

CDC'S FRAMEWORK FOR PROGRAM EVALUATION

CDC's Framework for Program Evaluation in Public Health[9] (Figure 1) is a guide for how to effectively evaluate public health programs and to use the findings for program improvement and decision making. Although the framework is described in terms of *steps*, the actions are not always linear and are often completed in an iterative manner that's cyclical in nature. Similar to the framework, the development of an evaluation plan is an ongoing process. You may need to revisit a step during the process and complete other discrete steps concurrently. Within each step of the framework, there are important components that are useful to consider in the creation of a quitline evaluation plan.

Six Steps of the CDC Framework

1. Engage stakeholders.
2. Describe the program.
3. Focus the evaluation design.
4. Gather credible evidence.
5. Justify conclusions.
6. Ensure use and share lessons learned.

> Over the life of a program, any number of evaluations may be appropriate, depending on the situation. There isn't one right model evaluation for all programs.

Figure 1. CDC Framework for Program Evaluation in Public Health
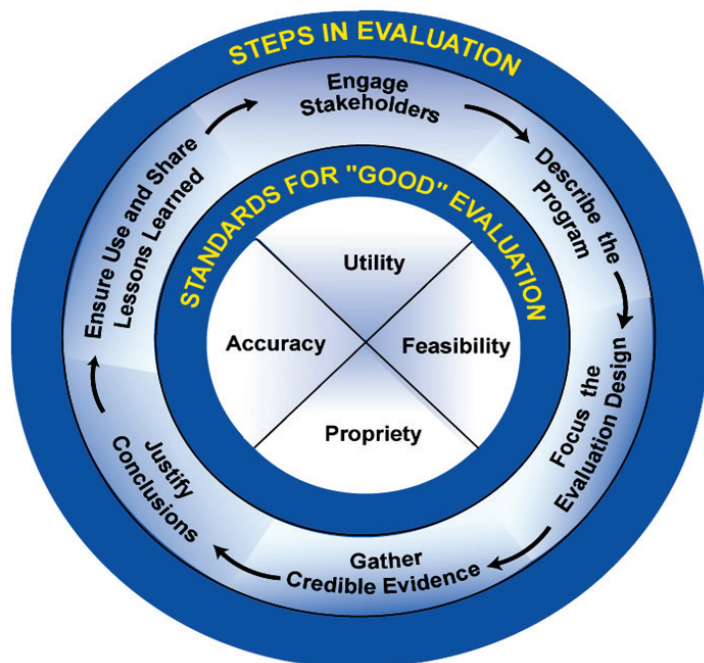
In addition to CDC's Framework for Program Evaluation in Public Health, there are evaluation standards that will enhance the quality of evaluations by guarding against potential mistakes or errors in practice. The evaluation standards are grouped around four important attributes (Figure 1):

1. **Utility**—serve information needs of intended users.

2. **Feasibility**—be realistic, prudent, diplomatic, and frugal.

3. **Propriety**—behave legally, ethically, and with due regard for the welfare of those involved and those affected.

4. **Accuracy**—evaluation is comprehensive and grounded in the data.[9,10]

The underlying logic of the evaluation framework is that good evaluation does not merely gather accurate evidence and draw valid conclusions, but produces results that are *used* to make a difference and engage stakeholders. To maximize the chances that evaluation results will be used, it's important to create a *market* before developing the *product* (i.e., the evaluation). Focusing on the questions that are most salient, relevant, and important to your stakeholders helps create the market for your results. You ensure the best evaluation focus by understanding where the questions fit into the full landscape of a program, and especially by ensuring that you have identified and engaged stakeholders who care about these questions and want to take actions on the basis of results. The CDC framework approach draws on the fundamental insight that there is no single correct program evaluation model that can be applied to all programs. Rather, over the life of a program, multiple evaluations may be appropriate, depending on the situation.

1 2 3 4 5 6

Part I: Putting the CDC Framework into Action for Your Quitline

STEP 1: ENGAGE STAKEHOLDERS

Defining the Purpose in the Plan

The purpose of an evaluation influences the identification of stakeholders for the evaluation, selection of specific evaluation questions, and the timing of evaluation activities. It is critical that the quitline staff be transparent about the intended purposes of the evaluation. If evaluation results will be used to determine whether specific quitline features (or the quitline itself) should be continued or eliminated, stakeholders should know this up front. The stated purpose of the evaluation drives the expectations and sets the boundaries for what the evaluation can and cannot deliver. In any single evaluation, and especially in a multiyear plan, more than one purpose may be identified; however, the primary purpose can influence decisions on resource allocation, use, the selection of stakeholders, and other issues. Although there are many ways of stating the identified purpose(s) of the evaluation, they generally fall into three categories:[8]

1. Rendering judgments—accountability.

2. Facilitating improvements—program development.

3. Knowledge generation—transferability.

Identifying and Engaging the Evaluation Stakeholder Workgroup (ESW)

Who are the quitline's stakeholders?

The first decision to make when initiating a quitline evaluation is which stakeholders to include. Stakeholders are consumers of the evaluation results. As the intended consumers, users, and beneficiaries of the evaluation results, they will have a vested interest in these results.[8,11] In general, stakeholders are those who are (1) interested in the quitline and would use evaluation results, such as referral sources (e.g., physicians, clinics, health systems, health plans, or community groups), government agencies, national partners (e.g., NAQC), and decision makers; (2) those who are involved in running the quitline, such as program staff, partners, management, the funder, and the service provider; and (3) those who are served by the quitline, primarily tobacco users. Other stakeholders may also be included as these categories are not exhaustive.

Engaging stakeholders in the evaluation process enhances intended users' understanding and acceptance of the evaluation. Stakeholders are much more likely to buy into and support the evaluation if they are involved in the evaluation process from the beginning. Moreover, to ensure that the information collected, analyzed, and reported meets the needs of the program and its stakeholders, it is best to work with the people who will be using this information throughout the entire evaluation process.

Engaging stakeholders in a quitline evaluation can have many benefits.
Stakeholders can help:

- Determine and prioritize key evaluation questions.
- Pretest data collection instruments.
- Facilitate data collection.
- Implement evaluation activities.
- Increase credibility of analysis and interpretation of evaluation information.
- Ensure that evaluation results are used.

*An **Evaluation Purpose Exercise** worksheet is provided in Part II, Section 1.2 to assist you with determining the intended purposes for your quitline's evaluation.*

Possible Quitline Stakeholders

Below is a list of possible quitline stakeholders, some of which you may want to engage, depending on the specific situation in your state. This list is not exhaustive.

Referral sources:
- Physicians or health care professionals.
- Health educators in hospitals, clinics, etc.
- Employers.
- Health systems (e.g., physicians, other health care providers, clinics, practices, health care organizations or systems, health plans or insurers).
- Community-based organizations, including cessation providers.

Federal government agencies and entities:
- US Department of Health and Human Services (HHS).
- Centers for Disease Control and Prevention (CDC).
- Centers for Medicare and Medicaid Services (CMS).
- National Cancer Institute (NCI).
- Veterans Administration (VA).
- Department of Defense (DoD).

State or territorial government agencies and entities:
- State tobacco control program.
- State department of health.
- Women, Infants, and Children (WIC) programs.
- State Medicaid office.
- State agencies conducting surveillance that might collect information on tobacco use prevalence or quitline awareness or use (e.g., BRFSS).
- State mental health and substance abuse agencies.
- State agencies on chronic diseases associated with tobacco use.
- Tribal health agencies.
- Local health departments.

Professional organizations and national partners:

- American Cancer Society (ACS).
- American Lung Association (ALA).
- American Heart Association (AHA).
- American Hospital Association (AHA).
- Legacy for Health (Legacy).
- Campaign for Tobacco-Free Kids (TFK).
- North American Quitline Consortium (NAQC).
- National Network Consortium.
- Agencies representing state, territorial, tribal, and local health departments.

Others:

- Employers of major companies or corporations offering quitline services.
- Quitline service providers (staff and management).
- Tobacco users.

Use the evaluation standards to help identify those stakeholders who matter most. Give priority to those stakeholders who:

- Will support or authorize changes to the quitline that the evaluation may recommend.
- Are served by the quitline.
- Are responsible for day-to-day implementation of the activities that are part of the quitline.
- Can increase the credibility of quitline evaluation efforts.
- Will support, fund, or authorize the continuation or expansion of the quitline.

How do I use an Evaluation Stakeholder Workgroup (ESW) to conduct an evaluation?

Stakeholders will often have diverse and, at times, competing interests. Given that a single evaluation cannot answer all possible evaluation questions raised by diverse groups, it will be critical that the prioritization process is outlined in the evaluation plan.

It is suggested that the program enlist the aid of an **evaluation stakeholder workgroup (ESW)** of 8-10 members that represents the stakeholders who have the greatest stake or vested interest in the evaluation.[12] This workgroup of **primary intended users** will serve in a consultative role on all phases of the evaluation. As members of the ESW, they will be an integral part of the entire evaluation process from the initial design phase to interpretation, dissemination, and use of the evaluation. Stakeholders will play a major role in the program's evaluation, including consultation and possibly even data collection and decision making on the basis of the evaluation results. Stakeholder groups should be selected to participate in the ESW on the basis of relevancy and feasibility. For example, it is unlikely that a staff member from the US Department of Health and Human Services will participate on an individual state quitline's ESW.

As mentioned previously, stakeholders can have competing interests that may come to light in the evaluation planning process. It is important to explore agendas in the beginning and come to a shared understanding of roles and responsibilities, as well as the purposes of the evaluation. It is important that both the program and the ESW understand and agree to the role of the workgroup.

Stakeholders can be involved in the evaluation at various levels. For example, it may be beneficial to include referring physicians on a team to develop questions, data collection processes, and analysis plans. Consider ways to assess partners' needs and interests in the evaluation, develop communication plans for keeping them informed of the evaluation's progress, and integrate their ideas into

An **ESW** comprises members who have a stake or vested interest in the evaluation findings and can most directly benefit from the evaluation. These members represent the **primary users** of the evaluation results and generally act as a consultative group throughout the entire planning and implementation of the evaluation. In addition, members sometimes facilitate the dissemination of results. Examples include promoting responses, participation in surveys, and in-kind support for interviews and interpretation meetings. The members can identify resources to support evaluation efforts. The exact nature and roles of group members is up to you, but roles should be explicitly delineated and agreed to in the evaluation plan.

evaluation activities, regardless of their level of involvement.

A program's critics should also be engaged in the evaluation. Critics may help identify

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*A **Stakeholder Inclusion and Communication Plan Exercise** worksheet is provided in Part II, Section 1.3 to assist with identifying roles for stakeholders for the quitline evaluation, as well as modes and timing of communication for each stakeholder group.*

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issues around program strategies and evaluation information that could be attacked or discredited, thus helping to strengthen the evaluation process. This might be through the ESW, or through face-to-face interviewing, depending upon the level of criticism likely. This information might also help to understand potential opponent's rationale for not supporting a particular initiative and help engage potential agents of change within the opposition.

However, it is important to remember that stakeholders will have different viewpoints and different information needs. Ascertain their information needs at the beginning of the evaluation process to determine how they align with the purpose, design, and use of the evaluation. In Step 1: Engage Stakeholders, you will conduct a preliminary assessment of information needs. You will pursue this further in Step 2: Describe the Program and Step 3: Focus the Evaluation, until you have identified the final evaluation questions.

Below are examples to illustrate the diversity of the information that may be needed by various quitline stakeholders.

- State governmental agencies, such as state departments of health or state Medicaid offices, will be able to use the data to assess the reach of the quitline, or to report on the proportion of various population subgroups that use the quitline annually.

- Quitline partners (in particular quitline administrators or funders and service providers) can use quitline evaluation data to examine the effect of changes in quitline protocols, assess the cost-effectiveness of specific quitline components, and identify areas for change or improvement.

- Voluntary health organizations can use the data collected as part of the quitline evaluation to monitor progress in state tobacco control efforts and to highlight the importance of the quitline as a component of the state's comprehensive tobacco control plan.

- Members of the medical community, such as physicians, nurses, and health

educators, may directly use data collected by the quitline to provide up-to-date information on quitline services, and to make decisions about whether to refer their patients to quitline services.

The process of stakeholder engagement (Step 1) continues throughout the evaluation, and stakeholders' roles should be described in the quitline evaluation plan. The process of engaging the ESW continues in the remaining steps, as follows:

Step 2: Describing the program. A shared understanding of the program and what the evaluation can and cannot deliver is essential to the successful implementation of evaluation activities and the successful use of evaluation results. The program and stakeholders must agree on the purpose(s) of the evaluation and on the logic model. For example, a good understanding of the goals of the quitline and the services provided to quitline callers can help define the program's proximal and distal outcomes.

Step 3: Focusing the evaluation. Understanding the purpose of the quitline's evaluation and the rationale for prioritization of evaluation questions is critical for transparency and acceptance of evaluation findings. It is essential that the evaluation address the questions that are of greatest practical importance to the quitline and to the priority users of the evaluation. For example, if a state has a focus on the high burden of tobacco use among persons insured by Medicaid, then some of the high priority evaluation questions should address use of the state quitline among this population.

Step 4: Planning to gather credible evidence. For the evaluation results to be accepted and used, stakeholders have to accept that the evaluation methods selected are appropriate to answer the questions asked and that the data collected are credible. The acceptance of evaluation results begins in the planning phase. Stakeholders can guide the selection of appropriate methods. For example, if the program focuses on increasing the number of persons from various priority populations who use the quitline, then intake data should be collected to allow for identification of those populations, and compared with appropriate population-based surveys that provide both population size and tobacco use prevalence for those populations.

*A **Stakeholder Information Needs** identification exercise is provided in Part II, Section 1.4 to assist you with determining stakeholder information needs.*

Step 5: Justifying conclusions. Stakeholders should guide the analysis and interpretation of evaluation, as well as the process of developing conclusions and recommendations. In turn, this will facilitate the acceptance and use of the evaluation results by other stakeholder groups. Stakeholders can help determine if and when stakeholder interpretation meetings should be conducted. For example, if findings indicate that calls to the quitline are lower than expected, it may help to involve either health system partners, who refer patients to the quitline, to discuss if referrals have declined, or staff or agencies involved in promotional campaigns to discuss whether certain promotions have not been as effective as expected.

Step 6: Ensuring use and sharing of lessons learned. Stakeholders should guide the translation of evaluation results into practical applications and actively participate in the meaningful dissemination of lessons learned. This will help ensure that the results of the quitline evaluation are used. Stakeholders can facilitate the development of an intentional, strategic communication and dissemination plan as part of the evaluation plan. For example, the results of the quitline evaluation could indicate that calls to the quitline are low among Hispanic people. One of the lessons learned may be that more promotion of the quitline should be directed to this population.

Evaluation Tools and Resources for Step 1:

Part II

✓ 1.1 Stakeholder Mapping Exercise

✓ 1.2 Evaluation Purpose Exercise

✓ 1.3 Stakeholder Inclusion and Communication Plan Exercise

✓ 1.4 Stakeholder Information Needs Exercise

STEP 2: DESCRIBE THE QUITLINE PROGRAM

Develop a Shared Understanding of the Quitline Program

Narrative Description

A narrative description is helpful to ensure a full and complete shared understanding of the quitline. A logic model or other type of descriptive graphic may be used to succinctly synthesize the main elements of a program. Although a graphic representation of program elements is not always necessary, a program narrative is necessary. The program description is essential for focusing the evaluation design and selecting appropriate methods. Groups can sometimes jump to selecting evaluation methods before they have a good grasp of what the program is designed to achieve. The quitline program staff and stakeholders must agree upon the program description and the purposes(s) of the evaluation. The description will be based on the quitline's objectives and context, but most descriptions include the following at a minimum:

- **A statement of need** to identify the health issue(s) addressed (e.g., the burden of increased morbidity and mortality caused by tobacco use).

- **Targets or objectives** of quitline activities to ensure that progress is made toward program goals (e.g., achieving 8% treatment reach).

- **Outcomes** of quitline activities (e.g., increased number of calls to the quitline, reach, number of quit attempts).

- **Inputs or program resources** available to support or implement quitline activities (e.g., state and federal funding, strategic funding or referral partnerships, quitline outreach and promotion).

- **Program activities** linked to program outcomes through theory or best practice program logic to help the intended audience for the program make specified changes or take action (e.g., local, state, or national media campaigns, quitline protocols for provision of counseling, and medications).

- **Environmental context** in which a program is implemented (e.g., state-level awareness of the quitline, level of support for the quitline by strategic partners, degree of integration of the quitline into health systems in the state).

Linking Activities and Outcomes

The program description often includes a graphic representation of quitline activities and outcomes to visually show the link between these elements. This clarity can help with both strategic planning and program evaluation. It is helpful to review the model with the ESW to ensure a shared understanding of the model and to confirm that it is still an accurate and complete reflection of your program. The model should identify available resources (inputs), what the program is doing (activities), and anticipated achievements (outcomes). You should also articulate any challenges you face.

*An exercise for **Developing a Quitline Logic Model** is included in Part II, Section 2.1 to assist in identifying the activities, inputs, outputs, and outcomes for your quitline.*

One example of a graphic representation is a logic model, which is a common tool used by evaluators. Logic models are graphic depictions of the relationship between a quitline's infrastructure or inputs, and activities and intended outcomes. As the starting point for evaluation and planning, a logic model illustrates the underlying logic behind the program, (i.e., why it should work). Over time, evaluation, research, and experience will deepen the understanding of what does and does not work, and the model will change accordingly. See Figure 2 for a sample quitline logic model.

Logic models typically include the following elements:

Inputs: Infrastructure and resources necessary for program implementation.

Activities: The actual interventions that the program implements to achieve outcomes.

Outputs: Direct products created as a result of program activities.

Outcomes: (Short-term; intermediate; long-term); the results of program implementation (activities and outputs), changes, and effects.

*An exercise to **Describe the Quitline's Environmental Context** is included in Part II, Section 2.2, to assist you with determining what some of the factors are that can contribute to and detract from your quitline's goals. In addition, the environmental context can help identify what evaluation questions are both feasible to answer and most important to answer.*

Figure 2. Sample Quitline Logic Model

Inputs
- Quitline promotion and outreach
- Quitline funding
- Quitline capacity
- Quitline partnerships

Activities
- Quitline protocol
- State / national paid media
- State / national earned media
- Outreach activities
- Targeted to populations with tobacco-related disparities

Outputs
- Completed quitline promotional activities
- Materials, counseling, NRT provided

Short-term outcomes
- Increased awareness of the quitline
- Increased quitline call volume
- Increased number of referrals
- Increased number of registrants
- Increased number of tobacco users receiving services

Intermediate outcomes
- Increased interest in quitting
- Increased number of quit attempts

Long-term outcomes
- Increased cessation
- Reduced tobacco prevalence & consumption
- Reduced tobacco-related morbidity & mortality
- Reduced tobacco-related medical expenditures
- Decreased tobacco-related disparities

Environmental Context
State Medicaid cessation coverage, state excise tax rates, smokefree policies, media campaigns, state tobacco control funding (as a proxy for state tobacco control expenditures)

Evaluation Plan Tips for Step 2

✓ A program description will facilitate a shared understanding of the program between the quitline program staff and the evaluation workgroup.

✓ The description section often includes a logic model to visually show the link between activities and intended outcomes.

✓ The logic model should identify available resources (inputs), what the program is doing (activities), products of those activities (outputs), and what you hope to achieve (outcomes). The environmental context should be included, if possible. The level of detail should be appropriate for the audience using the model.

✓ Evaluation results should be incorporated into future iterations of quitline programming and activities.

Evaluation Tools and Resources for Step 2:

Part II

✓ 2.1 Developing a Quitline Logic Model Exercise

✓ 2.2 Describe the Quitline's Environmental Context Exercise

STEP 3: FOCUS THE EVALUATION

The scope and depth of any program evaluation is dependent on program and stakeholder priorities; available resources, including financial resources; staff and contractor availability; and amount of time committed to the evaluation. The quitline staff should work together with the ESW to determine the priority and feasibility of each evaluation question, and identify how the results will be used before designing the evaluation. Because resources for evaluation are usually limited, this chapter provides a series of decision criteria to help determine the most appropriate evaluation focus. These criteria are inspired by the evaluation standards, specifically, utility (who will use the results and what information will be most useful to them), and feasibility (how much time and resources are available for the evaluation).

Useful quitline evaluations should focus on the information that will be used by the program, stakeholders (including funders), and decision makers to improve the program, make decisions, and engage all groups. Establishing the focus of the quitline evaluation began with the identification of the primary purposes and the primary intended users of the evaluation. This process was further solidified through the selection of the ESW.

Focus the evaluation design with the ESW on the basis of the identified purposes, program context, logic model, and resource limitations. Discuss the priority, feasibility, and efficiency of the evaluation with the ESW. Transparency is particularly important in this step. Stakeholders and users of the quitline evaluation will need to understand why some questions were identified as high priorities, whereas others were rejected or delayed. Example scenarios illustrating ways that quitlines can focus their evaluations on the basis of variations in environmental context are presented in Part II, Step 3.

*A **Focus the Evaluation** exercise is located in Part II, Section 3.1 of this workbook.*

Developing Evaluation Questions

In this step, it is important to solicit evaluation questions from your various quitline stakeholder groups on the basis of the stated purposes of the evaluation. The questions should be considered in the context of the logic model or program description. Evaluation questions should be checked against the logic model, and changes may be made to either the questions or the model, thus reinforcing the iterative nature of the evaluation planning process. Questions can be prioritized on the basis of the ESW and program information needs, as well as feasibility and efficiency issues. Evaluation questions will likely change on the basis of the lifecycle of the quitline. For example, newer programs will require different questions than well-established programs.

Types of Quitline Evaluation Questions

An evaluation plan should include both process and outcome measures. In general, process evaluation focuses on the first three boxes of the logic model: inputs, activities, and outputs.[12] Some process questions serve a monitoring function that help document what is happening in the quitline, whereas others are more evaluative in nature and often require additional data sources. Outcome evaluation, as the term implies, focuses on the last three outcome boxes of the logic model: short-term, intermediate, and long-term outcomes. A single evaluation can and should include both process and outcome evaluation questions. As the evaluator and the ESW take ownership of the evaluation, honing the evaluation focus can help solidify interest in the evaluation among quitline stakeholders. Selection of final evaluation questions should balance what is most useful to achieving all the primary stakeholders' information needs, as identified in Step 1. Having the quitline stakeholders participate in the selection of questions increases the likelihood of their securing evaluation resources, providing access to data, and using the results. This process increases personal ownership of the evaluation by the ESW.

> **Process and Outcome Evaluation in Harmony in the Evaluation**
> A single evaluation can and often does include both process and outcome evaluation questions. Excluding process evaluation questions in favor of outcome evaluation questions often eliminates the understanding of the foundation that supports outcomes.

Process Evaluation Questions

Process evaluation questions common in quitline evaluation can document program implementation (i.e., monitoring), or can evaluate the effectiveness or impact of quitline services. Several monitoring-type questions are whether specified quitline activities are taking place, who is conducting the activities, and who the activities are reaching. Questions that are more evaluative in nature are whether sufficient infrastructure or capacity is in place to conduct quitline activities, or whether sufficient resources have been allocated or mobilized.

Process evaluations can measure whether actual program implementation was faithful to the initial plan, as well as identify unsatisfactory program performance early on to allow for corrections to be made in a timely manner.[12] Process evaluations can also help identify areas where additional training, resources, or technical assistance may be warranted. Table 1 provides concepts and sample process evaluation questions for quitlines. Depending on the context, some of these questions could also be considered outcome evaluation indicators (as in the sample logic model in Figure 2). Where something fits in the logic model is less important than whether it follows a theoretical pathway of change, and represents assessment of program implementation (i.e., process evaluation) or changes in knowledge or behavior from program implementation (i.e., outcome evaluation).

Table 1. Process Evaluation Areas of Interest for Quitlines and Sample Monitoring and Evaluation Questions

Process Evaluation Areas of Interest for Quitlines	Sample Monitoring Questions	Sample Process Evaluation Questions
Demand for Quitline Services	What is the call volume for the quitline on a daily, weekly, monthly, or annual basis? How does it change over time?	Why did demand change over time (e.g., policy changes, media promotions)?
Quitline Promotion	Is promotion of the quitline being conducted according to plan and meeting targets?	How does call volume relate to quitline promotional efforts?
Quitline Referral Networks	How many referrals are received by the quitline? What referral sources (e.g., individual health care providers, clinics, and health systems) are there for the quitline? What recruitment strategies or outreach activities are being used to add new referral sources?	How does referral type and source effect reach? How do referral sources correlate with outreach activities? What proportion of persons who were referred is successfully contacted by the quitline? What proportion of persons who were referred is successfully enrolled by the quitline?
Quitline Use	How many tobacco users receive services (i.e., counseling, medications) from the quitline annually? What are the characteristics of the callers?	How does the population of quitline participants compare to the population of tobacco users in the state? Are callers representative of the population we were trying to reach? What is the quitline's reach?
Quality Assurance	Are tobacco users receiving proactive calls, or is the quitline responding to voicemails within the time frame specified by the quitline contract? Are referrals being processed in a timely fashion? Are reports accurate and complete?	To what extent are the services provided meeting quality standards? Is the counseling being provided by using evidence-based methods?
Participant Satisfaction	What is the level of participant satisfaction with services (e.g., counseling, provision of medication, educational materials)?	What quitline factors increase participant satisfaction? What factors decrease participant satisfaction?

Process Evaluation Areas of Interest for Quitlines	Sample Monitoring Questions	Sample Process Evaluation Questions
Program Intensity	What treatment (e.g., number and length of proactive calls, type and amount of medication) on average are participants receiving? How do these differ across sociodemographic groups, smoking status, or whether they were referred or not?	How do treatments delivered compare with program protocol?
Investment in Services and Promotion	What is the annual investment in quitline services, medications, promotions, and outreach?	Do we have the right mix of services for our investment? What could we achieve with more funds?
Quitline Staffing	What is the level of supervision for coaches or counselors? What form does supervision take?	Is the quitline staffed sufficiently to respond to all incoming calls and referrals? Are the hours of operation adequate to meet the demand for services? Did demand for services exceed capability? Are quitline coaches or counselors trained appropriately (e.g., language, cultural competency trainings)?
Quitline Efficiency	How much did the quitline spend per enrollee?	How are the quitline's spending per smoker amounts related to reach? Did we have the right strategies (e.g., promotion, treatment mix) to reach or treat our desired population efficiently?
Interaction among Cessation Program Components	How does the quitline interact (if at all) with other cessation program components?	How could components interact more effectively and efficiently?

Outcome Evaluation Questions

Outcome evaluation measures changes in knowledge, attitudes, or behaviors that arise from your quitline or promotions to the quitline. You may be interested in your quitline callers, or the general population, or all the smokers in the state. Depending on the purpose of the quitline evaluation, outcome evaluation questions may include some or all of those listed in Table 2.

Table 2. Outcome Evaluation Areas of Interest for Quitlines and Sample Outcome Evaluation Questions

Outcome Areas of Interest for Quitlines	Sample Outcome Evaluation Questions
Quitline Awareness	What proportion of the state's adult population (tobacco user and nontobacco user) is aware of the quitline?
Intent to Use Quitline	Does the proportion of tobacco users reporting plans to call a quitline for help in their next quit attempt change after a media campaign?
Interest in Quitting	Has interest in calling the quitline for help with quitting changed among the general population, callers, or participants (after a media campaign, for example)?
Changes in Motivation to Quit or Confidence in Quitting	How are participants' motivations to quit or confidence in quitting changing as a result of quitline counseling (especially among those not ready to make a quit attempt upon registration)?
Quit Attempts	How many or what proportion of tobacco users are making at least one 24-hour quit attempt since registering for quitline services?
Long-term Quit Success	What proportion of quitline participants report no use of any tobacco product for the past 7 (or 30) days at 7-month follow-up? (point prevalence abstinence)[1]
Reduction in Prevalence	How has tobacco use prevalence in the state changed over time? Has the change been caused by cessation, prevention, or both?
Economic Evaluations • Cost-effectiveness[2] • Cost-benefit analysis • Cost-utility analysis • Return on investment	What is your quitline's cost per quit, including the cost of promoting the quitline? How does cost per quit compare with other programs your department, agency, or organization provides? How does it compare to other quitlines? How much does each dollar spent on quitline services save the state (or other payers, such as health plans) for prevented medical care costs? How many Life Years Saved can be attributed to the quitline? What is the cost for each Quality Adjusted Life Year saved?
Attribution of outcomes to the quitline	Is there a clear link between outcomes related to your quitline activities, as opposed to other events occurring at the same time? What programmatic or policy changes have occurred in your state or various local jurisdictions during the evaluation period in question? Has the tobacco tax rate increased? Have smokefree ordinances gone into effect? Have media campaigns promoting the national portal number 1-800-QUIT-NOW been in the field?

1   For guidance on calculating quit rates for quitlines, see the NAQC Issue Paper, "Measuring Quit Rates" at http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/docs/naqc_issuepaper_measuringqui.pdf.

2   For more on calculating cost-effectiveness, see the NAQC Issue Paper, "Assessing the Cost Effectiveness of Quitline Programs" at http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/issue_papers/assessingcosteffectivenessof.pdf.[13]

Feasibility Considerations

In addition, you must determine whether the intended focus of your quitline evaluation is realistic and feasible. Resources and logistics will influence decisions about evaluation focus in that some evaluation questions are quicker, easier, and cheaper to answer than others. Your feasibility discussions should include the budget and resources (financial and human) that can be allocated to the evaluation. The 2014 edition of CDC's *Best Practices for Comprehensive Tobacco Control Programs*[5] recommends that 10% of total annual tobacco control program funds be allocated for surveillance and evaluation. The questions and subsequent methods selected will have a direct relationship to the financial resources available, evaluation team member skills, and environmental constraints. The ESW should have a thorough discussion of feasibility and recognition of practical constraints to facilitate a shared understanding of what the evaluation can and cannot deliver. Early identification of inconsistencies between utility and feasibility is an important part of focusing the evaluation. For example, process evaluation questions of a monitoring nature would likely be less expensive to collect than the evaluative questions because they often are reported by the quitline vendor, and the data need less manipulation from an evaluation standpoint. The process of selecting the appropriate methods to answer the priority evaluation questions and discussing feasibility and efficiency is iterative. Steps 3, 4, and 5 in the evaluation process may be carried out concurrently in a cyclical manner until the group comes to consensus.

Even with an established multiyear plan, Step 3 should be revisited with the ESW annually (or more often, if needed) to determine if priorities and feasibility issues still hold for the planned evaluation activities. This highlights the dynamic nature of the evaluation plan. Ideally, your plan should be intentional and strategic by design, and it should generally cover multiple years. Moreover, the plan should not be regarded as set in stone. On the contrary, it should be flexible and adaptive. It must be flexible because resources and priorities change, and it must be adaptive because opportunities and programs change. Indeed, the quitline environment will likely change over time with respect to available resources, quitline service offerings, and engagement of key partners or referral sources. The evaluation questions should change as the quitline environment changes, and as the evaluation needs of both the quitline and its stakeholders change. Your evaluation plan should be sufficiently flexible and adaptive to accommodate these scenarios, and remain focused on the evaluation goals and objectives of the program and the ESW.

Evaluation Plan Tips for Step 3

✓ It is not possible or appropriate to evaluate every aspect or specific initiative of a program every year.

✓ Evaluation focus is context-dependent and related to the purposes of the evaluation, its primary users, the program's stage of development, the logic model, program priorities, and feasibility considerations.

✓ Evaluation questions should be checked against the program model.

✓ The iterative nature of plan development is reinforced in this step.

✓ Transparency for evaluation choices and priorities will be important. Implications of each choice should be reviewed and discussed with the ESW.

Evaluation Tools and Resources for Step 3:

Part II

✓ Illustrating Decisions to Focus the Evaluation

✓ 3.1 Focus the Evaluation Exercise

1 **2** **3** **4** **5** **6**

1 2 3 **4** 5 6

STEP 4: GATHER CREDIBLE EVIDENCE

Once the focus of an evaluation has been solidified, and the questions to be answered have been identified, it is necessary to select the appropriate methods that fit the quitline evaluation questions that have been selected. If you have followed the steps in this workbook, you have worked with the ESW to select the evaluation questions that should provide the necessary information to guide program improvement and decision making. In addition to selecting the methods, it is prudent to identify a timeline and to spell out the roles and responsibilities of those overseeing the implementation of the evaluation, whether it is program staff or stakeholders. This will be documented and transparent in the evaluation plan.

> **Fitting the Method to the Evaluation Question(s)**
> The method (or methods) chosen need to fit the evaluation question. A poor fit between evaluation question and method can and often does lead to incomplete or inaccurate information. The method should be appropriate for the question, in accordance with the Evaluation Standards.

To accomplish this step, the following is important:

- Keep in mind the purpose, program description or logic model, evaluation questions, and available resources.

- The method(s) need to fit the question(s). There are a multitude of options, including but not limited to qualitative, quantitative, mixed methods, multiple methods, naturalistic inquiry, experimental, and quasi-experimental.

- Think about what will constitute credible evidence for stakeholders or users.

- Identify sources of evidence (e.g., persons, documents, observations, administrative databases, surveillance systems) and appropriate methods for obtaining quality (i.e., reliable and valid) data.

- Identify roles and responsibilities along with timelines to ensure that the project remains on time and on track.

- Remain flexible and adaptive, and as always, transparent.

Choosing the Appropriate Methods

Three general types of research designs are commonly recognized: (1) experimental; (2) quasi-experimental; (3) and nonexperimental or observational.[14] Although program evaluations often apply nonexperimental or observational designs, some evaluation questions over the life of the quitline may require experimental or quasi-experimental designs. We provide information on each type of design below.

Experimental designs use random assignment to compare the outcome of an intervention on one or more groups with an equivalent group or groups that did not receive the intervention. For example, you could randomly select a group of quitline registrants, and then some could be randomly assigned to be offered an enhanced counseling protocol of additional counseling topics or more counseling calls or both, or randomly assigned to usual care (serving as controls). All participants have the same chance of being assigned to the intervention or control group. Random assignment reduces selection bias, the chance that the control and intervention groups vary in any way that could influence differences in program outcomes. This allows you to attribute change in outcomes to the changes in the quitline protocol. However, it is often difficult to provide an enhanced *intervention* in a quitline setting that will produce an outcome that is different enough from the standard, or control, intervention to be measurable without requiring a sample size that is prohibitively large. In addition, it is generally considered unethical to provide a less intensive service than what is currently offered as standard.

Quasi-experimental designs make comparisons between nonequivalent groups and do not involve random assignment to intervention and control groups. An example would be to assess quit rates or other quitting-related activities before and after a change in quitline protocol, such as the introduction of free nicotine replacement therapy (NRT). After the change, you would assess the same outcomes that were assessed before the change, and then you would expect to see a change in outcomes (e.g., quit rates) as a result of the introduction of free NRT. Critics could argue that other differences (e.g., seasonal differences between the two groups) caused the changes in outcomes, so it is important to document that the intervention and comparison groups are similar on key factors, such as population demographics and tobacco-use history.

Related to quasi-experimental design, comparison of outcomes or outcome data among states and between one state and the nation as a whole are common ways to evaluate public health efforts. Such comparisons can help establish meaningful benchmarks for progress. States can compare their progress with that of states with a similar investment

in quitlines, similar quitline services offered, or similar populations served, or they can contrast their outcomes with those of states with a larger investment or more intensive services offered. Quitline data from the National Quitline Data Warehouse (NQDW) are available to access by using several online data applications provided by CDC's Office on Smoking and Health. To access full downloadable data sets of all NQDW data, visit the new OSHData tobacco use data portal at the following URL: http://www.cdc.gov/OSHData. To access preformatted reports available for each state quitline, including data on services provided, reach, population served, and quit rates, visit the STATE System at the following URL: http://www.cdc.gov/tobacco/STATESystem.

In addition, NAQC regularly provides reports to quitlines that show de-identified aggregate metrics on quitline investment (spending per smoker), quit rates, and reach. Each quitline can compare their measures to other similar quitlines, although the identity of the other quitlines is not reported by NAQC. Please note that comparisons between quitlines should be performed with caution because of variations in the types of services provided and populations served by each quitline.

Observational designs include, but are not limited to, time series analysis, cross-sectional analysis, and case studies. Periodic cross-sectional surveys (e.g., quitline intake or 7-month follow-up surveys) can guide an evaluation and be used to calculate quitline reach and quit rates. For quitlines, cross-sectional surveys are the most common form of evaluation data collection, given the nature of the intervention.

Consider the appropriateness and feasibility of nonexperimental designs (e.g., simple before–after [pretest–posttest] or posttest-only designs). Depending on a program's objectives and the intended use(s) for the evaluation findings, these designs may be more suitable for measuring progress toward achieving quitline goals. In the end, it is important to choose a design that will measure what will meet both your immediate and long-term needs.

It is beyond the scope of this workbook to discuss in detail the complexities of what appropriate methods to choose. It is important to remember that not all methods fit all evaluation questions, and often a mixed-methods approach is the best option for a comprehensive answer to a particular evaluation question. At this point in the evaluation, it is often when it is crucial to consult with evaluation experts for direction on matching method to question. More information can be found through the resources listed in Part II.

Credible Evidence

The evidence gathered to support the answers to your evaluation questions should be seen as credible by the primary users of the evaluation. The determination of what is credible is often dependent on context and can vary across programs and stakeholders. The determination of credible evidence is naturally tied to the evaluation design, implementation, and standards to which the data collection, analysis, and interpretation are adhered. Best practices for a program area and the evaluation standards included in the CDC Framework (Utility, Feasibility, Propriety, and Accuracy)[9] will facilitate discussing what constitutes credible evidence with an ESW.

> **Evaluation Standards from the Framework**
> **Utility:** Will some methods make the data more credible with skeptics or key users?
> **Feasibility:** What methods can you afford?
> **Propriety:** What ethical considerations do you need to address?
> **Accuracy:** Are the data collection methods likely to influence the answers given by respondents?

The use of standard data collection instruments, such as the National Quitline Data Warehouse Quitline Services Survey (administered to quitlines quarterly), or the Minimal Data Set for Quitlines on which the NQDW instruments are based, can help with issues of credibility with stakeholders. In addition, reporting findings by using standard methodologies for outcomes, such as reach and quit rates, can also raise the credibility of your evaluation results. For more information on the Minimal Data Set, see http://www.naquitline.org/mds. For more information on NAQC-recommended methods for calculating reach and quit rates, see "Measuring Reach of Quitline Programs"[15] and "Calculating Quit Rates: 2015 Update."[16]

Measurement

Often, there is a wide range of possible measures or indicators that can be selected for any one evaluation question. In addition, there may be reporting needs that dictate which measures you will want to collect to answer a specific evaluation question. For example, the publication *Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs*[17] includes several outcomes under Goal 3, "Promoting Quitting Among Adults and Young People," that can be reported by using quitline data.[17] These include

Outcome 7: Establishment or Increased Use of Cessation Services

Outcome 11: Increased Number of Quit Attempts and Quit Attempts Using Proven Cessation Methods

Outcome 13: Increased Cessation Among Adults and Young People

If a quitline's goals include progress toward these or other outcomes, your evaluation questions and measures should reflect that. We have provided example questions and measures or indicators in Part II, Step 4 of this workbook. For more information on selecting valid and reliable indicators and measures, consult the CDC Guide to *Key Outcome Indicators for Evaluating Comprehensive Tobacco Programs (2005)*[17] or an evaluation consultant.

In Step 3, we discussed the difference between types of evaluation questions, such as process and outcome questions. For each area of interest for quitlines, we provided sample evaluation questions in Tables 1 and 2. For Step 4, it is important to link each evaluation question to a measure or measures that can help answer it. When selecting a measure, evaluators should consider whether it is already being collected or not, and if not, what the feasibility would be of creating a new data stream. It may also be helpful to consider whether the measure is one that is commonly used by others within the quitline community, and whether it can be used for multiple purposes. All measures need to be carefully defined in process (e.g., what constitutes a call?) and outcome (e.g., how is a quit measured?) evaluation; and when measuring trends, these definitions should not change over time without being explicit.[18] Sample evaluation questions and measures are included in Part II, Step 4 of this workbook.

> **Considerations for Selecting Measures**
> When selecting measures for specific evaluation questions, you may want to consider the following:
> - Does the measure help me answer my evaluation questions?
> - Is the measure already being collected?
> - Is it a standard measure?
>
> Sample measures mapped to evaluation questions are included in Part II, Step 4.

Many measures for process or implementation evaluation and their definitions can be found in the NAQC Issue Paper, "Call Center Metrics: Best Practices in Performance Measurement and Management to Maximize Quitline Efficiency and Quality."[19] This issue paper defines the most critical operational, service performance, and efficiency-related call center metrics for establishing and maintaining quitline quality. The paper makes recommendations on important metrics to measure, including why they are important for funders, service providers, and callers, and how to measure and report these metrics, and describes how these reports may be used by both the service providers and funders to improve quality.

Demographic and tobacco use characteristics of quitline participants can be collected through implementation of the National Quitline Data Warehouse (NQDW) surveys. One of the surveys, the NQDW Intake Questionnaire, is administered to all callers during their first registration call. The questionnaire collects data on demographics (e.g., age, gender, race/ethnicity, education), current tobacco use and history, intention to quit smoking or using tobacco (if currently using), and how the caller heard about and reached the quitline. This questionnaire is adapted from NAQC's Minimum Data Set (MDS) Intake Questions. See http://www.cdc.gov/tobacco/quit_smoking/cessation/nqdw/ and http://www.naquitline.org/mds for more information, including services, intake, and follow-up survey instruments). The NQDW offers a standard approach to collecting measures for evaluation of tobacco cessation quitlines. Having a standard set of variables is valuable for the following:

- Establishing commonly defined performance indicators (e.g., quitline reach, quit rate) to assist in assessing quitline performance, improving the quality of quitlines, identifying knowledge gaps, and designing strategies to fill the gaps.

- Providing a common language allowing for consistent communication with others within and external to the quitline community.

- Establishing quitline performance benchmarks that can be used to identify effective, cost-efficient tobacco cessation interventions.

- Testing and assessing new treatment techniques across large, diverse populations.

- Collecting consistent data and allowing aggregation of data across quitlines to make possible improved analyses of a variety of variables relevant to the success of quitlines in the United States.

Reach calculations and definitions can be found in the NAQC Issue Paper, "Measuring Reach of Quitline Programs,"[15] which recommends a standard definition of *reach* and provides recommendations for standard measuring and reporting of the reach of quitline programs.

Data Sources

As emphasized already, it is important to select the method or methods that are most appropriate to answer the evaluation question. The types of data needed should be reviewed and considered for credibility and feasibility. On the basis of the methods chosen, you may need a variety of input, such as the quitline's intake and follow-up surveys, quitline administrative and utilization data, focus groups, and other quality assurance methods.

You may need to consider multiple data sources and the triangulation of data for reliability and validity of the information. Quitline data can be combined and compared with data from existing sources (e.g., BRFSS, ATS, TUS-CPS, US Census). The form of the data (e.g., quantitative or qualitative) and specifics of how these data will be collected should be defined, agreed upon as credible, and the rationale for these choices should be transparent to all involved. There are strengths and limitations to various types of data, and they should be considered carefully with the help of your ESW. For example, the use of Minimal Data Set intake or follow-up survey items may help reduce costs, maximize the use of existing information, and facilitate comparability with other programs, but may not provide program specificity. Additional questions may need to be added to your quitline's intake or follow-up survey instruments to answer your evaluation questions as identified in Step 3.

All data collected should have a clear link to the associated evaluation question and anticipated use to reduce unnecessary burden on the respondent and stakeholders. It is important to revisit data collection efforts over the course of a multiyear evaluation plan to examine utility against the burden on respondents and stakeholders. Finally, quality assurance procedures must be put into place so that data are collected in a reliable way, coded and entered correctly, and checked for accuracy. Many valid and reliable data sources have been consolidated and provided through CDC's OSHData (see http://www.cdc.gov/oshdata/) and STATE system (see www.cdc.gov/tobacco/statesystem). OSHData presents comprehensive tobacco prevention and control data in an online, easy to use, interactive data application. The STATE System is an interactive application that houses and displays current and historical state-level data about tobacco use prevention and control in preformatted reports for easy access.

These and other resources related to data sources and measures are available in the Resources Section.

Reliability and Validity

When monitoring call volume, ensure you are measuring call volumes the same at each time. Did these include calls answered live, sent to voice mail, hung up or abandoned? You should define and use the same measure for reporting purposes to reliably assess call volume over time.

Counseling protocols are determined by each quitline. When monitoring services are received, you want to know whether your data represent a valid measure of actual services received. For example, are reminder calls being counted as counseling calls? Are counselors following the counseling protocol? A thorough assessment of fidelity to the protocol could demonstrate the validity of your treatment data.

Evaluation Methods Checklist

As has been stated above, the methods selected for a quitline evaluation must match the evaluation questions identified in Step 3. In addition to considering the specific methodology, the evidence that is considered credible by your stakeholders, measures that can help answer evaluation questions, and data sources from which to collect measures, it may also be beneficial to go back to the Evaluation Framework (Figure 1), and the four evaluation standards that form the heart of the Framework: Utility, Feasibility, Propriety, and Accuracy. These standards can help focus decisions around data collection more clearly and ensure that the results of your quitline's evaluation will be most useful. An Evaluation Methods Checklist exercise has been included in Part II, Section 4.1 of this workbook, and can serve as a guide related to each of the evaluation standards when considering methods, credibility of evidence, measurement, and data sources.

*An **Evaluation Methods Checklist** exercise is located in Part II, Section 4.1 of this workbook.*

Evaluation Methods Grid

One tool that is particularly useful in your evaluation activities is an **evaluation methods grid**. This tool is helpful to align evaluation questions with methods, indicators, performance measures, data sources, roles, and responsibilities, and it can facilitate a shared understanding of the overall evaluation plan with stakeholders. As you develop an understanding of the quitline's components, identify evaluation questions that are important to answer and select methods that can help you answer those questions. It will be very important to carefully assign roles to all of the parties involved. For example, if you have an external evaluator working on the quitline evaluation, which parts of the evaluation method selection and data collection will fall under their responsibility? How often will the ESW meet? What is the scope of the ESW's work? The Evaluation Methods Grid can be helpful for linking all of the pieces of the evaluation puzzle together that have been identified so far. The tool can take many forms and should be adapted to fit your specific evaluation and context. Tables 3 and 4 below provide illustrations for methods grids; more examples are provided in Part II, Exercise 4.2.

Table 3. Evaluation Methods Grid, Example A

Evaluation Question	Indicator/ Performance Measure	Method	Data Source	Frequency	Responsibility
What is the effect of offering free NRT through the quitline?	Number of calls, number of tobacco users receiving services, 7-month quit rate, cost per quit.	Cross-sectional observational pre-post design.	Quitline intake data, quitline administrative and use data, 7-month follow-up survey data, quitline budget data.	Pre and post introduction of NRT.	Quitline service provider (intake, administrative data); quitline evaluator (follow-up survey and analysis).

Table 4. Evaluation Methods Grid, Example B

Evaluation Question	Indicators/ Performance Measure	Potential Data Source (Existing/New)	Comments
How effective are quitline promotional activities at increasing demand for quitline services?	Description of promotional activities (timing, duration, content), number of tobacco users calling the quitline and their demographics, referral source, as reported by tobacco users, "how heard about the quitline?"	TRP and GRP data sources. Registration/intake data. Call volume data.	

Budget

The evaluation budget discussion was most likely started during Step 3, when the team was discussing the focus of the evaluation and feasibility issues. It is now time to develop a complete evaluation project budget on the basis of the decisions made about the evaluation questions, methods, roles, and responsibilities of stakeholders. A complete budget is necessary to ensure that the evaluation project is fully funded and can deliver upon promises. The evaluation questions, measures, and priorities may need to be revisited as part of this step, depending on how well they match up with available resources.

Evaluation Tips for Step 4

✓ Select the method(s) that is best suited to answer the evaluation questions. This can often involve a mixed methods approach.

✓ Gather evidence that is seen as credible by the primary users of the evaluation.

✓ Define implementation roles and responsibilities for program staff, evaluation staff, contractors, and stakeholders. Ensure there is sufficient expertise on the evaluation team to conduct the planned evaluation activities and analysis.

✓ Develop an evaluation plan methods grid to facilitate a shared understanding of the overall evaluation plan, and the timeline and budget for evaluation activities.

Evaluation Tools and Resources for Step 4:

Part II

✓ Matching Measures to Evaluation Questions

✓ 4.1 Evaluation Methods Checklist

✓ 4.2 Evaluation Methods Grid Exercise

✓ 4.3 Evaluation Budget Exercise

STEP 5: JUSTIFY CONCLUSIONS

Justifying conclusions includes analyzing the information collected, interpreting this information, and drawing conclusions from the data. This step is needed to turn the quitline data collected into meaningful, useful, and accessible information that can be used to engage quitline stakeholders and decision makers. This is often when programs incorrectly assume they no longer need the ESW to remain integrally involved in decision making, and instead look to the *experts* to complete the analysis and interpretation. However, engaging the ESW in this step is critical to ensuring the meaningfulness, credibility, and acceptance of quitline evaluation findings and conclusions. Continuing to consult with stakeholders and discussing preliminary findings with them helps to guide the interpretation phase. In fact, quitline stakeholders often have novel insights or perspectives that evaluation staff may not have, leading to richer interpretation and more fully thought-out conclusions.

*A **Stakeholder Interpretation Meeting** exercise is found in Part II, Section 5.1*

Planning for analysis and interpretation of quitline evaluation data is directly tied to the timetable initiated in Step 4. Involving others in Step 5 (analysis, interpretation, and justifying conclusions) is a prerequisite to arriving at valid and defensible results, but it can take a significant amount of time. Errors or omissions in planning this step can create serious delays in completing the final evaluation report, and may result in missed opportunities if the report has been timed to correspond with key events or decisions.

After planning for the analysis of the data, you will prepare to examine the results to determine what the data actually say about the program. These results should be interpreted in light of the goals of your program, its social or political context, and the needs of the stakeholders.

Moreover, it is critical that your plans allow time for interpretation and review by quitline stakeholders to ensure the transparency of your process and the validity of the conclusions. The emphasis here should be on justifying conclusions, not just analyzing data. This is a step that deserves due diligence. It is the responsibility of the evaluator and the ESW to ensure that conclusions are drawn directly from the evidence. This is a topic that should be discussed with the ESW in the planning stages, along with reliability and validity issues and possible sources of bias. If possible and appropriate, triangulation of data should be considered, and remedies to threats to the credibility of the data should be addressed as early as possible.

Provide Context: Compare Results to Other Types of Programs

Evaluation results should always be provided within a specific context, and that context should be referenced in the analysis and interpretation of results. Below are some examples to help clarify this point.

Example 1: Interpreting Quit Rates Within the Context of Prior Research

One evaluation question that quitlines often ask is how effective their program is at helping tobacco users quit. When the results are in, it is important to understand some of the basic context before the quit rate for the quitline can be appropriately interpreted. First, it is important to recognize that quitlines are 60% more effective at helping people quit than no help.[2] In addition, providing medications with counseling is 70% more effective than providing counseling alone.[2] According to a recent literature review, the range of reported quit rates was 16%-23% for quitlines providing counseling alone, and 30%-36% for quitlines providing medication.[20] Recent research showed that the average quit rate for quitlines not providing free medications was 24.8% (n = 10), and for quitlines providing free medication, 30.3% (n = 33).[21]

Example 2: Interpreting Quit Rate Changes Over Time

Once results are available, examine them within the context of quit rates for quitlines as noted above. When you examine a quitline's quit rates over time, it's important to maintain a single definition of what constitutes a quit.[18] Quitline 'A' designed an evaluation that included assessing quit rates for all tobacco users served by the quitline. Over the course of 3 years, the quit rate has dropped from 28% to 21% (NAQC standard quit rate calculation for conventional tobacco only – see NAQC, 2015[16]). The Department of Health was concerned about the drop. The ESW included representatives from community clinics that provide a large number of referrals to the quitline. During an evaluation meeting, they pointed out that the proportion of quitline users with lower education levels and Medicaid patients increased dramatically over the same period. The association of low socioeconomic status with lower quit rates[22] could at least partially explain the observed drop in quit rates. The results were graphically represented in an easily interpreted way, as follows in Figure 3.

Figure 3. Graphic Representation of Quit Rates, Proportion of Medicaid Callers, and Proportion of Low Education Callers Over Time
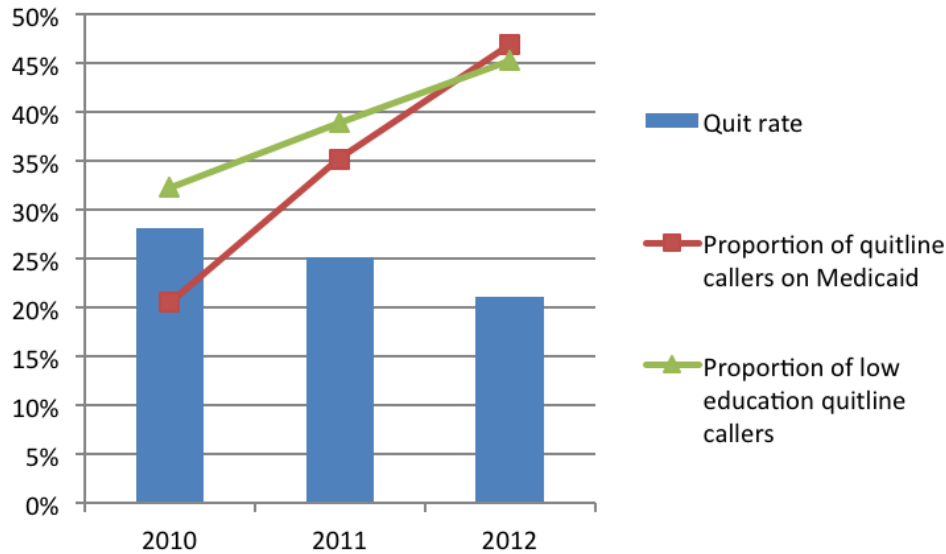
Example 3. Interpreting the Effect of Quitline Promotions

Quitline B was launching a new media campaign and designed an evaluation to assess the campaign's impact on quitline reach, quality, and outcomes. After the campaign had aired for 3 months, the ESW met to review preliminary results. Over the 3-month period, the number of calls to the quitline had tripled compared with the same 3 months of the year prior to the media campaign, thus exceeding the goal for the campaign (Figure 4).

Figure 4. Graphically Demonstrating the Impact of a Quitline's Media Plan

Call Volume 2011-2012
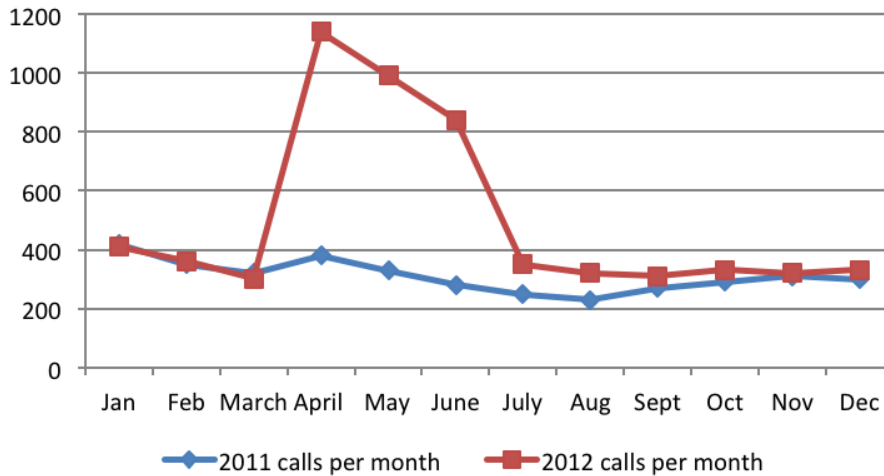
However, the ESW included counseling staff from the quitline's service provider, who called attention to the fact that the increase in call volume was making it impossible to connect with all callers in a timely fashion, and that it was taking up to several weeks to return calls, as shown in Figure 5.

Figure 5. Mapping Call Volume to Average Time to Enrollment

Calls and Average Time to Enrollment
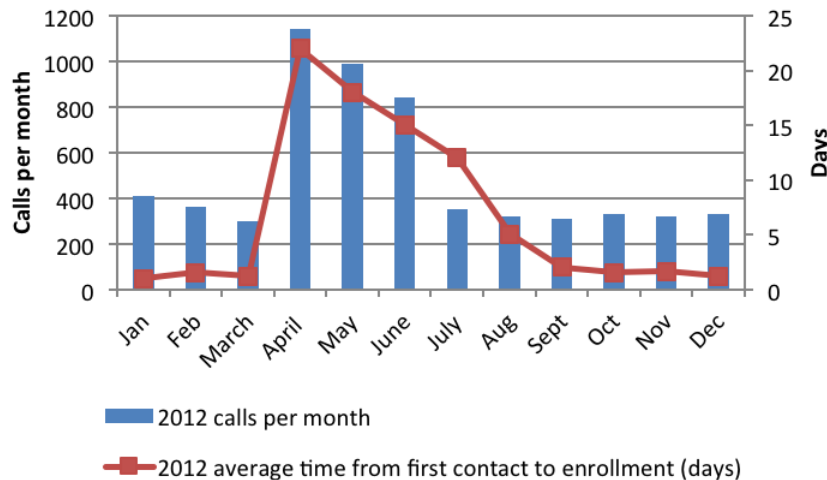
On the basis of these results, and the contextual information provided by the ESW, a decision was made to modify the counseling protocol during periods of high call volume to limit the number of counseling calls until the backlog of callers had been provided at least one counseling call.

As this example shows, "impact" cannot be appropriately and completely assessed without all aspects of the quitline program being taken into consideration. Having representatives from all stakeholder groups on the ESW, including those involved in provision of services, can be a critical component of interpreting the evaluation results and justifying your conclusions.

Provide Context: Present Evaluation Results with Other Data

For some evaluation questions, it is important to present specific measures, and those measures alongside other measures that can help provide the appropriate context.

Example 4. Interpreting the Impact of Quitline Promotions (Part 2)

Colorado was interested in measuring the response to promotions that they had been conducting during 2010 by looking at call volume over time. However, they were also interested in seeing how higher call volume impacted the overall readiness of callers to engage in counseling. To assess this, they looked at the number of calls that were answered "live," or by talking to a quitline staff member, rather than going to voicemail or having the person hang up. Further, they recorded the number of callers who registered for counseling. They then divided the number of callers registering for counseling by the total number of calls that were answered live to arrive at a measure of *productive* calls, or the proportion of calls answered live that resulted in registration for quitline counseling services. The graphic representation of this information is provided in Figure 6.

Figure 6. Quitline Call Volume and Phone Counseling Provided, Colorado
(Jan. – Dec. 2010)
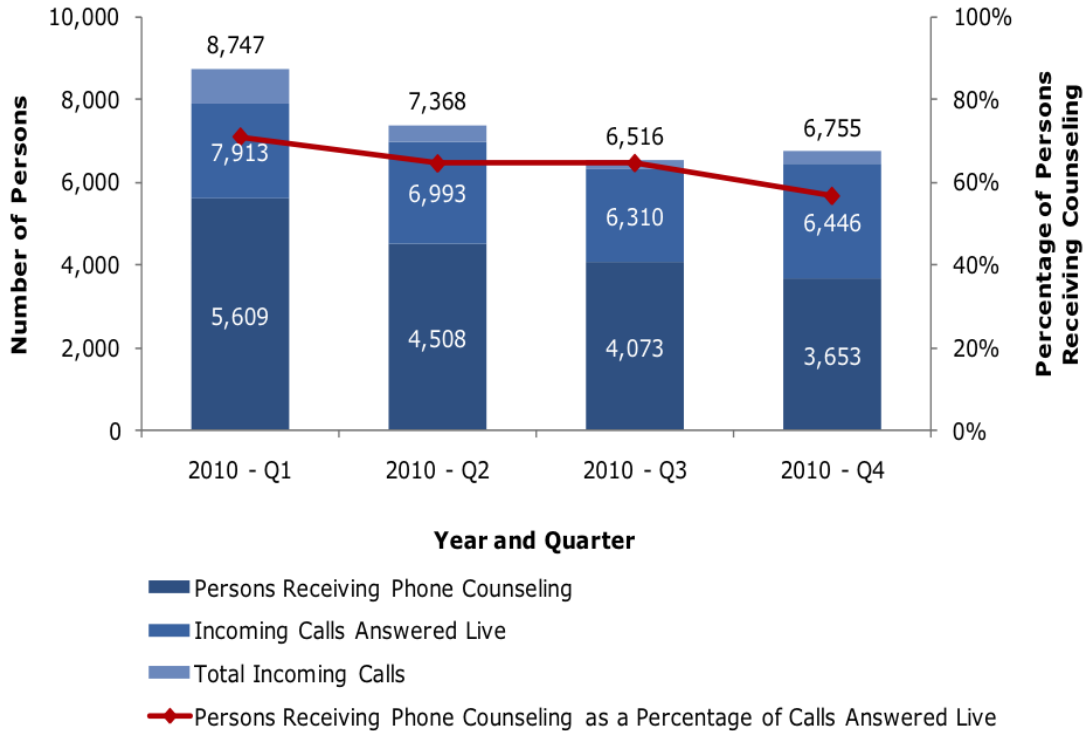
During the year, the number of calls that were answered live increased. At the same time, the proportion of calls answered live that resulted in telephone counseling being delivered declined slightly during the year. Additional information is needed to determine whether the decrease in the number of productive calls resulted from a change in the population of tobacco users calling the quitline (e.g., an increase in the number of callers who are not prepared to engage in the quitting process), or a decline in service delivery standards (e.g., failure to follow up with callers in a timely fashion, resulting in higher rates of lost callers).

Example 5. Interpreting the Demographics of Quitline Callers: How Well Is the Quitline Serving Its Intended Population?

Another common evaluation question is, "who is the quitline serving?" It is a straightforward matter to report the number and proportion of quitline callers belonging to different age groups, genders, and racial or ethnic groups, and reporting different education levels and

patterns of tobacco use (e.g., type of tobacco use, heaviness of use). However, on its own, this information does not answer the question of how well a quitline is serving its intended population. To answer this question, a quitline must compare the proportion of quitline callers in various categories to the proportion of tobacco users in its target population in those same categories. The Vermont Quit by Phone program made such a comparison in Figure 7:

Figure 7. Demographic Summary of New Registrants, Vermont Quit Network: Quit by Phone Program, FY 2010
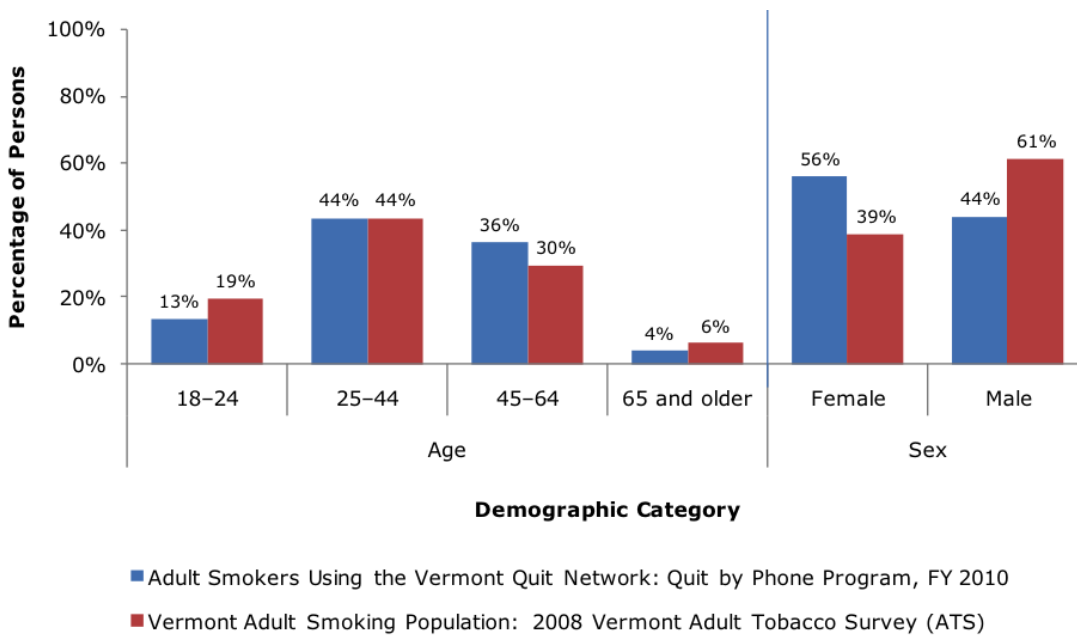
Source: Vermont Quit by Phone Program, Intake Data for Fiscal Year (FY) 2010, 2008 Vermont Adult Tobacco Survey (ATS)

From this graph, the Vermont program could see that they were proportionally serving more 45-64-year-olds and women than were represented in the general population of Vermont smokers. Although this is typical for quitlines nationwide (NQDW, 2013), it may raise a question for quitlines: Should they do more to target promotional efforts at younger and older smokers, as well as men?

As these examples illustrate, it is critical to involve all stakeholders in the evaluation process from the beginning because it is not always clear what elements of the system will be relevant when interpreting results.

Reporting with Clarity

Steps 5 and 6 are about interpretation, engaged data, and ensuring use of evaluation data. According to Heath and Heath,[23] ideas that "stick" are understandable, memorable, and effective in changing thought or behavior. For stakeholders and decision makers to retain the knowledge in your evaluation, the data must be presented in simple, clear terms. The core message must not be muddied by distractions in the report, and the results must be concrete. The evaluation results must be humanized and delivered in terms that are credible and actionable.[4]

To make the information visually appealing and easy to read, consider using graphic design best practices or the assistance of a graphic design expert when formatting your evaluation report, success stories, or briefing.[4] The STATE system provides interactive tools and ready-made reports that are easy to read and designed to present data in a graphically appealing manner. You can insert the graphs for your state into reports or download the Quitline Highlights Report as a PDF. Additional material on reporting with clarity can be found in *Developing an Effective Evaluation Report*.[4]

Evaluation Tips for Step 5

✓ The justifying conclusions step is needed to translate the data collected into meaningful, useful, and accessible information for action.

✓ Including your stakeholder group in this step is directly tied to the previous discussion on the credibility of data and conclusions.

✓ The composition of the stakeholder group is key—it is not always clear at the outset which perspectives will be important with respect to interpreting the findings.

✓ Errors in planning in this step can create serious delays in completing the final evaluation report and may result in missed opportunities if the report has been timed to correspond to important events or decisions.

✓ It is critical that your plans build in time for interpretation and review by stakeholders, (including critics of the program), to increase the transparency of your process and the validity of your conclusions.

✓ The standards and values of less powerful stakeholders and of those stakeholders most directly affected by the quitline should be given special weight. Conclusions should be fully understandable to stakeholders.

✓ Limitations of the evaluation should be examined.

Evaluation Tools and Resources for Step 5:

▪ **Part II**

✓ 5.1 Stakeholder Interpretation Meeting Exercise

✓ Checklist for formal stakeholder interpretation meeting

1 **2** **3** **4** **5** **6**

STEP 6. ENSURE USE OF EVALUATION FINDINGS AND SHARE LESSONS LEARNED

The ultimate purpose of program evaluation is to use the information to improve programs and engage stakeholders. The purpose(s) you identified early in the evaluation process should guide the use of the evaluation results. The evaluation results can be used to demonstrate the effectiveness of your quitline, identify ways to improve your program, modify program planning, demonstrate accountability, and justify funding. Step 6 of the Evaluation Framework, *Ensure Use of Evaluation Findings* and *Share Lessons Learned*, should be the ultimate goal of all your evaluation planning and implementation. It is sometimes felt that this step is automatic once the report is published. In reality, planning for how the evaluation results will be used begins with Step 1 and the consideration of stakeholder involvement. Evaluation results are more likely to be used when end-use is planned for and built into the six steps in your evaluation plan. Planning for use is directly tied to the identified purposes of the evaluation and program and stakeholder priorities. By including the ESW in the entire plan development process, you begin building a market for your evaluation results and increase the chances that these results will be used for program improvement and decision making. This step is directly tied to the utility standard in evaluation. Is it ethical to consume program and stakeholder resources if evaluation results are never used or are used in a less than optimal way? Use must be planned for, nurtured, and included in the evaluation plan from the very beginning.

Use must be planned for, cultivated, and included in the evaluation plan from the very beginning.

Five elements are important to ensuring that the findings from an evaluation are used and that lessons learned are shared:

- Preparation

- Feedback

- Follow-up

- Dissemination

- Making Recommendations

Preparation

Preparation refers to the steps taken to use the evaluation findings. Through preparation, stakeholders can:

- Strengthen their ability to translate knowledge into appropriate action.

- Discuss how potential findings might affect decision making.

- Explore positive and negative implications of potential results, and identify options for program improvement.

Feedback

Feedback occurs among everyone involved in the evaluation. Feedback, which is necessary at all stages of the evaluation process, creates an atmosphere of trust among stakeholders. Early in an evaluation, giving and receiving feedback keeps an evaluation on track by keeping everyone informed about how the program is being implemented and how the evaluation is proceeding. As the evaluation progresses and preliminary results become available, feedback helps ensure that primary users and other stakeholders can comment on evaluation decisions. Valuable feedback can be obtained by holding discussions and routinely sharing interim findings, provisional interpretations, and draft reports.

Follow-up

Follow-up refers to the support that users need throughout the evaluation process. In this step, it refers to the support users need after receiving evaluation results and beginning to reach and justify their conclusions. Active follow-up can achieve the following:

- Remind users of how you intend to use what you have learned.

- Help to prevent misuse of results by ensuring that evidence is applied to the questions that were the evaluation's central focus.

- Prevent lessons learned from becoming lost or ignored in the process of making complex or political decisions.

Dissemination

Dissemination involves communicating evaluation procedures or lessons learned to relevant audiences in a timely, unbiased, and consistent manner. Regardless of how communications are structured, the goal of dissemination is to achieve full disclosure and impartial reporting. Planning effective communications requires advance discussion of the

reporting strategy with intended users and other stakeholders, and matching the timing, style, tone, message source, vehicle, and format of information products to the audience.

Some methods of delivering the information to audiences include the following:

- Mailings

- Web sites

- Community forums

- Media (television, radio, newspaper, social media)

- Personal contacts

- Listservs

- Organizational newsletters

How you present your evaluation results will vary depending on how the information will be used. This can be specified in the Communications Plan (discussed below).

Making Recommendations

Recommendations are actions to consider as a result of an evaluation. Recommendations can strengthen an evaluation when they anticipate and react to what users want to know, and may undermine an evaluation's credibility if they are not supported by enough evidence, or are not in keeping with stakeholders' values.

Recommendations will depend on the purpose of the evaluation and on your audience. It is important to remember that many or all of these key audiences were identified in Step 1, and you have engaged many of them throughout the evaluation as stakeholders. Hence, you have maximized the chances that the recommendations are relevant and useful to your key audiences. You know what information your stakeholders want and what is important to them. The feedback they provided early in the evaluation process should make them more likely to support the recommendations.

1 **2** **3** **4** **5** **6**

Developing a Communications Plan

Given that the communication objectives will be tailored to each target audience, it is important to consider along with the ESW who the primary audiences are (e.g., the ESW, the funding agency, the general public, or some other group). Some questions to ask about the potential audiences are:

- Who is a priority?

- What do they already know about the topic?

- What is critical for them to learn about the evaluation findings?

- How do we want them to use the information? What do we want them to do with it?

- Where do they prefer to receive their information?

- What is their preferred format?

- What language level is appropriate?

- Within what timeframe are evaluation updates and reports needed?

The Communicating Results exercise can be found in Part II Section 6.2 and can assist with tracking your audiences and ways to reach them. More information on developing a communication and dissemination plan can be found in the Resource Section in Part II of this workbook.

Developing a visual chart of the quitline and the system in which it is embedded (either a logic model or a system dynamic map) can help identify places to intervene through effective communication strategies with key stakeholders. For example, if poor public awareness (or worse, negative public opinion) of the quitline has reduced decision makers' support for continued quitline funding, part of the communications strategy could be to get as much media coverage as possible for success stories of "happy quitters."

Once the goals, objectives, and target audiences of the communication plan are established, you should consider the best way to reach the intended audiences by assessing which communication or dissemination channels will best serve your goals and objectives. Will the quitline use websites, oral presentations, visual displays, videos, storytelling, or press releases? What tools will be used in addition to a final report: executive summaries, slide decks, newsletters or fact sheets, infographics, success

stories, one-pagers? Carefully consider the best channels and tools to use drawing on feedback from your evaluation stakeholder workgroup, target audiences, and from others' experiences. An excellent resource on creative techniques for reporting evaluation results is Torres, Preskill, and Pionteck's (2004) *Evaluation Strategies for Communicating and Reporting*.[24]

The following example (Table 5) can help the program chart the written communications plan:

Table 5. Quitline Evaluation Communication Plan Example

Target audience (priority)	Goals	Tools	Timetable
Quitline funder	Inform them in real time about what's working well and what needs to be modified.	Monthly meetings and briefing documents	Monthly
Quitline service provider	Inform them in real time about what's working well and what needs to be modified.	Daily operational dashboard, weekly and monthly meetings and reports	Daily, weekly, monthly
Stakeholders	Promote quitline awareness and support.	Informational "fact sheets" and visits	Annually
Media	Promote quitline awareness for the general population, create a social norm around quitting.	Testimonials, letters to the editor, success stories	Quarterly, post-campaign, or upon evaluation results

It is not necessary or even ideal to wait until the final evaluation report is written to share evaluation results. A system for sharing interim results to facilitate program course corrections and decision making should be included in the evaluation plan. For example, a success story can show movement in your program's progress over time and demonstrate its value and impact. Success stories that focus on upstream, midstream, and downstream successes can facilitate program growth and visibility.[25] Upstream success involves the development of promotional materials before the campaign is launched. Midstream success deals with campaign implementation and how it is fielded and received by the target audience. And downstream success looks at the intended outcomes of the campaign for the target audience. See Figure 8 for more specific examples. Success stories can also serve as a vehicle for engaging potential participants, partners, and funders, especially when it takes time for a program to mature to long-term outcomes.[25-26]

Figure 8. Examples of Upstream, Midstream, and Downstream Successes with a Quitline Media Campaign
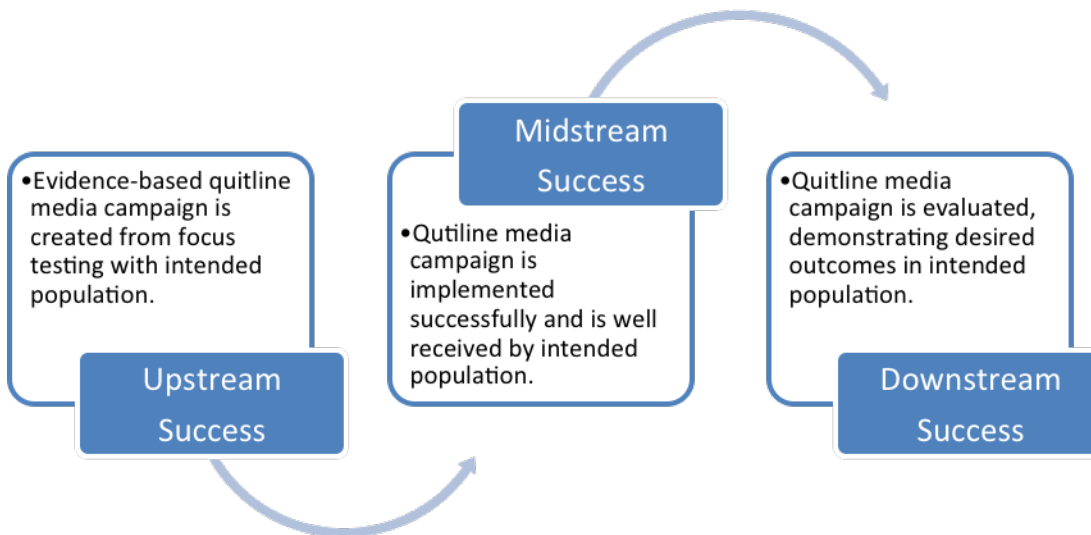
Communicating evaluation results is not enough to ensure use of these results and of the associated lessons learned. It is important for the evaluation team and program staff to proactively encourage wide dissemination and use of information gleaned through the evaluation to accomplish particular evaluation goals. It is helpful to strategize with stakeholders early in the evaluation process about how your program will ensure that findings are used to support programmatic improvement efforts and guide decision making.

Example 1. Using Evaluation Results to Improve Quitline Practice

One state quitline was offering 8 weeks of NRT to quitline callers. One of their evaluation questions was whether this was an efficient use of resources. To answer the question, the quitline evaluator conducted a survey 3 months after registration, and asked about callers' experiences with the quitline, including their receipt and use of NRT. Results showed that although an 8-week supply of NRT was sent at one time, on average, participants were using just more than 5 weeks of NRT. After reviewing these results, the quitline began splitting the shipment of NRT into one 5-week shipment and one 3-week shipment, with the second shipment being contingent on completing a counseling call around 3 weeks after initial contact with the quitline. Subsequent evaluation results showed that caller satisfaction and quit rates remained high, whereas costs decreased. Use of the evaluation results was ensured by designing the evaluation questions specifically around how they would be used to improve practice.

Example 2. Increasing Stakeholder Support for Quitlines

One state quitline was dependent on state legislative funding allocations. To increase legislative awareness of the quitline and stakeholder support for continued quitline funding, quitline use and quit data were collected and reported on cumulatively and by legislative district. Fact sheets were distributed annually to each state legislator, which included district-specific information about the number of constituents who called the state quitline, received quitline services, and successfully quit tobacco use. In addition, testimonials from "happy quitters" were collected and included in the fact sheets. Although state legislators were not included in this quitline's ESW, they were identified as a key stakeholder group, and evaluation results were disseminated to them in a format they could easily understand and use.

Example 3. Communicating Success Stories

In 2010, the CDC funded quitlines with Communities Putting Prevention to Work (CPPW) funding to increase their capacity for serving tobacco users. As part of the evaluation of the effect of CPPW funds, CDC produced several success stories with funded communities, highlighting the ways that funds were used and the impact those funds had on quitlines and tobacco control programs. One success story was an advertising campaign for the Kansas Quitline developed by the Kansas Department of Health and Environment's Tobacco Use Prevention Program (TUPP).The summary of the Kansas campaign described the rationale for developing the campaign, the content of the two ads that were developed, and provided key results of the campaign's impact (http://www.cdc.gov/tobacco/tobacco_control_ programs/surveillance_evaluation/success-stories/pdfs/kansas.pdf). For more on how to create your own success story, see Part II, section 6.3 and CDC, 2007.[25]

There are several practical steps you can include in your evaluation plan to help ensure that the evaluation findings are used. These might include plans to:

- Conduct regularly scheduled meetings with evaluation stakeholders as a forum for sharing evaluation findings in real time and developing recommendations for program improvement on the basis of evaluation findings (discussed in Step 5).

- Review evaluation findings and recommendations in regularly scheduled staff meetings.

- Engage stakeholders in identifying ways that they can apply evaluation findings to improve programs.

- Coordinate, document, and monitor efforts that program staff and partners are making to implement recommendations for program improvement.

- Develop multiple, tailored evaluation reports to address specific stakeholders' information needs.

Summary

The impact of quitline evaluation results can reach far beyond the evaluation report. If stakeholders are involved throughout the process, communication and participation may also be enhanced. If an effective feedback loop is in place, quitline improvement and outcomes may be enhanced. If a strong commitment to sharing lessons learned and success stories is in place, then other cessation programs may benefit from the information gleaned through the evaluation process. Changes in thinking, understanding, program, and organization for all stakeholders may stem from thoughtful evaluative processes.[8]

Evaluation Tips for Step 6

- **Planning for use begins with Step 1 and the consideration of stakeholder involvement.**

  - ✓ Use of the evaluation results is most likely to occur when end-use is planned for and built into the 6 steps in your evaluation plan.

  - ✓ Use of evaluation findings is most likely to occur when the evaluation is collaborative and participatory, a process that begins in the planning phase.

  - ✓ Your evaluation plan should include a communication and dissemination plan.

  - ✓ The planning stage is the time for the program to begin to think about the best way to share the lessons you will learn from the evaluation.

  - ✓ In addition to your final report, you will want to tailor reports that highlight specific findings for selected groups of stakeholders. Consider the target audience when making decisions about these reports' timing, style, tone, message source, method, and format. Stakeholder follow-through should be strategically encouraged as you consider these factors. Planning for these reports begins with your evaluation plan.

  - ✓ Findings should also be made accessible to everyone affected by the evaluation.

Evaluation Tools and Resources for Step 6:

- **Part II**

  - ✓ 6.1 Reporting Checklist Exercise

  - ✓ 6.2 Communicating Results Exercise

  - ✓ 6.3 Success Stories Examples and Tools

1 **2** **3** **4** **5** **6**

References

1.   NAQC. What is a Quitline? http://www.naquitline.org/?page=whatisquitline. Accessed June 1, 2015.

2.   Fiore M, Jaen C, Baker T, et al. (2008). *A clinical practice guideline treating tobacco use and dependence: 2008 update.* Rockville MD: USDHHS, U.S. Public Health Service. Retrieved from http://www.surgeongeneral.gov/tobacco/treating_tobacco_use08.pdf

3.   Centers for Disease Control and Prevention. *Developing an Effective Evaluation Plan*. Atlanta, GA: US Dept of Health and Human Services, Centers for Disease Control and Prevention; 2011. http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/evaluation_plan/index.htm. Accessed May 21, 2015.

4.   Centers for Disease Control and Prevention. *Developing an Effective Evaluation Report*. Atlanta, GA: US Dept of Health and Human Services, Centers for Disease Control and Prevention; 2013. http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/index.htm. Accessed May 21, 2015.

5.   Centers for Disease Control and Prevention. *Best Practices for Comprehensive Tobacco Control Programs*. Atlanta, GA: US Dept of Health and Human Services, Centers for Disease Control and Prevention; 2014. http://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm. Accessed May 21, 2015.

6.   Lavinghouze R, Snyder K, & Rieker P. (2014). The component model of infrastructure: A practical approach to understanding public health program infrastructure. *American Journal of Public Health, 104(8), e14-e24.*

7.   Lavinghouze R, Snyder K, Rieker P, & Ottoson J. (2013, Nov/Dec). Consideration of an applied model of public health program infrastructure. *Journal of Public Health Management and Practice*, *19*(6).

8.   Patton MQ. (2008). *Utilization-focused evaluation* (4th edition). Thousand Oaks, CA: Sage Publications.

9.   Centers for Disease Control and Prevention. (1999). Framework for program evaluation in public health. *MMWR, 48*(NoRR-11), 1-40. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4811a1.htm

10.   Yarbrough DB, Shulha LM, Hopson RK, & Caruthers FA. (2011). *The program evaluation standards: A guide for evaluators and evaluation users* (3rd edition). Thousand Oaks, CA: Sage Publications.

11.   Knowlton LW, Philips CC. *The Logic Model Guidebook: Better Strategies for Great Results.* Thousand Oaks (CA): Sage Publications, 2009.

12.   Centers for Disease Control and Prevention. (2008). *Introduction to process evaluation in tobacco use prevention and control*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Retrieved from http://www.cdc.gov/tobacco/publications/index.htm.

13.   NAQC. (Tinkelman D.) . (2010a). *Assessing the cost-effectiveness of quitline programs*. Phoenix, AZ. Retrieved from http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/issue_papers/assessingcosteffectivenessof.pdf.

14.   MacDonald G, Starr G, Schooley M, Yee SL, Klimowski K, & Turner K. (2001). *Introduction to program evaluation for comprehensive tobacco control programs*. Atlanta, GA: Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

15. NAQC. (Cummins S.). (2009b). *Measuring reach of quitline programs. Quality improvement initiative.* Phoenix, AZ. Retrieved from http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/docs/naqc_issuepaper_measuringrea.pdf.

16. North American Quitline Consortium (NACQ). (2015). Calculating quit rates, 2015 update. (Betzner A, Lien B, Rainey J, et al.) Phoenix, AZ. Retrieved from http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/Issue_Papers/WhitePaper2015QRUpdate.pdf.

17. Centers for Disease Control and Prevention. (2005). *Key outcome indicators for evaluating comprehensive tobacco control programs*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. Retrieved from http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/key_outcome/.

18. Centers for Disease Control and Prevention. (2004, September). *Telephone quitlines: A resource for development, implementation, and evaluation*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, Final Edition. Retrieved from http://www.cdc.gov/tobacco/quit_smoking/cessation/quitlines/pdfs/quitlines.pdf.

19. NAQC. (Reynolds P.). (2010b). *Call center metrics: Best practices in performance measurement and management to maximize quitline efficiency and quality.* Quality Improvement Initiative. Phoenix, AZ. Retrieved from http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/issue_papers/callcentermetricspaperbestpr.pdf.

20. NAQC. (2009c). Review of published data on quitline quit rates. Unpublished report. Available upon request. (naqc@naquitline.org).

21. NAQC. (2012). Results from the 2011 NAQC annual survey of quitlines. Prepared by: Saul J, Davis RA and the NAQC Annual Survey Workgroup. Retrieved from http://www.naquitline.org/?page=2011Survey.

22. Bush T, Zbikowski SM, Mahoney L, Deprey M, Mowery P, Cerutti B. State quitlines and cessation patterns among adults with selected chronic disease in 15 states, 2005-2008. *Prev Chronic Dis*. *2012;9:*E163.

23. Heath C, & Heath D. (2007). *Made to stick: Why some ideas survive and others die.* New York, NY: Random House.

24. Torres R, Preskill H, & Piontek ME. (2004). *Evaluation strategies for communicating and reporting* (2nd edition). Thousand Oaks, CA: Sage Publications.

25. Centers for Disease Control and Prevention. (2007*). Impact and value: Telling your program's story*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Oral Health. Retrieved from http://www.cdc.gov/OralHealth/publications/library/pdf/success_story_workbook.pdf

26. Lavinghouze R, Price AW, & Smith K-A. (2007). The program success story: A valuable tool for program evaluation. *Health Promotion Practice*. *8*(4), 323-331.

Part II. Exercises, Worksheets, and Tools

The exercises, worksheets, and tools found in Part II of this workbook are to help reinforce the concepts discussed in Part I. These tools are only examples, and every evaluation will vary on the basis of program and stakeholder priorities and context.

1 **2** **3** **4** **5** **6**

STEP 1. TOOLS TO ENGAGE STAKEHOLDERS

1.1 Stakeholder Mapping Exercise

It is suggested that the program enlist the aid of an evaluation stakeholder workgroup **(ESW)** of 8-10 members that represents the stakeholders who have the greatest stake or vested interest in the quitline evaluation (Centers for Disease Control, 2008). These stakeholders or primary intended users will serve in a consultative role on all phases of the evaluation. To begin the process of selecting those members who will best represent your primary intended users, it is suggested that you compile a list of all possible users with corresponding comments about their investment in the quitline evaluation and potential uses for evaluation results.

1.1 Stakeholder Mapping

Priority	Person or Group	Comments

Now, go back over your list of potential users of the quitline evaluation results and consider their level of priority on the list. For example, providing the information that funders or decision makers need may take a higher priority than other users, even though all users are still very important. You might rate stakeholders in terms of high, medium, or low, or you might rank order them from 1 to n.

1.2 Evaluation Purpose Exercise

Identifying the end users and the evaluation stakeholder workgroup is as important as identifying the purpose of the quitline evaluation. These two aspects of the evaluation serve as a foundation for evaluation planning, focus, design, interpretation, and use of results. The purpose of an evaluation influences the identification of stakeholders for the evaluation, selection of specific evaluation questions, and the timing of quitline evaluation activities. It is critical that the quitline be transparent about intended purposes of the evaluation. If evaluation results will be used to determine whether a quitline component should be added, continued, or eliminated, then stakeholders should know this up front.

To determine the evaluation purpose, the evaluation team should work with those who are requesting the evaluation to identify the possible multiple purposes for the evaluation from multiple sources. The first task is to consider what groups are interested in an evaluation of the quitline. This might include the quitline service provider staff, health department staff, funders, state-level decision makers, and other stakeholders. The second task would be to align the specific group with what they are requesting to be evaluated. The third task would be to ascertain what the potential uses of the evaluation results will be by each group interested in the evaluation. And fourth, the team should develop a purpose statement relevant to each group and evaluation requested.

1.2 Evaluation Purpose

Group interested in an evaluation	What is to be evaluated	How will the results be used	Evaluation purpose statement

Next, the team should consider each purpose statement for duplication and overlap. What statements could be combined? The final step in the process is to merge the statements into one overall purpose statement.

Evaluation Purpose Statement:

1.3 Stakeholder Inclusion and Communication Plan Exercise

It is important to explore agendas at the beginning of the quitline evaluation process and come to a shared understanding of roles and responsibilities, as well as the purposes of the evaluation. Some stakeholders will be represented on the evaluation stakeholder workgroup (ESW), and some will not. It is important to include a clear communication plan in the evaluation plan to meaningfully engage all appropriate quitline stakeholders and increase participation and buy-in for the evaluation, as well as use of final results.

For each stakeholder relevant to the evaluation, list their appropriate role and how and when they might be engaged in the evaluation. Consider their expertise, level of interest, and availability when developing the communication plan. If there are specific deadlines for information, such as a funding opportunity or quitline contract rebidding process, note those as well. Additional columns could be added for comments.

1.3 Stakeholder Inclusion and Communication Plan

Evaluation stakeholder	Role related to the evaluation	Mode of communication	Timing of communication

A note on roles: Stakeholders need not be a member of the evaluation stakeholder workgroup to have a role related to the evaluation. Given a stakeholder's specific expertise, interest, availability, or intended use of the evaluation results, they may be involved in part or all of the evaluation without being a specific member of the evaluation stakeholder workgroup. Roles might include, but are not limited to the following:

- Development of the quitline evaluation plan.

- Feedback on focusing the evaluation or selecting evaluation questions.

- Needing information about specific quitline evaluation activities or progress of the evaluation.

- Facilitating implementation of specific aspects of the quitline evaluation.

- Included in interpretation meetings.

- Disseminating and promoting use of quitline evaluation results.

1.4 Stakeholder Information Needs Exercise

Although focusing the evaluation occurs in Step 3, the groundwork begins with the identification of quitline stakeholders relevant to the evaluation or the primary intended users. Membership in the evaluation stakeholder workgroup is designed to reflect priority information needs, as well as those that will use the evaluation information. However, it is not always possible to include some groups who need information, and it is certainly not possible to include representation from every group that would benefit from evaluation results. This should not prevent evaluation staff and the evaluation stakeholder workgroup from considering all points of view and needs for information when considering how best to focus the quitline evaluation. Therefore, determining stakeholder information needs is both useful for considering membership in the evaluation stakeholder group (Step 1) and focusing the evaluation (Step 3).

From the list of primary intended users (i.e., those who have a stake in the quitline evaluation results), identify what information each stakeholder will use.

1.4 Stakeholder Information Needs

Primary Intended User (Stakeholder)	Evaluation Information Needed
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	

STEP 2. TOOLS TO DESCRIBE THE PROGRAM

2.1 Developing a Quitline Logic Model Exercise

As a logic model for your quitline program is developed, carefully consider the purpose of the quitline evaluation (see 1.2 Evaluation Purpose Exercise). It can be helpful to start with the intended outcomes of the quitline, such as increased calls or referrals, and increased quit attempts. Or it may be easier to start with the inputs (resources) available to the quitline, such as funding amounts or referral networks, as well as quitline activities. In either case, the goal will be to identify as many relevant elements of the context in which the quitline exists that will contribute to or detract from its intended outcomes.

> **Inputs:** Infrastructure and resources necessary for quitline implementation.
>
> **Activities:** The actual activities conducted by the quitline to achieve its goals.
>
> **Outputs:** Direct products obtained as a result of program activities (e.g., counseling and medication provision).
>
> **Outcomes:** (Short-term; intermediate; long-term; distal) The changes, impacts, or results of quitline implementation (activities and outputs).
>
> **Environmental Context:** Larger cessation program and policy environment in which the quitline is operating.

First, identify the elements in the logic model.

Inputs	Activities	Outputs	Short-term Outcomes	Intermediate Outcomes	Long-term Outcomes
1.	1.	1.	1.	1.	1.
2.	2.	2.	2.	2.	2.
3.	3.	3.	3.	3.	3.
4.	4.	4.	4.	4.	4.
5.	5.	5.	5.	5.	5.
6.	6.	6.	6.	6.	6.

Next, go through the items listed above, and start identifying how the inputs, activities, and outputs might link to outcomes (both intended and unintended). Your ESW can help identify some of the links. On the basis of the identified links, place the logic model elements into a logic model diagram. This will form the starting point for a shared understanding of the quitline program and its intended outcomes. An overview of the environmental context can also be highlighted on your logic model (see next).

2.2 Describe the Quitline's Environmental Context Exercise

Developing a clear description of the quitline's environmental context can be a critical component when determining the factors that can contribute to, and detract from the quitline's goals. In addition, the environmental context can help identify what evaluation questions are both feasible to answer and most important to answer.

Start with the quitline's inputs listed above. For each input identified, transfer them to the tables below. Consider environmental factors that might influence those inputs. The same environmental factor may influence more than one input. Repeat the process for quitline activities, outputs, and outcomes (short-term, intermediate, and long-term). When considering the environmental context, think back to the key stakeholder identification exercise in Step 1. Which individuals and groups are most likely to take an interest in the quitline? Which ones should be more engaged? Which are strong supporters, weak supporters, or have negative views of your quitline? In addition, think about the following questions:

- What factors are likely to influence your quitline's available funding capacity?

- What state or national activities, events, or policies might influence your quitline's activities or outcomes?

- How might the tobacco industry's promotional efforts affect your quitline's work?

2.2 Environmental Context Exercise

Inputs	1.	2.	3.	4.	5.	6.
Influential Environmental Factors	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.

1 2 3 4 5 6

Activities	1.	2.	3.	4.	5.	6.
Influential Environmental Factors	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.

Outputs	1.	2.	3.	4.	5.	6.
Influential Environmental Factors	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.

Short-term Outcomes	1.	2.	3.	4.	5.	6.
Influential Environmental Factors	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.

Intermediate Outcomes	1.	2.	3.	4.	5.	6.
Influential Environmental Factors	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.

1 2 3 4 5 6

Long-term Outcomes	1.	2.	3.	4.	5.	6.
Influential Environmental Factors	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.

STEP 3. TOOLS TO FOCUS THE DESIGN

Illustrating Decisions used to Focus the Evaluation

The following scenarios illustrate how a quitline's stakeholders, the evaluation purpose, and the quitline components and context interact to help focus a quitline's evaluation. The types of evaluation questions that can and should be asked will vary on the basis of the length of time a quitline has been in operation, the degree of engagement by stakeholders, and the amount of resources (human and financial) to which a quitline has access, as well as other factors. It may be helpful to share these examples with stakeholders, if necessary, to start the conversation, or to determine if these scenarios apply in your context. Try to discuss what factors apply in your context.

Scenario 1: A New Quitline Service

When technological services (e.g., texting, web services) are added to a quitline, it may not be appropriate to conduct outcome evaluation on quit rates or cost-effectiveness during the first few years. Instead, it may be appropriate to focus on process evaluation questions, such as the number of tobacco users served by each method, how participants who only use technology services differ from those who also use telephone counseling, and the relationship between promotional efforts and reach. Following some basic monitoring and process evaluation and related program improvement, a program should be collecting follow-up data to enable outcome evaluation during subsequent years. It may also want to ask primarily quality-related questions related to whether the quitline program is being delivered as intended, and whether participants are satisfied with their experience.

Scenario 2: Determined Stakeholders

A quitline receives funding by using a state legislative appropriations process. One state legislator continually requests information about how the state quitline compares to quitlines in neighboring states. By inviting her to serve on the evaluation stakeholder workgroup, her larger questions about quitline performance can be addressed through an educational process related to quitline context and the feasibility of producing certain comparative metrics.

Scenario 3: Limited Funding

A cut in a quitline's budget can be cause for reconsideration of the relative importance of various evaluation questions. If a quitline has not changed the constellation of service offerings since the last outcome evaluation, it may not be necessary to collect quit outcomes during the period of budget shortfall, and instead, focus on questions related to demonstrating high reach across multiple demographic groups.

Once you have identified the various environmental factors that can both enhance and detract from achievement of your quitline's goals, it can become easier to determine which evaluation questions are most important to answer.

3.1 Focus the Evaluation Exercise

The amount of information you can gather concerning your quitline is potentially limitless. Evaluations, however, are always limited by the number of questions that can be realistically asked, the methods that can actually be employed, the feasibility of data collection, and the available resources. These are the issues at the heart of Step 3 in the CDC framework: focusing the evaluation. The scope and depth of any program evaluation is dependent on program and stakeholder priorities; available resources including financial resources; staff and contractor availability; and the amount of time committed to the evaluation. The quitline staff should work together with the ESW to determine the priority of the questions, the feasibility of answering the questions, and how the results will be used before designing the evaluation plan.

In this exercise, you will need to consider all the information from previous exercises in Step 1 through Step 2, the logic model, and your stakeholders' vested interest in the evaluation.

From the Stakeholder Mapping exercise (1.1), list the stakeholders categorized as high priority for information needs:

Stakeholders in High Priority Category of Importance for Information Needs (from exercise 1.1)

From the Evaluation Purpose Identification exercise, indicate your overall evaluation purpose statement:

Evaluation Purpose Statement (from exercise 1.2):

Consider each stakeholder's evaluation needs and the information most appropriate for answering that question (from exercise 1.4):

Primary Intended User	Evaluation Information Needed
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	

1 **2** **3** **4** **5** **6**

Given the overall purpose statement, what questions from the high-priority stakeholder group are viable for the current evaluation effort?

Evaluation Purpose Statement:	
High Priority Stakeholders	**Evaluation Question**

Next, the team should consider issues of feasibility related to those evaluation questions that are viable options given the evaluation purpose.

Evaluation Question	Methods that might be used to answer the question	Assumptions or conditions for this method to be viable	Resources needed to implement this method	Limitations of this method

No chart, grid, or exercise can fully answer the question of how best to focus the evaluation. However, the above information should facilitate informed discussions and can help avoid evaluation activities that are misaligned with the quitline purpose or activities, are underfunded, or not of the highest priority for information needs. Additional considerations that might help prioritize your evaluation questions include

- The questions most important to you and your key stakeholders (the "must answer" questions).

- Questions that provide results that can be used (e.g., for improvement).

- Questions you can answer fully with available or easy to gather data.

- Questions within your resources to answer.

The evaluation questions for the current evaluation are:

STEP 4. TOOLS TO GATHER CREDIBLE EVIDENCE

Matching Measures to Evaluation Questions

In Step 3, we discussed the difference between types of evaluation questions, such as process and outcome questions. For each area of interest for quitlines, we provided sample evaluation questions in Tables 1 and 2. For Step 4, you will need to link each evaluation question to a method and related measures that can help answer it. In Tables 6 and 7 below, a sample of quitline evaluation questions is linked to a measure (or indicator if a measure needs more specification by the program) that can help answer it. Please note that these are examples only, and if your quitline's evaluation questions are different than the ones listed below, the measures needed to answer them will also be different.

You may wish to consider these examples with the ESW if they relate to areas of interest in the evaluation plan. It's important to keep use in mind as you go through this exercise that data should not be collected for their own sake, but because they relay some useful information about the program that will be used for a specific purpose that has been laid out by the ESW.

Table 6. Sample Process Evaluation Questions and Sample Measures

Process Evaluation Areas of Interest	Sample Process Evaluation Questions	Sample Process Measures or Indicators
Demand for quitline services	What is the call volume for the quitline on a weekly, monthly, or annual basis? How does it change over time?	The total number of calls received by the quitline. The total number of (unduplicated) tobacco users calling for help for themselves. The total number of (unduplicated) proxy callers.
Quitline Promotion	Is promotion of the quitline being done according to plan and meeting set targets? How does call volume relate to quitline promotional efforts?	The total number of calls related to paid or earned promotional efforts or outreach activities. The number of tobacco users reporting hearing about the quitline from various sources. The content, placement, and coverage of paid advertising. The content, placement, and timing of earned media. The number and type of outreach efforts with provider groups or other potential referral sources.
Quitline Use	How many tobacco users receive services (counseling or medications) from the quitline annually? What are the characteristics of the callers? How does the population of quitline participants compare with the population of tobacco users in the state? Are callers representative of the population we are trying to reach? What is the quitline's reach?	Education level, gender, age, and race/ethnicity. Chronic disease and mental illness status (optional MDS questions). Promotional reach, "registration reach," and treatment reach for the quitline.

Process Evaluation Areas of Interest	Sample Process Evaluation Questions	Sample Process Measures or Indicators
Quitline referral networks	How many referrals are received by the quitline? How many referral sources (e.g., individual health care providers, clinics, health systems) are there for the quitline? What recruitment strategies/outreach activities are being used to add new referral sources? How do referral sources correlate with outreach activities? What proportion of people who were referred is successfully contacted by quitline? What proportion of people who were referred is successfully enrolled by the quitline?	The total number of referrals received by the quitline. The source of referrals. The number and type of outreach activities conducted. The number of referrals successfully reached by the quitline. The number of referrals registering for quitline services (completing an intake survey). The number of referrals receiving services (counseling and/or medications).
Quality Assurance	How well are provided services meeting quality standards? Is the counseling being provided by using evidence-based methods? Are tobacco users receiving proactive calls or responding to voicemails within the time frame specified by the quitline contract? Are referrals being processed in a timely fashion? Are reports accurate and complete?	The average time from initial contact with the quitline to start of counseling for those requesting counseling. The average number of counseling sessions completed per registration/quit attempt. The average number of minutes of counseling per registration/quit attempt.

Process Evaluation Areas of Interest	Sample Process Evaluation Questions	Sample Process Measures or Indicators
Participant Satisfaction	What are participants' satisfaction levels with the quitline? Materials provided? Messaging or other communication types? What quitline factors increase or decrease participant satisfaction?	Quitline satisfaction from quitline follow-up surveys (see MDS follow-up survey questions for standard optional question wording).
Investment in Services	What is the annual investment in quitline services, medications, promotions, and outreach?	Quitline budget for services and medications divided by the total number of adults in the state. Quitline budget for services and medications divided by the total number of adult smokers in the state. Quitline budget for promotions and outreach divided by the total number of adults in the state. Quitline budget for promotions and outreach divided by the number of quitline callers who received counseling or medication in the state .
Quitline Staffing	Is the quitline staffed sufficiently to respond to all incoming calls and referrals? Are the hours of operation adequate to meet the demand for services? Did demand for services exceed capability? Are quitline coaches/counselors trained appropriately (e.g., language, cultural competency)? What is the level of supervision for coaches/counselors? What form does supervision take?	The type of training completed by quitline counseling/coaching staff, both content and duration of initial training as well as ongoing continuing education. The number of coaches/counselors staffing the quitline. Supervision type and frequency for coaches/counselors (e.g., coaching calls recorded and reviewed).
Quitline Efficiency	How much did the quitline spend per enrollee? How are the quitline's spending per smoker amounts related to reach? Did we have the right strategies (e.g., promotion, treatment mix) to reach or target our desired population efficiently?	Spending per smoker on promotions and outreach compared with promotional reach. Spending per smoker on services and medications compared with treatment reach.

Table 7. Sample Outcome Evaluation Questions and Sample Measures

Outcome Areas of Interest	Sample Outcome Evaluation Questions	Sample Outcome Measures or Indicators
Quitline Awareness	What proportion of the state's adult population (tobacco user and nontobacco user) is aware of the quitline?	Quitline Awareness as measured by the Behavioral Risk Factor Surveillance System (BRFSS) module question.
Changes in Motivation to Quit/Confidence in Quitting	How are participants' motivation to quit or confidence in quitting changing as a result of quitline counseling (especially among those not ready to make a quit attempt upon registration)?	Motivation to quit as measured at intake. Motivation to quit as measured at follow-up (for those not quit at follow-up). Motivation to stay quit as measured at follow-up (for those who are quit at follow-up). Confidence in quitting as measured at intake. Confidence in quitting as measured at follow-up (for those not quit at follow-up). Confidence in staying quit as measured at follow-up (for those who are quit at follow-up).
Quit Attempts	How many/what proportion of tobacco users are making at least one 24-hour quit attempt since registering for quitline services?	"Since you first called the quitline on *(Date of first contact),* 7 months ago, did you stop using tobacco for 24 hours or longer because you were trying to quit?" (MDS follow-up item)
Longer-term quit success	How many quitline participants report no use of any tobacco product for the past 7 (or 30) days at 7-month follow-up (point prevalence abstinence)?[3]	"Have you used any tobacco, even a puff or a pinch, in the last 7/30 days?" as measured at seven-month follow-up. "Have you used any tobacco, even a puff or a pinch, in the last 6 months?" as measured at 7-month follow-up.
Reduction in prevalence	How has tobacco use prevalence in the state changed over time?	BRFSS smoking prevalence rate (see OSHData for results) trends. BRFSS tobacco use prevalence rate trends for cigarettes and smokeless tobacco. Adult Tobacco Survey (ATS) prevalence rate trends. TUS-CPS national and state prevalence rate trends.

Outcome Areas of Interest	Sample Outcome Evaluation Questions	Sample Outcome Measures or Indicators
Economic Evaluations Cost effectiveness[4] Cost-benefit analysis Cost-utility analysis Return on investment	What is your quitline's cost per quit, including the cost of promoting the quitline? How does cost per quit compare with other programs your department, agency, or organization provides? How does it compare with other quitlines? How much does each dollar spent on quitline services save the state (or other payers such as health plans) in terms of prevented medical care costs? How many Life Years Saved can be attributed to the quitline? What is the cost for each Quality Adjusted Life Year saved?	Quitline expenditure on services and promotions. "Have you used any tobacco, even a puff or a pinch, in the last 7/30 days?" as measured at 7-month follow-up. Smoking attributable health care costs (SAMMEC). LYS and QALY.
Attribution of outcomes to the quitline	Is there a clear link between outcomes related to your quitline, as opposed to other events occurring at the same time? What programmatic or policy changes have occurred in your state or various local jurisdictions during the evaluation period in question? Has the tobacco tax rate increased? Have smokefree policies gone into effect? Have media campaigns promoting the national portal number 1-800-QUIT-NOW been in the field? Are there other media campaigns in the field? What about Medicaid expansion coverage?	Date of policy change announcement and initiation. Date of tobacco tax increase announcement and implementation. Media strategy/buy for quitline promotions. Partner organization activity.

3 For guidance on calculating quit rates for quitlines, see the NAQC Issue Paper "Calculating Quit Rates, 2015 Update" at http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/Issue_Papers/WhitePaper2015QRUpdate.pdf.

4 For more on calculating cost effectiveness, see the NAQC Issue Paper "Assessing the Cost Effectiveness of Quitline Programs" at http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/issue_papers/assessingcosteffectivenessof.pdf.

4.1 Evaluation Methods Checklist Exercise

Here is a checklist of issues based on the evaluation standards that can help the ESW recommend the most appropriate data collection methods:

UTILITY

Questions	Notes
Purpose and use of methods: Do you seek a point-in-time determination of a behavior (quit status), or to examine the range and variety of experiences (satisfaction survey or focus groups), or to tell an in-depth story (case study of the integration of the quitline into a health system)?	
Users of evaluation data: Will some methods make the data more credible with skeptics or key users?	

FEASIBILITY

Questions	Notes
Resources available: Which methods can you afford?	
Time: How long until the results are needed?	
Frequency: How often do you need the data?	
Your background and capacity: Are you trained in the methodology you want to use, or will you need help from an outside consultant? Do you have the internal capacity to conduct the evaluation yourself, or is it beyond the scope of what your staff can handle?	

PROPRIETY

Questions	Notes
Characteristics of the respondents: Will issues such as cultural background or language make some evaluation questions more appropriate than others? For example, if your quitline serves a large number of Native Americans, it will be important to tailor your methods to acknowledge the importance of sacred or ceremonial uses of tobacco.	
Degree of intrusion to program/participants: Will the data collection method disrupt the program or be seen as intrusive by participants? This is particularly relevant with respect to quitlines, where asking a long series of intake questions before beginning cessation counseling can be perceived as being irrelevant or irritating.	
Other ethical issues: To what extent can you justify expending resources for data collection and evaluation efforts at the expense of providing services to a larger number of tobacco users?	

ACCURACY

Questions	Notes
Respondent bias: Are the data collection methods likely to influence the answers given by respondents? For example, follow-up surveys should not be conducted by the same counselors or coaches that provided the quitline intervention.	
Respondent memory: Are the questions you are asking of respondents too complex that there may be errors introduced because of their inability to remember accurately? For example, asking about how many patches were used on each day for the first 3 weeks of treatment may not produce reliable results. Techniques to increase accuracy of reporting could be researched.	
Self-report: Although it is a generally accepted practice to ask tobacco users to self-report on quit status for follow-up surveys, it should be noted that respondents tend to be more likely to have quit than non-respondents.	

4.2 Evaluation Methods Grid Exercise

One tool that is particularly useful in your quitline evaluation is an **evaluation methods grid**. This tool is helpful to align evaluation questions with indicators or performance measures and data sources and roles and responsibilities, and it can facilitate advocating for resources for the evaluation. In addition, this tool facilitates a shared understanding of the overall evaluation plan with stakeholders. This tool can take many forms and should be adapted to fit your specific evaluation and context; examples of the forms it takes follow.

Evaluation Methods Grid Example A

Evaluation Question	Indicator/ Performance Measure	Method	Data Source	Frequency	Responsibility
What is the impact of offering free NRT through the quitline?	Number of calls, number of tobacco users receiving services, seven-month quit rate, cost per quit	Cross-sectional observational pre-post design	Quitline intake data, quitline administrative and utilization data, seven-month follow-up survey data, quitline budget data	Before and and after introduction of NRT	Quitline service provider (intake administrative data), quitline evaluator (follow-up survey and analysis)

Evaluation Methods Grid Example B

Evaluation Question	Indicators/ Performance Measure	Potential Data Source (Existing/New)	Comments
How effective are quitline promotional activities at increasing demand for quitline services?	Description of promotional activities (timing, duration, content); number of tobacco users reaching the quitline and their demographics; referral source ("how heard about the quitline")	TRP and GRP data sources Registration/intake data Call volume data	

1 **2** **3** **4** **5** **6**

Choose the grid that is most appropriate for your program, and complete it given your chosen evaluation questions from Step 3.

Evaluation Question	Indicator/ Performance Measure	Method	Data Source	Frequency	Responsibility

Evaluation Question	Indicators/ Performance Measure	Potential Data Source (Existing/New)	Comments

Evaluation Question	Timeline	Methods	Data Sources	Instruments Needed	Staff/Persons Responsible

Evaluation Question	Methods	Instruments Needed	Timeline	Respondents/ Population/ Sample	Responsibility

Evaluation Question	Indicators	Data Collection Sources	Data Collection Methods	Timeline	Data Analysis Plan

4.3 Evaluation Budget Exercise

For this exercise, you will need the Evaluation Methods Grid you completed earlier in Step 4. For this exercise, we have used one grid as an example, but you should use the one you have chosen as most appropriate for your program.

The team should now consider roles and responsibilities, what services might be in-kind, and what activities will cost additional money. Will you need to pay for additional questions on existing surveys, or can you use items that already exist? Are there existing data sources, or will you need to create new ones? Do not forget items such as copying costs for surveys or web services or technology needed in the field, such as recorders or mobile data collection devices.

Evaluation Question	Indicator/ Performance Measure	Method	Data Source	Frequency	Responsibility	Cost Considerations

During this exercise, you may find it necessary to revisit Step 3 or earlier portions of Step 4. Often the budget available doesn't match the evaluation desired. Either the evaluation scope will need to be reduced or additional resources obtained. It is better to thoroughly consider this now before implementation begins than have to change course mid-implementation cycle.

STEP 5. TOOLS FOR JUSTIFYING CONCLUSIONS

5.1 Stakeholder Interpretation Meeting Exercise

Justifying conclusions includes analyzing the information you collect, interpreting what the data mean, and drawing conclusions based on the data. This step is needed to turn the data collected into meaningful, useful, and accessible information. This is often the step in which programs incorrectly assume they no longer need the stakeholder workgroup and that this step is better left to the "experts." However, including your stakeholder group in this step is directly tied to the previous discussion on credibility and acceptance of data and conclusions.

Moreover, it is critical that plans include time for interpretation and review from stakeholders, including critics, to increase transparency and validity of the process and conclusions. The emphasis here is on justifying conclusions, not just analyzing data. This step deserves due diligence in the planning process. The propriety standard plays a role in guiding the evaluator's decisions in how to analyze and interpret data to ensure that all stakeholder values are respected in the process of drawing conclusions (Program Evaluation Standards, 1994). This may include one or more stakeholder interpretation meetings to review interim data and further refine conclusions. A note of caution, as a stakeholder driven process, there is often pressure to reach beyond the evidence when drawing conclusions. It is the responsibility of the evaluator and the evaluation workgroup to ensure that conclusions are drawn directly from the evidence.

A variety of activities can be included in your evaluation plan to solicit stakeholder input and facilitate interpretation of evaluation data. An example is provided below:

Interpretation and Review Activities	Timeline
Initial quitline evaluation reports	As needed to produce final reports to meet data needs of stakeholders
Check-in with quitline service provider	As appropriate during analysis phase
Stakeholder interpretation meeting	Immediately following preparation of preliminary results
Stakeholder review of draft final report	Within 3 months following the stakeholder interpretation meeting
Clearance and review process of final report	Within 2 months following stakeholder review of draft final report

1 **2** **3** **4** **5** **6**

Complete an outline of proposed activities appropriate to the evaluation project to include opportunities for stakeholder interpretation and feedback:

Interpretation and Review Activities	Timeline

It is important to consider the time it takes to solicit and incorporate stakeholder feedback in the evaluation project timeline. Check that the budget and timeline created earlier ensures adequate time and funding for the stakeholder inclusion process.

To ensure the stakeholder interpretation meeting is a success, plan for steps to help things run smoothly. Time for these activities needs to be included in the evaluation timeline.

- Send the initial invitation at least 2 months in advance so that stakeholders can plan for the meeting. Remind stakeholders of the overall evaluation purpose and questions.

- Send the preliminary report or PowerPoint presentation with enough lead time before the meeting to allow stakeholders time to review. It is important to remind stakeholders that results are draft and should not be shared outside of the review group.

- Send reminders about the meeting 1 or 2 weeks before the date. Identify any pre-existing documentation that may be useful for understanding context.

- Plan for appropriate technology (and backup) needed, such as recorders, laptop, screen, flipcharts, etc.

- If feasible, use a professional meeting facilitator.

A checklist to facilitate the development of a formal stakeholder interpretation meeting can be found at: https://www.wmich.edu/evaluation/checklists.

STEP 6. TOOLS TO ENSURE USE AND SHARE LESSONS LEARNED

6.1 Reporting Checklist

Below is a checklist of items that may be worth discussing during the evaluation planning stage to ensure adequate time and resources are devoted to the implementation and reporting process.

Tools and Templates: Checklist for Ensuring Effective Evaluation Reports**

- ☐ Provide interim and final reports to intended users in time for use.
- ☐ Tailor the report content, format, and style for the audiences by involving audience members.
- ☐ Include an executive summary.
- ☐ Summarize the description of the stakeholders and how they were engaged.
- ☐ Describe essential features of the program (e.g., in appendices).
- ☐ Explain the focus of the evaluation and its limitations.
- ☐ Include an adequate summary of the evaluation plan and procedures.
- ☐ Provide all necessary technical information (e.g., in appendices).
- ☐ Specify the standards and criteria for evaluative judgments.
- ☐ Explain the evaluative judgments and how they are supported by the evidence.
- ☐ List both strengths and weaknesses of the evaluation.
- ☐ Discuss recommendations for action with their advantages, disadvantages, and resource implications.
- ☐ Ensure privacy protections for program clients and other stakeholders.
- ☐ Anticipate how people or organizations might be affected by the findings.
- ☐ Present minority opinions or rejoinders, where necessary.
- ☐ Verify that the report is accurate and unbiased.
- ☐ Organize the report logically, and include appropriate details.
- ☐ Remove technical jargon.
- ☐ Use examples, illustrations, graphics, and stories.

** Adapted from Worthen, B. R., Sanders, J. R., & Fitzpatrick, J. L. (1997). *Program evaluation: Alternative approaches and practical guidelines* (2nd edition). New York, NY: Addison, Wesley Logman, Inc. and presented in Comprehensive Cancer Control Branch Program Evaluation Toolkit, Centers for Disease Control and Prevention, June 2010.

Also visit The Evaluation Center at Western Michigan University online for a free evaluation report checklist:

https://www.wmich.edu/evaluation/checklists.

6.2 Communicating Results Exercise

Evaluation results may not reach the intended audience just because they are published; an intentional communication and dissemination plan should be included in your evaluation plan. As previously stated, the planning stage is the time for the program to begin to think about the best way to share the lessons you will learn from the evaluation. The communication-dissemination phase of the evaluation is a two-way process designed to support use of the evaluation results for program improvement and decision making. To achieve this outcome, a program must translate evaluation results into practical applications and must systematically distribute the information or knowledge through a variety of audience-specific strategies.

Communicating evaluation results involves sharing information in ways that make it understandable and useful to stakeholders. Successful communication is key to evaluation results being used. You can do this by using a variety of communication formats and channels. A communication format is the actual layout of the communication you will use, such as reports, brochures, one-page descriptions, newsletters, executive summaries, slides, and fact sheets. A communication channel is the route of communication you will use, such as oral presentations, videos, e-mails, webcasts, news releases, and web or phone conferences. Both the formats and channels should consider the needs of different audiences, the type of information you wish to provide, and the purpose of the communication.

When developing your communication or dissemination strategy, carefully consider the following:

- With which target audiences or groups of stakeholders will you share findings?
- What formats and channels will you use to share findings?
- When and how often do you plan to share findings?
- Who is responsible for carrying out dissemination strategies?

You can plan and track the communication process by using tools similar to the following examples.

6.2 Communicating Results

What do you want to communicate?	With whom do you want to communicate?	How do you want to communicate?	
		Format(s)	Channel(s)

** This tool was adapted from DASH's Communication Matrix in "Using Evaluation to Improve Programs: Strategic Planning" in the Strategic planning kit for school health programs. Available at: http://www.cdc.gov/healthyyouth/evaluation/strategicplan.htm Last accessed 5-19-2014.

This tool can help you track communications with your various audiences, including the communication format(s) (the layout of the communication, such as newsletters) and the communication channel(s) (the route of communication, such as oral presentations), audience feedback on the communication message, and next steps you need to take in response.

Here are two examples of a communication tracking charts. Select the best items for your context.

Communication	Date	Audience(s)	Communication Format(s)	Communication Channel(s)	Audience Feedback and Next Steps

Priority Audience	Objectives for the Communication	Tools	Time Table

6.3 Success Story Examples and Tools

Although not your main method of presenting data, success stories can contribute to the communication of your evaluation results. Kansas worked with OSH to put together a success story for their quitline campaign (http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/success-stories/pdfs/kansas.pdf). Their story highlighted focus group work to identify effective messaging, and the number of additional residents that were reached with services because of the campaign.

Success stories can put a "face" on the data, and can document how the program changed participants' lives (CDC, 2007). The key to a good success story is identifying your audience and concentrating on their information needs. Going back to Exercise 1.4 may help with identifying stakeholders' information needs that are unmet by the existing items in your communication plans. For example, legislators and other decision makers often want to see concrete examples of how government funds have helped their constituents. Credible evidence in this case may mean interviewing one or two individuals affected by the quitline and using quotes from them. Stakeholders may be useful in this process to recruit and identify participants. Discussing potential topics with the ESW may generate some ideas about dissemination you had not identified previously.

More information and success story data collection tools can be found in the CDC (2007) guide. In addition, CDC has an online success story application (http://www.cdc.gov/NCCDPHP/dch/success-stories/), which can help states or communities low on time and other resources. Features of the online tool include:

- Easy-to-use tool to develop your story.

- Guidance on how to write a success story.

- A downloadable worksheet to begin the prewriting process.

- Three professionally developed templates.

- A free photo library.

- A Success Stories Library that you can search and share.

Resource Section

Resources are listed for the convenience of the user and do not constitute endorsement by the U.S. Government.

QUITLINE RESOURCES

- "Call Center Metrics: Best Practices in Performance Measurement and Management to Maximize Quitline Efficiency and Quality" (2010).
    - http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/issue_papers/callcentermetricspaperbestpr.pdf.

    - Many metrics for process or implementation evaluation can be found in this NAQC Issue Paper. This paper defines the most critical operational, service performance and efficiency-related call center metrics for establishing and maintaining quitline quality. The paper, authored by Penny Reynolds of The Call Center School (http://www.thecallcenterschool.com/), makes recommendations on important metrics to measure (including why they are important for funders, service providers and callers); recommendations on how to measure and report these metrics; and describes how these reports may be used by both the service providers and funders to improve quality.

- Centers for Disease Control and Prevention. (2004, Sep). *Telephone quitlines: A resource for development, implementation, and evaluation* (final edition)*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

    - http://www.cdc.gov/tobacco/quit_smoking/cessation/quitlines/pdfs/quitlines.pdf

- Guide to Community Preventive Services. (2013). *Reducing tobacco use and secondhand smoke exposure: quitline interventions*. Retrieved from www.thecommunityguide.org/tobacco/quitlines.html.

- Minimal Data Set for Quitlines (MDS) (see http://www.naquitline.org/mds for more information, including intake and follow-up survey instruments).

    - Demographic and tobacco use characteristics of quitline participants can be collected through implementation of the MDS.

- The MDS offers a standard approach to evaluating tobacco cessation quitlines. Having a standard set of variables is valuable for:

  » Establishing commonly defined performance indicators to assist in assessing quitline performance, improving the quality of quitlines, identifying knowledge gaps and designing new strategies to fill the gaps.

  » Providing a common language allowing for consistent communication with others within and external to the quitline community.

  » Identifying quitline performance benchmarks that can be used to determine effective, cost-efficient tobacco cessation interventions.

  » Testing and assessing new treatment techniques across large diverse populations not possible by a single quitline.

  » Collecting consistent data and allowing aggregation of data across quitlines for improved analyses of a variety of variables relevant to the success of quitlines in North America.

- NAQC. (Cummins, S.). (2009). *Measuring reach of quitline programs. Quality improvement initiative.* Phoenix, AZ.

  - http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/docs/naqc_issuepaper_measuringrea.pdf.

  - Reach calculations and definitions can be found in this NAQC Issue Paper

  - This paper recommends a standard definition of "reach" and provides recommendations for standard measuring and reporting of the reach of quitline programs.

- North American Quitline Consortium. (2015). Calculating Quit Rates, 2015 Update. (Betzner A, Lien B, Rainey J, et al.). Phoenix, AZ.

  - http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/Issue_Papers/WhitePaper2015QRUpdate.pdf.

  - This paper provides a standard formula for measuring quit rates for quitline programs and recommends standard reporting methods as well.

- NAQC. (Tinkelman D) . (2010). *Assessing the cost-effectiveness of quitline programs*. Phoenix, AZ.

  - http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/issue_papers/assessingcosteffectivenessof.pdf.

- NAQC. (Wendling A, & Daigh R.). (2013). *Quitline referral systems.* Phoenix, AZ. Retrieved from:

  - http://c.ymcdn.com/sites/naquitline.site-ym.com/resource/resmgr/Issue_Papers/QuitlineReferralSystemsQuali.pdf.

NON-OSH EVALUATION RESOURCES

- American Evaluation Association

  - www.eval.org

  - The American Evaluation Association is an international professional association of evaluators devoted to the application and exploration of program evaluation, personnel evaluation, technology, and many other forms of evaluation. Evaluation involves assessing the strengths and weaknesses of programs, policies, personnel, products, and organizations to improve their effectiveness. AEA has approximately 5500 members representing all 50 states in the US as well as over 60 foreign countries. (Accessed 7/19/2011)

- CDC Division of Adolescent and School Health's Program Evaluation Resources and Tools

  - http://www.cdc.gov/healthyyouth/evaluation/

- CDC Division of STD Prevention's Practical Use of Program Evaluation among Sexually Transmitted Disease (STD) Programs

  - www.cdc.gov/std/program/pupestd/Introduction-SPREADS.pdf

- CDC Framework for Program Evaluation

  - http://www.cdc.gov/eval/framework/index.htm

  - Effective program evaluation is a systematic way to improve and account for public health actions that involves procedures that are useful, feasible, ethical, and accurate. The framework guides public health professionals in their use of program evaluation. It is a practical, nonprescriptive tool, designed to summarize and organize essential elements of program evaluation. The framework comprises **steps** in program evaluation practice and **standards** for effective program evaluation. Adhering to the steps and standards of this framework will allow an understanding of each program's context and will improve how program evaluations are conceived and conducted.

- Centers for Disease Control and Prevention. (2010). *Comprehensive cancer control branch program evaluation toolkit.* Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Cancer Prevention and Control.

  - http://www.cdc.gov/cancer/ncccp/pdf/CCC_Program_Evaluation_Toolkit.pdf

- CDC Introduction to Program Evaluation for Public Health Programs: A Self Study Guide

  - http://www.cdc.gov/eval/guide/

- Haddix A, Teutsch SM, & Corso PS. (Eds). (2003). *Prevention effectiveness: A guide to decision analysis and economic evaluation* (2nd edition). Oxford: Oxford University Press.

- Disseminating Program Achievements and Evaluation Findings to Garner Support

  - www.cdc.gov/healthyyouth/evaluation/pdf/brief9.pdf

- Knowlton LW, & Philips CC. (2009). *The logic model guidebook: Better strategies for great results*. Thousand Oaks, CA: Sage Publications.

- National Heart Disease and Stroke Prevention Program's Evaluation Guides: Writing SMART Objectives; Developing and Using Logic Models

  - http://www.cdc.gov/dhdsp/programs/spha/evaluation_guides/index.htm

- Penn State Extension Program Evaluation Resources

  - http://extension.psu.edu/evaluation/

- Western Michigan University. The Evaluation Center. Evaluation Checklists.

  - https://www.wmich.edu/evaluation/checklists

  - This site provides refereed checklists for designing, budgeting, contracting, staffing, managing, and assessing evaluations of programs, personnel, students, and other evaluands; collecting, analyzing, and reporting evaluation information; and determining merit, worth, and significance. Each checklist is a distillation of valuable lessons learned from practice.

- University of Wisconsin Extension: Program Development and Evaluation publications

  - http://www.uwex.edu/ces/pdande/evaluation/evaldocs.html

  - This site provides a range of publications for planning and implementing an evaluation and offers on-line evaluation curriculums and courses.

- W.K. Kellogg Foundation – logic model and evaluation guides

  - http://www.wkkf.org/knowledge-center/resources/2006/02/WK-Kellogg-Foundation-Logic-Model-Development-Guide.aspx

  - A guide to logic modeling to facilitate program planning and implementation activities. (Accessed 7/19/2011)

- Worthen BR, Sanders JR, & Fitzpatrick JL. (1997). *Program evaluation: Alternative approaches and practical guidelines* (2nd edition). New York, NY: Addison, Wesley Logman, Inc.

TELLING YOUR STORY: REPORTING EVALUATION RESULTS

- Atkinson C. (2007). *Beyond bullet points: Using Microsoft Office PowerPoint 2007 to create presentations that inform, motivate, and inspire*. Microsoft Press.

- Becker HS. (2007). *Writing for social scientists: How to start and finish your thesis, book, or article* (2nd edition). Chicago, IL: University of Chicago Press.

- CDC. Impact and Value: Telling Your Program's Story

  - http://www.cdc.gov/oralHealth/publications/library/pdf/success_story_workbook.pdf

- CDC. Division of Community Health. Success Stories Application.

  - http://www.cdc.gov/NCCDPHP/dch/success-stories/

  - The Division of Community Health's Success Stories Application is a free online tool to help you turn your success into strong, professional, polished documents.
    - » Easy-to-use tool to develop your story.
    - » Guidance on how to write a success story.
    - » A downloadable worksheet to begin the pre-writing process.
    - » Three professionally developed templates.
    - » A free photo library.
    - » A Success Stories Library that you can search and share.

- Evergreen S. (2011). *Evaluation report layout checklist*. Atlanta, GA: Tobacco Technical Assistance Consortium. Retrieved from http://www.ttac.org/resources/pdfs/022912_Reporting_Well_ERLC-handout.pdf

- Few S. (2004). *Show me the numbers: Designing tables and graphs to enlighten*. Oakland, CA: Analytics Press.

- Heath C, & Heath, D. (2007). *Made to stick: Why some ideas survive and others die*. New York, NY: Random House.

- Lavinghouze R, Price AW, & Smith K-A. (2007). The program success story: A valuable tool for program evaluation. *Health Promotion Practice*. 8(4), 323-331.

- Torres R, Preskill H, & Piontek ME. (2004). *Evaluation strategies for communicating and reporting* (2nd edition). Thousand Oaks, CA: Sage Publications.

QUALITATIVE METHODS

- Guest G, MacQueen KM, & Namey EE. (2011). *Applied thematic analysis*. Sage Publications.

- Guest G, Bunce A, & Johnson L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59-82.

- Miles MB, & Huberman MA. (1994). *Qualitative data analysis* (2nd edition). Thousand Oaks, CA: Sage Publications.

- Patton MQ. (2001). *Qualitative research and evaluation methods* (3rd edition). Thousand Oaks, CA: Sage Publications.

- Yin RK. (2008). *Case study research: Design and methods (Applied social research methods)* (4th edition). Thousand Oaks, CA: Sage Publications.

- Yin Robert K. (2010). *Qualitative Research from Start to Finish*. New York, NY: The Guilford Press.

QUANTITATIVE METHODS

- Few S. (2004). *Show me the numbers: Designing tables and graphs to enlighten* (Vol. 1, No. 1). Oakland, CA: Analytics Press.

- Few S. (2006). *Information dashboard design: The effective visual communication of data* (pp. 120-206). Sepastopol, CA: O'Reilly Media.

- Few S. (2009). *Now you see it: Simple visualization techniques for quantitative analysis*. Burlington, CA: Analytics Press.

- Kleinbaum DG & Klein M. (2010). *Logistic regression: A self-learning text (Statistics for biology and health)* (3rd edition). New York, NY: Springer.

- Rothman KJ, Greenland S & Lash TL. (2008). *Modern Epidemiology* (3rd edition). Philadelphia, PA: Lippincott Williams & Wilkins.

- Tufte ER. (1990). *Envisioning information*. Cheshire, CT: Graphics Press.

- Tufte ER. (2001). *The visual display of quantitative information*. Cheshire, CT: Graphics Press.

EVALUATION USE

- Butterfoss FD. (2007). *Coalitions and partnerships in community health*. San Francisco, CA: Jossey-Bass.

- Mattessich PW. (2003). *The manager's guide to program evaluation: Planning, contracting, and manging for useful results*. St. Paul, Minnesota: Amherst H. Wilder Foundation.

- Patton MQ. (2010). *Developmental evaluation: Applying complexity concepts to enhance innovation and use*. New York, NY: The Guilford Press.

- Patton MQ. (2008). *Utilization-Focused Evaluation* (4th edition). Thousand Oaks, CA: Sage Publications.

OSH EVALUATION RESOURCES

- **Best Practices for Comprehensive Tobacco Control Programs—2014**

  - http://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm

  - CDC's *Best Practices for Comprehensive Tobacco Control Programs*—2014 is an evidence-based guide to help states plan and establish effective tobacco control programs to prevent and reduce tobacco use.

- **Introduction to Process Evaluation in Tobacco Use Prevention and Control**

  - www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/ process_evaluation/index.htm

  - Published in 2008, this guide will help state and federal program managers and evaluation staff design and implement valid, reliable process evaluations for tobacco use prevention and control programs.

- **Introduction to Program Evaluation for Comprehensive Tobacco Control Programs**

  - http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_ evaluation/evaluation_manual/index.htm

  - Published in 2001, this "how to" guide for planning and implementing evaluation activities will help state tobacco control program managers and staff in the planning, design, implementation, and use of practical and comprehensive evaluations of tobacco control efforts.

- **Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs**

  - http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/key_outcome/index.htm

  - Published in 2005, this guide provides information on 120 key outcome indicators for evaluation of statewide comprehensive tobacco prevention and control programs.

- **Question Inventory on Tobacco (QIT)**

  - https://chronicdata.cdc.gov/Survey-Questions-Tobacco-Use-/Question-Inventory-on-Tobacco-QIT-/vdgb-f9s3

  - This web-based tool developed by CDC's Office on Smoking and Health, categorizes more than 6,000 tobacco-related questions. This site can be used to collect information on survey questions used in the past, locate available data for secondary analyses, and gather ideas for future instrument development.

- **Quitlines: A Resource for Development, Implementation, and Evaluation**

  - http://www.cdc.gov/tobacco/quit_smoking/cessation/quitlines/index.htm

  - This 2005 document is intended to help state health departments, health care organizations, and employers to contract for and monitor telephone-based tobacco cessation services. It is also intended to help states, health care organizations, and quitline operators enhance existing quitline services, and to inform those who are interested in learning more about population-based approaches to tobacco cessation.

- **Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC).**

  - http://www.cdc.gov/oshdata/

  - This online application allows you to estimate the health and health-related economic consequences of smoking to adults and infants.

- **Office on Smoking and Health's Interactive Data Dissemination Tool: OSHData**

  - Available at: http://www.cdc.gov/oshdata/

  - OSHData presents comprehensive tobacco prevention and control data in an online, easy to use, interactive data application

  - Users can:

    » Access data online.

    » Reuse, redistribute, and download data sets for further analysis.

    » Explore and download methodology and data source information.

    » Create visualizations to share in presentations and reports.

    » Subscribe to data updates.

- **State Tobacco Activities Tracking and Evaluation (STATE) System**

  - Available at http://www.cdc.gov/statesystem/.

  - The STATE System is an interactive application that houses and displays current and historical state-level data on tobacco use prevention and control in preformatted reports for easy access.

  - Users can:

    » View data online by topic or source (in addition to NQDW data).

    » Choose multiple topics to compare data.

    » Choose specific states to compare data.

    » Access data by state in a Highlights Report.

    » Compare data across states.

- **Surveillance and Evaluation Data Resources for Comprehensive Tobacco Control Programs**

  - http://www.cdc.gov/Tobacco/tobacco_control_programs/surveillance_evaluation/surveillance_manual/index.htm

  - Published in June 2014, this compilation of data sources for tobacco control programs is useful for tobacco control programs that are conducting surveillance or evaluation.

- **Surveillance and Evaluation Net Conferences**

  - Archived presentations available at http://www.ttac.org/resources/cdc_netconferences.html

  - The Surveillance and Evaluation Net-conference series provides information on evaluation best and promising practices and describes the role of evaluation in tobacco control work. The Net-conference series was originally designed for state surveillance and evaluation staff, but the material covers a variety of interesting and emerging topics in surveillance and evaluation that are valuable to other public health professionals. Each conference consists of a lecture followed by a question and answer session.

- **Surveillance and Evaluation web page on CDC-OSH's Smoking and Tobacco Use website**

  - http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/index.htm

- **Tobacco Control State Highlights 2012**

  - http://www.cdc.gov/tobacco/data_statistics/state_data/state_highlights/2012/

  - *Tobacco Control State Highlights 2012* guides states in developing and implementing high-impact strategies and assessing their performance.

  - Highlight how some states are making great strides in reducing smoking rates by using evidence-based strategies while also showing that more work needs to be done in other states.

  - Enable readers to see how their own states perform.

  - Help policymakers with decision making.

National Center for Chronic Disease Prevention and Health Promotion

Office on Smoking and Health