













Measuring What Matters

A toolkit to learn step-by-step how to evaluate programs

April 2020

CENTER FOR COMMUNITY HEALTH AND EVALUATION cche.org

Measuring what matters so communities can make a difference

The Center for Community Health and Evaluation (CCHE) developed the *Measuring What Matters* curriculum and toolkit to support nonprofits, community collaboratives and funders that want to learn how to understand how their programs are making a difference and communicate about the results.

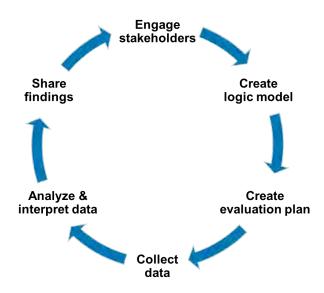
This toolkit walks through how to design and conduct an evaluation that is useful, feasible, ethical and accurate.

It breaks down evaluation into understandable steps that people can use to see if they are making progress, to learn how to improve programs in real time, and to share results with their stakeholders, including funders.

Measuring What Matters creates a guide for how to conduct evaluations across a wide range of health-related activities and programs by adapting the six steps in the CDC's Framework for Program Evaluation in Public Health.

Each section explains what that step is, why it is important, and provides easy to follow checklists and templates so you can learn how to do it yourself.

Measuring What Matters includes tools that explain each of these key evaluation steps



Bringing evaluation to life: The HealthConnect program case study

To bring each step of the evaluation framework to life we use a case study of a hypothetical program where a community health worker (CHW) helps people with diabetes be healthy by creating links between clinics and community resources. We include examples throughout the toolkit of how the *HealthConnect* program team completed the steps to plan and implement their evaluation.

CCHE's Measuring What Matters is evidence-based

The toolkit and curriculum are informed by the literature around effective evaluations, including:

- Centers for Disease Control and Prevention: A Framework for Program Evaluation
- University of Wisconsin–Extension: Program Development and Evaluation
- Northwest Center for Public Health Practice: Data Collection for Program Evaluation [online course]

For more information:

The *Measuring What Matters* toolkit can be downloaded as a full set or as individual tools at www.Measuring-What-Matters.org.

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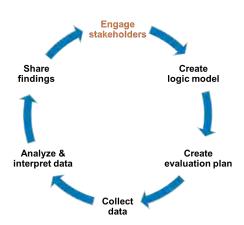
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MEASURING WHAT MATTERS

Engaging stakeholders

This tool is part of an evaluation toolkit called Measuring What Matters. It includes information about how to complete this essential step of evaluation, including templates and a case study example of how a typical community organization – *HealthConnect* - might complete this step for their community health worker program.



Why engage stakeholders?

The first step in evaluation is engaging your stakeholders

—those who are connected with or have an interest in the program. Involving stakeholders in every stage of your evaluation builds buy-in, gives a voice to those affected by the program, and ensures that the evaluation is useful to the greatest number of people.

Who are your key stakeholders?

- People who support and carry out the program: collaborative partners, program managers, staff
- People served or affected by the program, as well as other service providers and partner organizations
- Decision-makers: people who are in a position to create change, take action, or decide funding, such as your leadership/governance boards, funders, and policy makers

How do you engage stakeholders?

Ask stakeholders for their input and actively listen to their opinions as you plan and carry out the evaluation. A great first question is "What does success for this program look like to you?" Stakeholders may advise on evaluation design and directly participate in the evaluation itself, either by gathering or helping interpret data. Ideas about how to successfully involve stakeholders will be provided throughout this toolkit.

Stakeholder checklist

A comprehensive and thoughtful evaluation plan is an essential component of a quality evaluation. Engaging your stakeholders is how you begin – but it also is something that is included throughout your evaluation! Use the items in this checklist to ensure you've followed these key steps.

☐ Have you identified your key stakeholders?

- People who support and carry out the program
- People served or affected by the program
- Decision-makers and those who request the evaluation

☐ Have you talked with stakeholders about what they are interested in learning from the evaluation?

Engaging stakeholders throughout your evaluation is invaluable because it:

- Increases the chance that evaluation will be useful
- Enhances credibility of the evaluation
- · Increases understanding of results
- Help avoid potential conflicts or misunderstandings about the purpose of evaluation or findings.

Involvement in the evaluation provides the opportunity for stakeholders to learn more about your work. This can result in:

- Bringing in more talent and expertise to the evaluation
- Spreading responsibilities and roles
- Creating new or additional access to resources

Purposeful engagement is also a way to address health equity issues as you ask evaluation questions and collect data that is useful to a range of stakeholders who are central to your program. Understanding what your stakeholders are interested in learning is the cornerstone of the process. By doing so, you can:

- Show respect
- Help ensure cultural relevance
- Strengthen the evaluation through diversity of perspectives

The Stakeholder Engagement Plan Template includes questions to spark this kind of conversation.

☐ Did you determine what role each stakeholder group or individual will play in the evaluation?

Potential roles for stakeholders might include:

- Designing the evaluation
- Constructing data collection protocols/instruments and collecting data
- Assisting with analysis and interpretation
- Being an advocate for your program and/or the evaluation
- Raising funds
- Communicating/disseminating findings
- Serving as a member of an advisory group

☐ Do you have a plan for keeping stakeholders involved and engaged in the evaluation, including the ways you will communicate and exchange information?

A great way to figure out how to involve stakeholders is to talk about it! Have a conversation upfront about how they want to be involved and ask them:

- What is important to you? What do we need to accomplish?
- What are the critical questions at this time?
- How can you be involved in this evaluation, and how would you use the results?
- Is there a regular way to communicate findings and share lessons learned?

As you begin to plan for regular stakeholder engagement, think about what will make things easiest for them:

- Is there a standing meeting you can use for regular stakeholder feedback and engagement?
- Will you need to provide incentives for some stakeholders to participate, particularly those who receive services from your program?
- Are there key points you want to make sure you check in with your stakeholders about?

☐ Have you used the Stakeholder Engagement Template?

Once you have an initial plan, write it down in the Stakeholder Engagement Template and check back with them to make sure you are on the same page. Provide regular updates to your stakeholders to keep them engaged and invite feedback throughout the evaluation process.

Case study: The *Health Connect* program team started by brainstorming who their stakeholders might be and how they would be involved. Once they had completed a draft of the Template, they were ready to bring everyone together for a conversation and finalize their plan.

The Center for Community Health and Evaluation designs and evaluates health-related programs and initiatives throughout the United States. CCHE's *Measuring What Matters* curriculum is informed by the following resources:

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- University of Wisconsin-Extension: Program Development and Evaluation
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Engage stakeholders template

Who are our evaluation stakeholders?	How might they be involved? What will they do?	What might they be interested in learning from the evaluation?	What do we need to do to get them involved and keep them engaged during the evaluation?
Example: Board members	Review and comment on the evaluation plan; assist with interpretation of evaluation results	How the program can be improved	Include the evaluation as a board meeting agenda item; identify a champion on the board to ensure involvement

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Case study: HealthConnect completes the engage stakeholders template

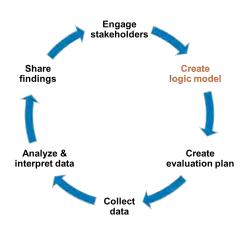
Who are our evaluation stakeholders?	How might they be involved? What will they do?	What might they be interested in learning from the evaluation?	What do we need to do to get them involved and keep them engaged during the evaluation?
Program team: Champions/leads from each key partner: community center, food bank, health department	 Give feedback on evaluation design Provide data (e.g., referral data) Engage in interpreting the data & identifying ways to improve Share findings and lessons learned 	 How the referral process is working in real time How to use the findings to make the program work better How successful the program has been 	 Set up initial meetings to design the evaluation and then a regular quarterly meeting (or add to program team meetings) Set up a process to share information between meetings
Community Health Worker (CHW)	 Give feedback on evaluation design Participate in the program team (paid time) Help develop the data systems and collect data from clients (e.g. filling out key forms) Help interpret the data and identify lessons learned Recruit and/or interview clients to capture stories 	 How the referral process is working in real time How to use the findings to make the program work better Stories about client experiences and any changes in health behaviors or outcomes resulting from the program 	 Hold initial meetings where we ask what is important to them Provide training and support around evaluation activities Develop data systems that are useful for CHWs Set up a process to share information in between meetings Celebrate key accomplishments
Participants served by the CHW program	 Give feedback on evaluation design Tell the story of program impact through interviews, e.g. understanding how satisfied they are and if the program makes a difference Help interpret the data and identify areas for learning and improvement 	 What the program impact has been How their insights have contributed to making program improvements 	 Ask how they would define success Support them in completing program forms that capture key data Schedule a meeting to review findings and identify potential improvements Pay them for their participation make participation easy (e.g., schedule meetings at times that work best for them)

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MEASURING WHAT MATTERS

Creating a logic model

This tool is part of an evaluation toolkit called Measuring What Matters. It includes information about how to complete this essential step of evaluation, including templates and a case study example of how a typical community organization – *HealthConnect* - might complete this step for their community health worker program.



What is a logic model?

A logic model provides a visual diagram of your program all on one page. It shows your outcomes—the changes you hope to achieve—and the inputs and activities necessary to get there. The most important part of developing the logic model is the conversations and

agreements that it helps to facilitate about the program's components and intended outcomes. We've provided a basic template you can use as a starting point. Feel free to adapt it to make it a tool that works for you and your stakeholders.



Why use a logic model?

Having a logic model makes it more likely that stakeholders agree on what you're doing, what it will take to carry-out activities and what changes you expect to see as a result. It is used in the evaluation to help you focus on the key elements of your program.

A logic model is useful throughout the lifecycle of your program.



Logic models are not static documents. They should change over time as programs evolve, new best practices are identified, or data become available for program improvements. For longer term programs, logic models should be reviewed and updated at least annually.

Logic model checklist

Describing your program with a logic model is the foundation of a successful evaluation. Use the items in this checklist to ensure you've followed these key steps.

☐ Did you review the basic framework of the program, including its mission, goals, objectives, and activities?

Creating a logic model starts by having a conversation with your stakeholders about the key building blocks of the program and changes that they want to see. Sometimes grant applications or strategic plans can be useful resources for the conversation. It can be helpful to start logic model development by walking through a set of questions that guide your conversations with stakeholders. Check out the Conversation Guide included on page 5.

☐ Have you identified the resources, activities and participation for your logic model?

A logic model is a visual description of your program that shows the relationships between what you invest and what you hope to achieve. There are many different logic model templates available; we've provided a basic template you can use as a starting point. Feel free to adapt it to make it work for you and your stakeholders.

Inputs are the resources needed to support the program and may include: key organizational resources like program staff, funding, specific facilities/equipment, as well as partnerships with other organizations or experts.

Activities are what you do in your program and are usually described in action verbs, such as "assess," "create," "provide," "monitor," "develop," "educate," "train." It's helpful to start by brainstorming all the activities and then grouping them into key categories.

Participation is the people who will participate in or be reached by those activities. This should be the target audience for your activities, not the people/groups delivering them. Ask yourself: whom do we need to reach for these activities to be successful?

☐ Have you identified the right time frame to measure the outcomes of your program?

Often people think of short-term outcomes as changes that happen in less than one year, intermediate as 2-5 years, and long-term as more than 5 years, however, your time frame may vary depending on the life of your program. What time frame should you consider for your evaluation?

☐ Have you identified the outcomes? What do you want to see as a result of your actions?

The most important thing in developing outcomes is that they build on the activities and each other in a stepwise matter. By creating this logical progression, you can visually display progress toward your long-term goals. You may not be able to measure the long-term outcomes for a while, but by measuring short-term and intermediate outcomes, you are able to demonstrate progress towards the goal you care about.

Short-term outcomes are changes you expect to see fairly quickly as a result of your program's activities

Outcomes build on each other. Make sure each set of outcomes aren't just "more of the same" over a longer time frame. They should build on each other to further measure the impact of your activities.

Example: A common mistake is to develop a short-term outcome of serving 100 people and then simply adding to the number of people who will be reached for longer term outcomes. Instead, consider the impact you expect your work to have with those 100 people over a longer time frame. For example, how will their behavior have changed?

Intermediate outcomes are often related to actions—e.g., changes in participants' behaviors due to increased knowledge and changed attitudes.

Long-term outcomes are changes you expect to see in the later stages of your program, or even after the program is over

☐ Did you test the logic of your logic model?

A logic model can work in both directions. If you start from the left side, you can talk about how you are including specific inputs and activities "so that" you can achieve short and long-term changes that are the goal of your program.

Testing the logic of a logic model for *Health Connect*, a community health worker (CHW) program that connects low-income diabetic residents to health-promoting community



Once you have a draft of the logic model, it's important to test it by walking backwards starting with the outcomes and asking a series of "how?" questions. In the example above, the Health Connect program will improve diabetic health outcomes as a long-term outcome. How? By increasing physical activity and healthy eating and so on. The logic worked!

☐ Did you review the logic model with key stakeholders to ensure you have a mutual understanding of the program's elements?

The most important part of developing the logic model is the conversations and agreements that it helps facilitate. When you share it with stakeholders, some questions to ask are:

- Are there additional resources being used that are not reflected in the "inputs" column?
- Do the activities listed represent your understanding of what is being carried out?
- Are the participants you listed the people you believe to be reached through the activities?
- Are the outcomes what you expect to see as a result? Are the outcomes reasonable to expect given the level of investment and activities?

☐ Did you use the Conversation Guide and Logic Model Template?

Use the Conversation Guide to talk with your key stakeholders and start describing your program. Once you are on your way, you can use the information from your stakeholder conversation to fill in the logic model template so that you have a visual guide for your work and a way to communicate about your program with others.

Then take a look at the logic model that the *Health Connect* program team created with their stakeholders. They broke out some of their key program components into different groups of activities and participants so that they could understand how these key elements fit together. That helped them to understand what kinds of outcomes would be important to track.

The Center for Community Health and Evaluation designs and evaluates health-related programs and initiatives throughout the United States. CCHE's *Measuring What Matters* curriculum is informed by the following resources:

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CONVERSATION GUIDE

Use the following questions to start a conversation about a program or set of activities that you are interested in evaluating. Your responses do not need to include all your organization or coalition's programs and activities.

What is the problem we are trying to solve or issue we are trying to address?

What specific activities will we undertake (e.g., convenings, press releases, training, direct services, advocacy, etc.) in order to address the problem or issue?

For each of the activities identified above, whom are we trying to reach?

What resources are needed to successfully complete the activities identified? (e.g., time, talent, technology, information, money, community partnerships, etc.)

What changes do we expect to see as a result of our activities? (The timeframe below for short, intermediate and long-term changes is only a suggestion. Use what makes sense for your program!) What changes do we expect to see in the short term? (e.g., 1 year)

What changes do we expect as a result of short-term outcomes being achieved? (e.g., intermediate, 2-5 years)

What will be different if we are successful in the long term? (e.g., 5+ years)

What is the context in which our program takes place? Are there any factors that might influence its outcome that we should keep in mind?

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Logic model template

Inputs	Outputs		Outcomes				
	Activities	Participation	Short-term	Intermediate	Long-term		
What resources are needed to implement the activities?	What specific activities will you undertake?	Whom are you trying to reach through your activities?	What changes do you expect to see in the short term. (e.g., < 1 year)?	What changes do you expect to see as a result of achieving the short-term outcomes (e.g., 2-5 years)?	What will be different if you are successful (e.g., in > 5 years)?		
•	•				•		

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Case Study: HealthConnect completes the logic model template

HealthConnect is a community health worker (CHW) program that connects low-income diabetic residents to health-promoting community resources.

Inputs	Outputs		Outcomes			
	Activities	Participation	Short-term	Intermediate	Long-term	
What resources are needed to implement the activities?	What specific activities will you undertake?	Whom are you trying to reach through your activities?	What changes do you expect to see in the short term?	What changes do you expect as a result of short-term outcomes?	What will be different if you are successful?	
Partner funding: food bank, community center, health dept. Technology (e.g., referral system to track CHW clients) Info / resources (e.g., health education materials, community resource lists) Internal processes (workflow / forms for tracking client progress) CHW training (skill development, diabetes knowledge) Facilities (community center, clinics, food bank)	 Program infrastructure Promote CHW program Develop & implement referral processes between key partners Client services Enroll clients in assistance programs Collaboratively develop goals and action plans for self-management Connect clients with programs at key partners & referrals to other social services (e.g., housing) Provide information ways increase healthy eating & physical activity Follow-up and support clients achieving selfmanagement goals 	Residents: Low-income residents with diabetes, focusing on those with poor access to food, health care and/or opportunities to be physically active CHW partners: Health department clinic providers Food bank staff Community center staff	Increased awareness & utilization of CHW by low-income residents with diabetes Improved referral processes & linkages between key partners Increased referrals to other social services & enrollment in assistance Establishment of self-management goals and action plan Increased awareness of opportunities to increase physical activity Increased participation in self-management activities (e.g., healthy eating, physical activity, regular primary care visits)	Increased food security Improved health behaviors, i.e., Increased healthy eating (fruit and veggie consumption) Increased physical activity Increased number of clients with a medical home Decrease in unmet social service needs Progress toward or achievement of self-management goals	Improved diabetic health measures Decreased diabetic complications Increased quality of life	

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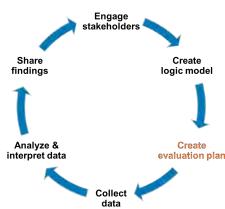
MEASURING WHAT MATTERS

Designing an evaluation plan: Overview

This tool is part of an evaluation toolkit called Measuring What Matters. It includes information about how to complete this essential step of evaluation, including templates and a case study example of how a typical community organization – *HealthConnect* - might complete this step for their community health worker program.

Why design an evaluation plan? Analyze & interpret data An evaluation plan is the blueprint for your evaluation and flows

from your logic model and helps you think through how you will measure your progress and achievements. In this step, you will create a solid plan to guide your evaluation that identifies:





- The specific evaluation questions you want to answer to know if your program is effective
- The measures or indicators you will use to know if you are moving toward your goals
- The practical and realistic data sources and methods you will use to get the information to answer your questions
- The people who will help you collect your data and the timeline and budget that will guide your work.

As you build your evaluation plan, it is important to check it by using a set of quality standards so that your evaluation will be effective and make the difference you want to see in your community. These quality checks ensure your evaluation is:



How do you design an evaluation plan?

We've broken the steps of designing an evaluation plan into two parts. Each part has a tool with more information, shows an example in practice, and provides a template to work on each step. This basic template is a starting point. Feel free to adapt it to make it a tool that works for you and your stakeholders.

Designing an evaluation plan, part 1: Developing evaluation questions and indicators

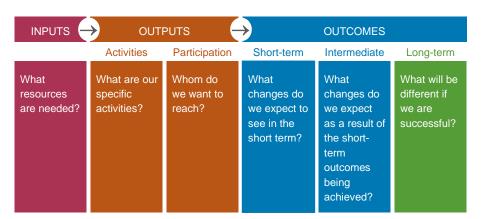
Designing an evaluation plan, part 2: Planning for data collection

Designing an evaluation plan, Part 1:

Developing evaluation questions and indicators

What are evaluation questions?

Developing evaluation questions is the starting point for a strong evaluation plan. They help you to focus on the program elements that you and your stakeholders think are the most important to understand if your program is effective. Evaluation questions should flow easily from your logic model:



- Process questions ask about implementation; how the inputs, activities and participation sections of your logic model are working. These questions will help you understand whether the program is being implemented according to your plan and identify opportunities for improvement.
- Outcome questions ask whether you have accomplished your outcomes as described in your logic model. These questions will help you understand progress and changes made as a result of your program. For example, have there been changes in people's knowledge or health behaviors as a result of your short-term outcomes?

What are Indicators?

The next step is determining how to answer your evaluation questions. To do this you need to identify indicators, which are the evidence that you are making progress. They answer the question "If the outcome is achieved, how will we know it?" Indicators also can help you see where you are making progress if you cannot yet show your program's impact on the longer-term outcomes.

If this step is skipped, it can be difficult to make sure you pick the right data collection method to actually answer your questions! Here are some examples:

- An indicator of academic achievement is high school graduation rate
- An indicator of a residential area's walkability is the proportion of streets that have sidewalks
- An indicator of children's health is the percentage of those who are obese

Evaluation plan checklist

Creating an evaluation plan starts with developing evaluation questions and prioritizing indicators. Use the items in this checklist to ensure that you've followed these key steps and included the quality checks ().

☐ Did you identify what you and your stakeholders want to learn from the evaluation?

Using your discussions with stakeholders and the logic model as a reference, consider the program's inputs, activities, participation, and outcomes. Brainstorm what you and the various stakeholders want to know about the program, as well as how that information would be used. Examples of evaluation questions are listed below.

Sample questions about process (inputs, activities, participation):

- What resources were invested in the program?
 Did we have the resources we needed?
- To what extent were activities implemented as planned?
- Who have we reached with this program?
- Who does not attend/participate? Are particular demographic groups missing?

TIP: It is easy to confuse evaluation questions with those you might ask in an interview or a survey. The difference is evaluation questions are broader in scope, while those asked in interviews or surveys are more specific and are used to answer the broader evaluation questions.

Sample questions about outcomes (results, achievements):

- What changes occurred? What is different as a result of the program? For whom?
- What is the overall impact on the community? On the target group?
- What do people/groups/communities learn or gain? What are they able to accomplish?
- To what extent have we reached our goals? Our performance targets? How do results change over time?

☐ Did you prioritize your evaluation questions with a quality check?

No single evaluation will be able to answer all the questions you may have about your program. That means you will need to determine which are the most important to answer given the resources you have for evaluation. The following quality checks will help you decide if the evaluation question is a high, medium or low priority, or if it should be eliminated.

✓ *Useful.* How important is this information? Which stakeholders care about this question? How will the stakeholders use this information?

Feasible. Can the evaluation question be answered at this stage of the program? For example, if you are planning a new program, you may not want to prioritize an evaluation question about the long-term impact of the program. You might instead focus on questions you'd be able to answer that would show you're making progress.

	Did y	ou brainstorm	possible	indicators f	or each	evaluation	question ar	nd rate	them'	?
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Indicators are the pieces of information that you need to answer your evaluation questions—the information you are committing to measure that will drive your data collection efforts. Indicators need to be specific and measurable. By defining them you will know what information you need and can determine how to best collect it.

- ☐ A great place to start is by brainstorming the potential indicators you could use for any given question. Try not to be overly critical while you brainstorm!
 - Sometimes indicators are **quantitative**—they involve counting things like participation or calculating the percentage of people that changed health behavior.
 - Sometimes indicators are qualitative—they involve using observation or people's stories
 to understand changes in how the program works or how it impacted their lives.

Example: When the *Health Connect* team wanted to create of an indicator of extent to which clients had established self-management goals and action plans to manage their diabetes, they brainstormed a range of potential indicators and selected these three:

- Number and percent of clients that have established self-management goals
- Number and percent of clients that have established action plans
- Client's own perceptions about whether their self-management goals & action plans are appropriate, useful, and achievable

Once you have your list of potential indicators, you can think about your unique program and rate them to determine which indicators will best help you understand if your program is effective. There are several considerations to balance when making your decision.

✓ Useful. Which indicators provide the most useful information to help you understand and improve your program? It will be helpful to know what type of information will resonate with your stakeholders. Would they like numbers, percentages, comparisons, stories, examples, pictures? What information will most effectively show the progress or impact of your program?

Feasible. Is the cost of collecting data for an indicator greater than the utility of the information collected?

✓ Accurate. Are your indicators stated clearly so that anyone can understand exactly what is meant and how the data will be collected? Are they specific enough? Do they measure as directly as possible what you are wanting to measure? For example, if you were measuring the reduction of teen smoking, the best measure is the number and percent of teens smoking. The number and percent of teens that receive cessation counseling does not directly measure the outcome, but it may be the best you can get given available time and resources.

☐ Have you selected the final evaluation questions and indicators to be used in your evaluation? Have you vetted your plan with stakeholders?

One last question to ask yourself is whether you have the right number of indicators to provide information on all aspects of what you are measuring. Often more than one indicator is needed to answer each question. Generally, about three or four indicators per evaluation question are sufficient. If you find you have more than four indicators per question, it may mean that your question is too broad or complicated and should be broken down into multiple questions.

As you develop your evaluation questions and indicators, be sure to involve your stakeholders. Stakeholder feedback can provide new ideas for what needs to be asked and how you might answer those questions. Their perspectives might provide insight on an indicator that you would not have thought about and will ensure that you have buy-in as to what is most important to measure.

☐ Have you used the Evaluation Plan Template?

As you develop your evaluation questions and indicators, use the first two columns on the evaluation plan tool to help keep track of how the indicators and questions relate to each other. Beginning to fill in the tool will prepare you for the next step in evaluation planning that is described in Part 2: planning for data collection.

Case study: The *Health Connect* program team sat down with their logic model and brainstormed a list of evaluation questions. It was tough to prioritize them, but they focused on those that would be the most **useful** and **feasible** to answer. They chose a few indicators for each evaluation question and tried to pick a mix of qualitative and quantitative indicators to more completely answer the question.

Designing an evaluation plan, Part 2:

Plan for data collection

Planning for data collection is the best way to know you will get the information needed to measure success! Use the items in this checklist to ensure you've followed these key steps and included the quality checks.

- ☐ Did you identify the best sources of reliable data to answer the evaluation questions? Ask yourself these questions:
 - Which source is likely to provide the best information? For example, you could gather
 information about blood pressure levels by asking patients to recall their latest results, but
 their medical records might be a more accurate source. How to decide? It may be helpful to
 do a spot check to compare self-reported blood pressure levels with patients' charts. That
 could help you detect the degree to which self-reported data are accurate.
 - How easy or difficult will it be to gather the information you need from a particular source? You will have to weigh the level of accuracy you need against the degree of difficulty in obtaining the information. Building on the previous example, how difficult will it be to access medical records? And if you can access them, how much time and money will be needed to do a medical records review? On the other hand, a question about blood pressure could be easily added to a patient questionnaire, but the data collected might not be as accurate as data in medical records.
 - Is there more than one source for a particular item of information? Using more than one source provides a check of your data, which can help you avoid bias in your results.
 - Are there any existing data sources that would meet the evaluation's needs?
 Depending on your evaluation, some of the data you need may be available from an existing source. Using existing data may be less costly and time-consuming than collecting your own data, but might not be as useful. It should only be used when it fits intended purpose.
- ☐ Have you identified the people responsible, the timeline, and the budget for data collection to help you make your decisions about data collection methods?
 - Who will be responsible for overseeing each data collection method? That person has
 to have the time and also the necessary skills, so if additional training is needed, factor that
 into your plan. Although one person will have overall responsibility for that activity, if more
 than one person is collecting data, all those involved need to coordinate and ensure they are
 collecting data in a consistent way.
 - What is the timeline for data collection? What will be collected by when and/or at what
 intervals? This may be driven by many factors, such as when your program activities will
 occur. Set an end date for each method so you know when it will be completed.
 - What is the budget for data collection? What resources will you have for data collection?
 This may drive decisions about the feasibility of data collection methods and frequency.

☐ Have you considered the advantages and disadvantages of a range of data collection methods?

It is important to consider whether it will be necessary to collect new data to answer your evaluation quesitons or whether it is possible to leverage existing data sources. Consider the benefits and challenges to both as you design your data collection strategy.

Collecting new	data for yo	our evaluation	
Purpose	Method	Advantages	Disadvantages
Get lots of information from people in a non- threatening way	Questionnaires, surveys, checklists	 Can be anonymous Can be inexpensive to administer Can easy to compare & analyze Administer to many people Can get a lot of data Sample questionnaires already exist 	 Might not get careful feedback or the full story Wording can bias responses Impersonal May need sampling expert for large scale or community surveys
Fully understand someone's impressions or experiences, or learn more about their answers to a survey	Interviews	 Get full range and depth of information Develops relationship with interviewee Can be flexible with interviewee 	 Time intensive More expensive for each respondent Interviewer can bias client's responses
Explore a topic in depth through group discussion to get people's reactions to an experience or suggestion, understanding common complains, etc.	Focus groups	 Quickly and reliably get common impressions Can be an efficient way to get much range and depth of information in a short period of time Can convey key information about programs to participants Useful in evaluation and marketing 	 Need good facilitator for safety and closure Managing recruitment and logistics can be time consuming Typically need to provide incentives
Gather accurate information about how a program operates, particularly about processes	Observation	 View operations of a program while it is actually occurring Can adapt to events as they occur 	 Can be difficult to interpret behaviors Can be complex to categorize observations Can influence behaviors of program participants Can be expensive and time consuming

Leveraging existing data sources						
Purpose	Method	Advantages	Disadvantages			
Impressions of how the program operates without interrupting the program	General document review (applications, finances, memos, minutes, etc.)	 Get comprehensive and historical information Doesn't interrupt program or program participants Information already exists Few biases about information 	 Time intensive Information might be incomplete Need to be clear about what you're looking for Data is restricted by what already exists 			
Leverage electronic databases to gather specific data on individual health outcomes or clinic processes	Electronic database queries (EHRs, population health registries, program databases, etc.)	 Often includes the advantages of document review (above) Leverages data already being collected on items of interest like health outcomes and services provided to individual patients/participants 	 Often includes the disadvantages of document review (above) Can require access to patient/participant level data Requires specialized knowledge about how to extract the data from the electronic system Creating customized reports can be time consuming May require data mapping and validation process to ensure data in report are reliable 			
Use publicly available data sets to understand the needs of your community or region	Secondary data (e.g., health department and hospital community health needs assessment))	 Allows programs to understand needs and health outcomes at a community level Is available before your program starts 	 Is not specifically about program participants or outcomes It might not directly answer your questions 			

Adapted from materials produced by University of Wisconsin-Extension, Program Development and Evaluation

☐ Have you done a quality check on the data sources and methods you have selected?

As you are selecting your data sources and methods, consider the following quality check questions. This will help ensure the evaluation serves its purpose and meets the needs of your stakeholders.

✓ Useful. Will the data collected be useful to your program? Is this information source best suited for the job? Will the data sources and methods you selected provide you with the information that you need to demonstrate achievement and make improvements. Will your stakeholders see these data as credible and useful?

Feasible. Are these data available? Consider the time, resources and expertise you have available to carry out data collection efforts. Consider what data you are already collecting or have access to, and if they could be used to answer your evaluation questions.

✓ Ethical. How intrusive is the data collection method? Will your data collection take a lot of participants' time away from the program itself? How will you ensure the confidentiality of participants' responses?

☐ Is the method culturally appropriate?

It's important to keep your target audience in mind, including their age, culture, language, literacy level, phone and computer access, and so on. For example, in some communities, having people tell stories in person may be a more effective and respectful way to collect data than administering a questionnaire.

✓ Accurate. Are your methods the right ones to measure what you want to measure? Have you considered using more than one method to collect data? Evaluations that use more than one method (also called mixed methods) provide stronger evidence because they gather data from different sources.

☐ Have you used the Evaluation Plan Template?

Once you have brainstormed and prioritized your data sources and methods, you are ready to finalize your evaluation plan. After you add these pieces to the plan, be sure to look at it all together to make sure the pieces fit. Take a look at the case study example to see data sources and methods that the *Health Connect* program team created with their stakeholders.

The Center for Community Health and Evaluation designs and evaluates health-related programs and initiatives throughout the United States. CCHE's *Measuring What Matters* curriculum is informed by the following resources:

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Evaluation plan template

Complete	Complete this section in Part 2				
Evaluation Question	Indicator(s)	Data Source	Data collection	Person/entity	Timeline/
			method	responsible	frequency
	•				
	•				
	•				
	•				
	•				
	•				
	•				
	•				

Case Study: HealthConnect creates an evaluation plan for their community health worker program

Evaluation Question	Indicator(s)	Data Source	Data collection method	Person/entity responsible	Timeline/ frequency
Process (activity): To what extent has an effective referral process been established?	 Formal data sharing agreements established Written referral process (e.g., flow chart, responsibilities, referral process) Completed at least 2 PDSA (plan-do-study-act) cycles to assess effectiveness 	Program documents (e.g., agreements, PDSA documentation)	Document review	CHW partner organizations	Agreements and PDSA cycles in first 6 mos Agreements monitored & updated annually
	CHW & champions report that the referral process is effectively working	CHW & partner organizations	CHW/partner Interviews	Partner organization staff member	Interviews annually
Process (participation): Who has been served through the CHW program?	 # of unduplicated clients served # of encounters Demographics of clients served (age, gender, race/ ethnicity, income, education) 	Program documents: intake forms, schedules, and client list	Document review	CHW	Ongoing collection
Outcome (short term): To what extent have clients established self-management goals and action plans?	 #/% of clients that established self-management goals #/% of clients that have established action plans 	Client records	Document review	CHW	Monthly compilation
	Client perception that self- management goals & action plans are appropriate, useful and achievable	Clients (sample)	Client interviews (n=10 quarterly)	Partner organization staff member	Quarterly

Evaluation Question	Indicator(s)	Data Source	Data collection method	Person/entity responsible	Timeline/ frequency
Outcome (intermediate): To what extent have clients improved their health behaviors related to healthy eating and physical activity?	Improvement in client self- report behaviors around healthy eating and physical activity	Clients	Survey collected every 6 months for each client	CHW	Ongoing, rolling timeline
	Client perception that improvements have been made	Clients (sample)	Client interviews (n=10 quarterly)	Partner organization staff member	Quarterly
	CHW perception that improvements have been made & success stories	CHW & partner organizations	CHW/partner interview	Partner organization staff member	Annually
Outcome (long term): To what extent have clients' improved health outcomes related to diabetes?	 % of clients that have had a CHW visit within the past 12 months and had: blood sugar in control (A1c ≤ 9) blood pressure in control (BP ≤ 139/89) BMI ≤ 25 	Electronic Health Records (EHR) at the clinic	EHR report queries	Data analyst at clinic	Report pulled quarterly

CENTER FOR COMMUNITY HEALTH AND EVALUATION

MEASURING WHAT MATTERS

Collecting data

This tool is part of an evaluation toolkit called Measuring What Matters. It includes information about how to complete this essential step of evaluation, including templates and a case study example of how a typical community organization – *HealthConnect* - might complete this step for their community health worker program.

Analyze & interpret data

Share

findings

Engage stakeholders

Collect

Create

logic model

Create

evaluation plan

How will you collect evaluation data?

Once you have decided on data sources, you will need to figure out your process for collecting data. You may not have to start from scratch—there are many questions and

instruments that have been developed and tested by other organizations. Sometimes these will work without changes, and sometimes they need to be adapted to fit your evaluation. If existing resources will not work, you may need to design your own instrument. Here are a couple key considerations to keep in mind for data collection.

✓ Accurate. Is your data collection method measuring what you intend for it to measure, and is it doing so consistently?

- **Is your method reliable?** Reliability is the degree to which your method produces consistent results over many uses. For example, a reliable survey question would be one where each person thought the question was asking the same thing. Or a reliable observation tool would help any observers score or describe what they are seeing in the same way.
- **Is your method valid?** Validity is the degree to which your method actually measures what you intend it to measure. A simple example is that a ruler is a valid measuring device for length, but would not be valid for measuring weight. Often using more than one method for data collection can help you be more confident that you are measuring what you intend to measure.

✓ Ethical. Do you have a method to keep people's information confidential? If the data you are collecting will be sensitive or personal, your process will need to build in safeguards to protect people's privacy and make sure the data are secure.

Have you thought ahead about how you will manage the data once they are collected? Knowing how the data will be aggregated and analyzed and whether you want to be able to make comparisons can influence how data collection instruments are designed. For example, do you want to be able to generate numbers or percentages and compare them over time?

When should I collect data?

When you collect data depends on what you want to learn and the data collection method you will be using. To answer some questions, you may only need to collect that data at one point during the program. To answer other questions, it may be useful to collect data before and after the program and then compare the results.

How do you design tools and conduct data collection?

This toolkit includes resources for the most commonly used methods that walk you through how to design the instrument, recruit participants, and collect the data with each method.

Methods and tips for each of the following are included in the Appendix:

- Surveys
- Interviews
- Focus groups
- Observation

The *Health Connect* program's evaluation plan included a variety of measures that required data collection before, during, and after the program. Some data were collected to answer questions about how the program was working. Other data were collected to understand the program's outcomes, such as improvement in health behaviors related to healthy eating and physical activity. The program team was also able to use existing electronic health record data for their long-term outcomes. Here are examples of their data collection at different time points:

Baseline - before delivering new program services

Pull data on health outcomes related to diabetes for new clients, using existing electronic health record data

Before program

During the program

Collect program participation data, e.g. number of clients served

Interview clients to see if their goals and action plans are useful

Leverage existing electronic health record data to measure improvement in health outcomes related to diabetes and compare to baseline

After program

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CENTER FOR COMMUNITY HEALTH AND EVALUATION

MEASURING WHAT MATTERS

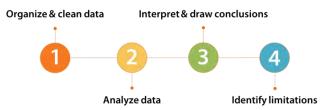
Analyzing and interpreting evaluation data

This tool is part of an evaluation toolkit called Measuring What Matters. It includes information about how to complete this essential step of evaluation, including templates and a case study example of how a typical community organization - HealthConnect - might complete this step for their community health worker program.



What are the steps in data analysis and interpretation?

The next step in your evaluation is to organize, analyze, and interpret your data so that you can use the results to make decisions and to improve your program.



You will need to organize or "clean" your data to make sure that your data are **Organize**

ready to analyze.

Analyze Quantitative analysis includes activities like tallying responses, counting

> program activities, or calculating changes in health outcomes. Qualitative analysis includes activities like looking systematically at the stories people shared with you in interviews or survey questions where people wrote in their

answers.

Interpret & draw conclusions What is the analysis telling you about your program? Sometimes it's useful to compare your data with other available data to better understand results. For example, it can be useful to compare the change you see in health behavior in your participants with existing data about similar changes across a bigger

population to understand how similar or different they may be.

Why is data interpretation important?

Calculating numbers or identifying themes is an important first step, but equally important is how you draw conclusions from those data. You can look at data through many different lenses, and each view could change your idea of what the results mean for your program. It may be helpful to refer back to the original purpose of the evaluation and the questions you outlined in your plan to help you interpret the data.

Be sure to involve stakeholders in this work to help you understand the data's significance and to justify conclusions. When stakeholders agree on conclusions, they will be more inclined to act on the results.

How do you analyze and interpret your data?

Data analysis and interpretation can seem complicated, but there are straightforward steps and guidelines for the process. The key is to keep your evaluation plan front and center during your analysis process to stay focused on the questions you are trying to answer.

Analysis & interpretation checklist

Before beginning data collection, it is important to think about how you will organize and analyze your data and set up systems and keep track of what you are learning. Use the items in this checklist to ensure you've followed these key steps and included the quality standards.

☐ Step 1: Did you organize and clean the data?

You should have a system in place to **organize the information** you collect. Tracking and managing as you go will make it much easier when you begin to analyze all the data you have gathered. The size or complexity of your data organization depends on how much data you will be collecting.

It is important to put the data into a standard format or template that can be used for your analysis method. Often this is an Excel spreadsheet or basic Word table. The key to recording data is making sure that you're consistent. If multiple people are entering data, make sure to have clear written instructions about how to enter the data, and keep track of any decisions you make about the data (e.g., how you are coding various responses).

If you've collected paper documents (questionnaires, attendance forms, etc.), keep the original documents organized (numbered) in case you need to refer back to them later. If you have electronic data, make sure it is backed up and consistently named and filed.

✓ *Ethical*. Consider the sensitivity of your data and who will have access to it. It may be necessary to mask personal information and use identification numbers on your data (e.g., each completed survey, or interview transcript). It also may be important to store your original data sources and any identifying information separately and securely.

Cleaning the data involves reviewing each item and decided if anything is incomplete, not understandable, or out of line in any way. For example, are there instances in which respondents selected two answers when only one should be selected? Such problematic responses should be deleted from the data set you will analyze. For qualitative data, you should ensure that your notes or transcripts are complete and understandable.

☐ Step 2: Did you analyze the data with a method that answers your evaluation question?

Analysis can be very complicated or very simple, depending on the type of data you have and what you want to be able to say about the data. The analysis method that you will use depends on the type of data you collected and the indicators you are using. Your initial data analysis will help you compile lists of patterns, themes and unanticipated results such as high or low numbers, unique perspectives. More detailed information on each of these analysis methods can be found at the end of this tool.

☐ Step 3a: Did you interpret the data to answer your evaluation questions?

The next step is to **interpret** the data—to ask what the data are telling you about your program. These are your key findings. What story do your data tell? What key findings would be of most interest to your stakeholders? What do the data say about your organization or program that might need attention? Often you will find that your initial analysis raises more questions than it provides answers.

To help make sense of the data, review your data for patterns, trends or themes that help you to tell a clear and compelling story about your program/organization. For example:

- Compare the results against targets set for the program
- Describe trends in the program data over time by comparing the data you collected at one point in time against data that was collected in the same way at another point in time—for example at the beginning and end of

the program.

Qualitative analysis involves carefully reviewing responses to survey questions where people wrote in answers, interview or focus group transcripts, and observation notes. The goal is to identify the key points as well as patterns or themes that emerge.

You can use simple analysis methods, like creating tables in Word or highlighting themes on paper copies of responses. See page 65.

Quantitative analysis involves tallying responses or doing familiar calculations like averages and percentages, or sometimes doing new calculations like weighted averages or comparisons.

An Excel spreadsheet can be used for these types of calculations, which are usually adequate for beginning to understand your results. See page 67.

- Compare with other similar programs that have shared their findings, or compare the results against standards established by others, such as funders or government agencies.
- Look for outliers (e.g., high numbers, low numbers, or unique perspectives) and note expected/unexpected results; consider what insights these provide.

Accurate. Involve your team and other stakeholders as you interpret the data. Getting different opinions on meaning and importance will lead you to the most accurate conclusions. It's also helpful to consider different explanations for the results.

☐ Step 3b: Did you develop conclusions to answer your evaluation questions?

Now it is time to pull the results together into an overall picture of your program by **drawing conclusions**. Conclusions answer the evaluation questions and describe what you learned. Depending on your reason for evaluating, you may highlight conclusions that relate to the program's strengths and best practices, the impact it is having, or areas where it is not performing well. What do the patterns in the data or the comparisons tell you?

Key finding	Conclusion
60% of kids who participated in after-	Over the past six months, the after-
school nutrition classes reported eating	school nutrition program contributed to
at least 5 servings of vegetables per	an increase in vegetable consumption.
day (compared to 25% who had not	
participated in the nutrition classes).	

Extracting meaningful conclusions from data can be straightforward if the data provide clear, direct answers to your evaluation questions. However, it can be challenging if the answers are less apparent or if different data sources yield results that lead to different conclusions. If the conclusions aren't clear, it's a good idea to talk with your stakeholders and see if you need different data to answer your question.

☐ Step 4: Did you examine and document the limitations of the evaluation?

An important part of the process is identifying the limitations of the evaluation—that is, any factors that may have affected the results. These may be things directly related to the evaluation, like how the data were collected, poor response rates, or biases that could have been introduced. They could also be things beyond your control, like political or economic changes.

✓ Accurate. When you report the results and conclusions, acknowledging the limitations will strengthen people's confidence in your results because you are being transparent about what you can and cannot claim.

For more information on how to analyze qualitative or quantitative data, see the tools available in the appendix.

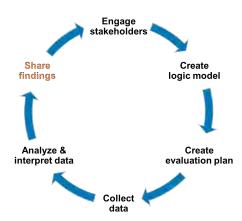
The Center for Community Health and Evaluation designs and evaluates health-related programs and initiatives throughout the United States. CCHE's *Measuring What Matters* curriculum is informed by the following resources:

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CENTER FOR COMMUNITY HEALTH AND EVALUATION MEASURING WHAT MATTERS

Using and sharing evaluation results

This tool is part of an evaluation toolkit called Measuring What Matters. It includes information about how to complete this essential step of evaluation, including templates and a case study example of how a typical community organization – *HealthConnect* - might complete this step for their community health worker program.



What does it take to use and share your evaluation findings?

This last step in conducting an evaluation involves developing recommendations and thinking creatively about how best to share your findings and recommendations. In this step, you'll think through questions like:

- What recommendations do we want to make?
- What actions should be taken based on what we learned?
- With whom should we share our evaluation findings?
- What findings will interest different stakeholder groups? How will we reach them?
- When should we share recommendations so they are timely and have maximum effect?

Why share and use your findings?

By providing a deeper and richer understanding of your program, you can build on what's working and develop new strategies for what's not. The many reasons to communicate your findings include:

- Learning: Program improvement, strategic planning, sharing lessons / promising practices
- Reporting: Meet funding requirements, accountability to the board, sharing findings with evaluation participants
- Outreach: Engaging stakeholders, marketing, fundraising

How do you share and use your evaluation results?

This step starts with developing your recommendations and identifying the list of stakeholders you want to share your results with. Then you can keep each of those stakeholders in mind and think through the "what," "how," and "when" of sharing your findings. Then you'll be ready to put this information together into a communications plan.

At the end of year one, the *Health Connect* program team found that the program was making a difference, but it wasn't reaching enough people. Based on their findings they recommended making changes for program year 2: adding evening hours and having a food bank representative come to give weekly demonstrations of cooking on a budget. It was time to use and share these initial findings and recommendations at a meeting with funders and stakeholders.

Using and sharing your results Checklist

Sharing the right information with the right people in the right way is the best way to make sure your findings are useful! As you create your communication plan, use the items in this checklist to ensure that you've followed these key steps and included the quality checks.

☐ Did you develop recommendations?

Recommendations describe the actions you think should be taken based on what you learned. They should align with the reasons you did the evaluation in the first place. For example:

> If your goal is to improve the program's ability to reach its outcomes

Recommendations may include different approaches to make the program more successful or highlight areas where training is needed.

If your goal is to determine the future of the program



Recommendations may suggest expanding a successful program by adding services or locations.

✓ Useful & Feasible. Did you review your list of stakeholders and figure out WHOM you should share results with?

Share the results with stakeholders both inside and outside of the program—people who have an interest and people who can take action on your findings. Look back at your list of stakeholders and use that as a starting point. Consider expanding it to include those who you would like to know more about your program and those who might be interested in your findings or lessons learned.

☐ Did you decide WHAT information you want to share back to each audience?

What you communicate will probably be different for each audience, because not everyone will be interested in the same thing. Tailor the information to each set of stakeholders and interested parties in terms of detail, technical complexity, and area of focus. Ask yourself:

- What general issues does this stakeholder care about?
- What specific information will this group want to know?
- What, if any, other information will resonate with them?

✓ Accurate. Don't bias your reporting by eliminating negative results—report both negative and positive findings. And be sure to include a discussion of the limitations of your evaluation so that audiences can decide for themselves how to interpret the findings.

☐ Did you decide HOW you will share the information? What is the right format?

Just as different audiences will be interested in different information, the same format might not be best for every stakeholder on your list. For example:

- A comprehensive written report might be the best way to meet funder requirements.
- Program participants might prefer a personal conversation or meeting where findings are presented in a simple manner and the goal is to talk about the results.
- You might best reach the broader community with a news release or through social media.

In general, people are moving away from lengthy evaluation reports to presenting findings and recommendations in a way that emphasizes what matters most. Your stakeholders can help you decide on format and how much detail is suitable for the people they represent.

✓ **Useful.** It is also important to think about the language you will use. Complex analysis and technical terms may be appropriate for some audiences, but not for others. For maximum impact, people need to understand what you're saying!

☐ Did you decide WHEN the right time to share information with your stakeholders was?

The last thing in developing your communication plan is deciding when to share results with your stakeholders. Consider the following as you make your decision:

- Focus on timeliness and relevance by sharing findings while the data still matter and those who participated will see the results of their participation.
- Maximize impact by knowing when the information will be of use. Can you coordinate the release of your results with other upcoming events in the community?
- Sequence how you share findings and take care to inform your stakeholders of the results before sharing with the general public.
- Frequency is key Typically, if you want your evaluation findings to be useful, one written report is not enough. Plan to get the message out several times in a variety of ways.

Did you follow-up	to	ensure	that	your	evaluation	findings	are	used fo	r decisions	and
actions?										

The final step in the evaluation process is to follow up with stakeholders to make sure that 1) they have had an opportunity to review the information you provided, 2) they received the information they needed, and 3) there is a plan for next steps, if appropriate. The timing of follow-up may be related to funding cycles or other factors, but it is better to do so sooner rather than later, while the information is fresh and on stakeholders' minds.

☐ Did you use the Communication Plan Template?

Once you have thought through the "who", "what", "how" and "when" of using and sharing your findings, you are ready to put it together into the communication plan template! Take a look at the Case Study to see the communication plan that the *Health Connect* program team created.

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- University of Wisconsin–Extension: Program Development and Evaluation

Measuring What Matters Toolkit

Sharing your evaluation results template

Use this template to develop a plan for communicating the results of your evaluation.

Who? (List your stakeholders)	What information do you need to share with them?	Why? (What is your purpose for communicating with them?)	How will you share the information? (e.g., report, presentation, personal discussion, media release)	When should the information be shared?
Example: Board members	Progress toward goals	To inform strategic planning	Written and oral report at board meeting	Before/during strategic planning meeting

Adapted from University of Wisconsin-Extension: Program Development and Evaluation. http://fyi.uwex.edu/programdevelopment/

Case Study: HealthConnect completes the sharing evaluation results template

Who is your audience? (List your stakeholders)	What information do you need to share with them?	Why? (What is your purpose for communicating with them?)	How will you share the information? (e.g., report, presentation, personal discussion, media release)	When should the information be shared?
Program team: Champions/ staff at partner agencies and Community Health Workers	Ongoing information about the program is working Impact on health behaviors and outcomes; improvement ideas	To strengthen engagement; to close the loop and show how info they provided is being used; to inform improvement & planning	Written and oral reports at regular meetings Discuss evaluation results and work together to develop recommendations	As it is available and during quarterly quality improvement meetings
Participants served by the Community Health Worker (CHW) program	Impact on health behaviors and outcomes; improvements being made	To strengthen engagement; to close the loop and show how info they provided is being used	Brief written summary of results Verbally at individual or group visits as needed	Before any significant changes are made to the program
Board & leadership at CHW partner agencies Other social service organization partners	Referral information; impact on health behaviors and outcomes; improvement ideas	To ensure buy-in and inform resource allocation, to strengthen partnerships, to improve referrals	Top level findings and recommendations presented at meetings Personal conversations with key partners	Board: Upcoming board meetings Partners: Annually (after briefing internal stakeholders)
External funders	Progress toward outcomes; overview of findings and lessons learned	Grant accountability; to increase the likelihood of future funding	In grant progress report; personal discussion with external funders	Upcoming progress report
Community residents (broadly)	Success of program at improving health behaviors & outcomes	To recruit potential clients in order to better serve the community	Media release and use in community promotion (e.g. public transit or social media)	At least annually, after internal stakeholders have been briefed

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CENTER FOR COMMUNITY HEALTH AND EVALUATION

MEASURING WHAT MATTERS

Collecting data:

How to plan and conduct a focus group

Why conduct a focus group?

Focus groups are an excellent way to get rich stories and descriptions of how your program is working from a group of people. They are structured small group discussions with a set of questions that guide the group through a conversation about your program.

Focus groups are most appropriate to use for group process and brainstorming because people can build off each other's comments. Because of this, focus groups are often used to test messages, get ideas for program improvement, etc. Good focus groups also leave space for people to share individual points of view, but they are not an appropriate way to discuss topics that are sensitive, controversial, or personal.

Focus groups can help you explore:

- In-depth information about a particular issue or topic
- The range of perceptions, views and opinions about a particular issue or topic (not just what people agree about)
- Factors that influence opinions or behaviors

Typically, when they are used for evaluation, multiple focus groups are conducted. You could conduct focus groups with several groups of people that all share similar characteristics. You could also conduct multiple focus groups with diverse participants, as long as each focus group itself has similar characteristics or contexts. Then you can compare responses of different groups.

Planning and developing focus groups

Focus groups can help you collect information from multiple people in a short period of time. However, they can be time consuming and difficult to arrange because they require coordinating the logistics of bringing together a group of people in-person and finding a strong facilitator. Be sure to allot time for planning and organizing.

☐ Did you decide when to collect focus group data based on your evaluation plan?

The timing of your focus groups depends on what you want to learn about. To answer some of your evaluation questions, you may only need to do focus groups once. To answer other questions, it may be useful to do them at strategic points during your program.

FOCUS GROUP TOOL OVERVIEW

PLANNING

- Decide when
- Figure out logistics
- Identify the sample
- Recruit participants
- Identify & train a facilitator
- Develop a discussion guide
- Pilot test

COLLECTING DATA

- Use the data collection tips
- Track & document data
- Key follow up steps

- Identify what program features are needed
- Get baseline data for later comparison
- Assess community needs

Before program

During the program

- Assess progress
- Learn about what is working and not working to improve the program
- Assess if the program achieved the outcomes
- Understand who the program worked for

After program

☐ Did you identify your focus group sample – who you will invite to your focus group?

The key to a good focus group is finding participants that have similar enough demographics or characteristics OR a similar relationship to the program, so they regard each other as equals. This can help you to avoid power dynamics that may limit conversation. Some organizations or community groups may already have groups that meet regularly that could conveniently be used for a focus group at the same time. If you are interested in the perspectives of different groups of people, you will need to plan multiple focus groups. For example, if conducting focus groups within an organization, you may hold 1-2 focus groups with managers and 1-2 focus groups with staff.

There are a variety of methods you can use to identify the group of people that you will be inviting to your focus group. If there are a limited number of people that participate in your program, it may be possible to invite everyone to participate. Other options include:

- · Randomly drawing names from a hat
- Choosing systematically from a list (for example, inviting every 5th person on your list)
- Dividing the group into subgroups based on characteristics (e.g., gender, age, geography, participant, eligible but not participating) and randomly selecting representatives from each subgroup. This method is used when you have specific subgroups that you want to compare data across different subgroups.
- Recruiting people who are easy to reach (convenience sample). For example, you could
 approach individuals who are shopping at a farmers' market. Although this method can make
 it easy to recruit, the ideas expressed may not be representative of the people you're trying
 to get opinions from.
- **Snowball sampling.** You might also use a method where you start inviting a core group of people and ask them for suggestions of other knowledgeable people whom you might invite to participate. If you are working with a hard-to-reach population or have only a limited list to start with, using this method can expand your sample relatively easily. But it also may be subject to the same biases as a convenience sample.

☐ Did you figure out the logistics – the where, when and incentives?

- Focus groups are generally scheduled for 1-2 hours.
- No-shows are common for focus groups, so you should select a date, time, and location that are convenient for participants.

- It can take time to set up a room for a group meeting, so plan ahead and reserve your space before and after your actual meeting time.
- Also consider whether other assistance or support may be required for participation, e.g., transportation or childcare.
- Decide whether or not it is possible to provide incentives to participants. Incentives can
 increase the likelihood that people will participate. Incentives could range from providing food
 or beverages to offering cash or gift cards. If incentives will be offered, that should be
 communicated in the invitation and followed up on at the end of the focus group. You should
 also decide whether and when you will share what you learn with the participants.

☐ Did you recruit participants?

- Focus groups ideally consist of 6 to 8 people but should not be less than 4 or more than 12. If you can, try to recruit extra people in the event there are cancellations or no-shows. If you invite people that are part of an existing organization or program, you may just invite one or two extra people. If your sample is broader, such as patients at a clinic, you may want to invite at least double the minimum number you need. For example, if your minimum attendance is 6, be sure to invite at least 12. You want to have a group large enough to get different opinions, but small enough to make sure that everyone has an opportunity to talk.
- Once you have identified who you want to include in the focus group, send an invitation or
 advertise to people you would like to participate. It is common to use email or a flyer for this
 initial contact. Be sure to consider the needs and resources of the group you'll be
 recruiting—in some cases a phone call invitation may be more appropriate
- When you are inviting people, be sure to inform them of the purpose of the group, the
 amount of time it will take, the importance of being on time, and whether or not they can
 bring children or other family members who may wait at the site. You should also include any
 information about an incentive.

☐ Did you identify and train a facilitator?

Focus groups require a skilled facilitator to manage group dynamics and keep things on track. It is best to use a facilitator with focus group experience, who understands what you are hoping to learn. Ideally, you want a facilitator who:

- **Is neutral**—someone unknown to the participants.
- Can relate to the participants—understands their background and life experiences enough to be respectful and ask probing questions appropriately.
- Can create a comfortable environment for participants. To the extent possible, avoid any
 power differentials in the focus group—both among participants and between the facilitator
 and the participants.
- **Is skilled at facilitating group process**—e.g., how to respectfully get back to the discussion topic, how to engage everyone in discussion without putting people on the spot.

- Is familiar enough with the discussion topic to understand comments and probe appropriately.
- Can recap the key discussion points at the end to confirm what s/he has heard from participants.
- Can prevent "groupthink" where one or a small number of participants can influence the opinions of others.

The facilitator's job is to guide the discussion of the participants—not to provide information or their own opinions. Focus groups are not appropriate times to make presentations. If you would like someone on your staff to be trained as a focus group facilitator, the best way to learn is to shadow an experienced facilitator and to debrief after the session.

☐ Did you determine ground rules?

Every focus group should begin with a discussion about the ground rules/norms for the group. There are a couple options for setting ground rules: Brainstorm ground rules/norms together (have some prompts ready) or suggest two or three standard ground rules and ask participants if they have others, they would like to add additional ground rules. The first option might get participants more engaged in understanding these rules while the second option is more time efficient. Some basic ground rules include:

- What is said in the room, stays in the room
- Be respectful of other participants
- There are no wrong answers
- Avoid distraction: cellphones turned off and put away

☐ Did you develop your focus group questions and put them in a discussion guide?

A discussion guide helps the focus group be successful. Discussion guides include opening remarks, the questions, and important ideas for the facilitator to keep in mind.

Focus groups have three parts that should all be detailed in your discussion guide: the opening, the group discussion and the wrap-up. Your facilitator should be prepared to facilitate these three parts. The following table describes each of these parts and the elements that should be included.

Opening

- Welcome participants and make introductions
- Review the purpose of the focus group, what you'll generally talk about, and how the information will be used
- Review the ground rules: everyone's ideas are important; there are no right or wrong answers; all comments are confidential; and everyone is encouraged to respond to each question
- Use an easy introductory question to get the group talking

Discussion

- Guide participants through the questions and cycle through the group to be sure that all participants have a chance to speak
- When comments related to one question are finished, summarize the discussion, making sure that participants agree with the summary
- Take advantage of and explore unexpected comments or unanticipated directions the conversation may take if these may add to the discussion
- Use probes to explore ideas in more depth, but avoid irrelevant divergences

Wrap-up

- Provide an opportunity for participants to make any final comments
- Provide a recap of the major discussion points
- Thank participants and remind them how the information will be used
- Generally incentives are given at the end of the focus group

Tips for developing discussion guides

Developing questions. Your questions should be crafted to stimulate response and discussion. When developing questions focus only on information you need to know. You want to leave enough time for sufficient discussion of each question. During a two-hour focus group, you can typically get through 10-12 questions. Formulate questions that are:

- Conversational in tone
- Easy to say—the facilitator should be able to say them naturally
- Short, clear and easy to understand
- Culturally/context appropriate: use words that resonate with participants—avoid using
 jargon, acronyms, and overly technical words, unless that is appropriate for the group
- Open-ended: avoid asking questions that can be answered "yes" or "no"
- Focused on one thing at a time. For example, do not ask, "How has the program changed the way you eat and exercise?" Instead, ask about eating habits first and then ask about changes in physical activity.

Pay attention to the flow of the questions. Your discussion guide should start with something that is easy to answer—maybe even an icebreaker—to get the conversation started and make participants feel at ease. The questions should then flow to keep the conversation going, avoiding abrupt changes in topics. Typically, questions will start more general and then get more specific as the focus group discussion progresses.

Prepare opening and wrap-up remarks. These are important for building rapport and leaving the focus groups on a positive note. It is also useful for providing information and directions related to logistics and follow up, such as: location of the bathrooms, how/where to get their incentive, what you'll do with the information they provide, and whether/how you'll be in touch for follow up.

☐ Did you pilot test your discussion guide?

It is a good idea to pilot test or try out your discussion guide before using it in a focus group. Ideally, you would organize a pilot focus group with participants that share characteristics with those who will participate in the other focus groups and ask for feedback. This gives you a chance to see if the questions make sense, if the flow of questions keeps the discussion moving, and if the number of questions is appropriate for the time you have.

It may not be feasible to hold a pilot focus group with people similar to your targeted group. If this is the case, you may consider pulling together a mock focus group consisting of colleagues and/or friends to at least go through and get reaction to the discussion guide. Any data that you collect during the pilot should not be used as part of your evaluation data, unless the group is similar to your sample and you make no changes to the discussion guide as a result of the testing.

Collecting focus group data

☐ Did you pay attention to these key tips when facilitating your focus group?

The facilitator sets the tone of the focus group, affecting whether participants feel comfortable voicing their opinions. During the focus group, a good facilitator:

- **Is not biased or judgmental.** It is important to be neutral when hearing responses.
- Let's participants know that "they're the experts," reinforcing that the purpose of the focus group is to learn from participants.
- **Is comfortable with some silence.** Some participants may contribute more if they have time to consider the question before they speak.
- **Uses probes**—questions designed to stimulate ideas or encourage further sharing—to gather additional information, like:
 - "What do others think about...?" or "Does anyone else have anything to add to what has already been said?"
 - "I'd like to hear a little more about..." or "Would you give me an example of what you mean when you say...?"
 - "Has anyone had a different experience?"
- Avoids allowing one or two people to dominate the conversation. Using probes to
 engage other participants is a good way to redirect the discussion.
- Uses an appropriate pace to ensure that all of the important questions are asked.

☐ Did you keep track and document your completed focus group discussions?

Plan ahead for how you will keep track of the focus group conversation. Will you use video or audio recording, or will there be a note taker or court recorder?

• **Video/audio:** If video or audio recording is involved, you will need to get permission from participants beforehand. Test any equipment before the session begins and make sure

- there is no background noise so you will have a clear recording. If you don't have a note taker present, you will also need to plan for the recordings to be transcribed later.
- Note taking: Arrange for a skilled note taker to be present. Even with a note taker
 present, consider recording the conversation as a backup to the written notes and to
 retrieve verbatim responses as needed. Sometimes people doing focus groups hire a
 court recorder to take notes who later sends back a transcript of the conversation.
 These services can be expensive, so be sure to plan for this in your budget.

To keep an eye of what you are learning as you go, ask the facilitator (and notetaker if present) to set aside 15-30 minutes after the focus group to debrief and write down impressions, themes and important points while the information is still fresh.

☐ Did you complete these follow up steps after your focus group was complete?

- Thank participants. At a minimum, it is important to thank the people that participated in the focus group and inform them of any next steps. If other people helped to make the focus group possible (e.g., provided space, helped contact potential participants, etc.), you may also want to thank them for their help.
- Plan for data analysis. To analyze the data you need to (1) organize the data that you recorded; (2) conduct the appropriate level of analysis; (3) interpret your findings (i.e., what do the data tell you?); and (4) identify limitations of your data collection efforts. For details on how to do these steps, see the tool How to Analyze and Interpret Data.
- Report back to participants and program planners. When people participate in an evaluation, they often like to see the result. Consider appropriate ways to report back to participants, and determine how the information will be used to help with decision making and program improvement. For details, see the tool How to Use and Share Results.

Sources:

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The Center for Community Health and Evaluation designs and evaluates health-related programs and initiatives throughout the United States. CCHE's *Measuring What Matters* curriculum is informed by the following resources:

- Centers for Disease Control and Prevention: A Framework for Program Evaluation
- University of Wisconsin–Extension: Program Development and Evaluation
- Northwest Center for Public Health Practice: Data Collection for Program Evaluation [online course]

CENTER FOR COMMUNITY HEALTH AND EVALUATION

MEASURING WHAT MATTERS

Collecting data:

How to plan and conduct interviews

Why use interviews?

An interview is a one-on-one conversation with someone who has knowledge and experience about the specific topic you are interested in. Because the people who provide the data have perspectives that are important or "key", interviews for data collection are often called "key informant" interviews.

Interviewing is useful when:

- The topic is sensitive or people are likely to be inhibited to talk about the topic in front of others
- · People have a limited reading ability
- Bringing a group of people together is difficult

INTERVIEW TOOL OVERVIEW

PLANNING

- Decide when
- Identify the sample
- Recruit participants
- Identify & train interviewers
- Develop interview protocol
- Pilot test
- Finalize Logistics

COLLECTING DATA

- Track & document data
- Key follow up steps
- You need in-depth understanding about complex topics (e.g., community participation, empowerment, or cohesiveness)
- You have a lot of open-ended questions and want to be able to ask for clarification

Planning and developing interviews

☐ Did you decide when to collect interview data based on your evaluation plan?

The timing for your interviews depends on what you want to learn about. To answer some of your evaluation questions, you may only need to do interviews once. To answer other questions, it may be useful to do them before, during, and after the program.

- Identify what program features are needed
- Get baseline data for later comparison
- Assess community needs

Before program

During the program

- Assess progress
- Learn about what is working and not working to improve the program
- Assess if the program achieved the outcomes
- Understand who the program worked for

After program

☐ Did you identify your interview sample?

The first step is to decide who to interview. It is generally useful to interview a wide range of people in an effort to capture various perspectives on the topic, but the number of interviews will depend on your specific needs and resources. Good key informants:

- Understand the situation or topic you want to learn more about and are comfortable talking about it with you.
- Represent various points of view. You will need to determine what different characteristics/demographics are important for your interviews (e.g., age, racial and ethnic backgrounds, life experiences, educational levels, religious affiliations, profession/role, etc.).

There are a number of methods you can use to identify the group of people or sample that you will be interviewing. If there is a limited number of people that participate in your program, it may be possible to interview everyone. Other options include:

- Randomly drawing names from a hat
- Choosing systematically from a list (for example, inviting every 5th person on your list)
- **Dividing the group into subgroups** based on characteristics (e.g., gender, age, geography, participant, eligible but not participating) and randomly selecting representatives from each subgroup. This method is used when you want to compare data across different subgroups.
- Recruiting people who are easy to reach (convenience sample). For example, you could approach individuals who are shopping at a farmers' market. Although this method can make it easy to recruit, the ideas expressed may not be representative of the people you're trying to get opinions from.
- **Snowball sampling.** You might also use a method where you start inviting a core group of people and ask them for suggestions of other knowledgeable people to whom you might talk. If you are working with a hard-to-reach population or have only a limited list to start with, using this method can expand your sample relatively easily. But it also may be subject to the same biases as a convenience sample.

☐ Did you figure out the logistics – the where, when and how?

Some of the additional practical aspects of interviewing include deciding about:

- Setting. Determine when and where to conduct interviews. Select the best mode of communication—in person or over the phone. The date, time and location (if in person) should be convenient for the key informant. Try to conduct interviews in a guiet, comfortable, neutral, and private if necessary, space.
- Recording. Consider recording the conversation but get permission from the key informants in advance.

☐ Did you recruit and schedule interviews?

Contact key informants to invite them to participate. It is common to use email for this initial contact, but be sure to consider the needs and resources of the group you'll be interviewing— in some cases a phone call invitation for an interview is ideal.

The initial invitation should come from someone the key informants are familiar with, and the person doing the interview can follow up with the details.

- The invitation should include the logistics (i.e., who will conduct the interview, where it will occur, and how long it will take), the purpose, and how the information will be used. If you are hoping to conduct follow-up interview at a later date, be sure to mention this up front.
- It is also important to describe the benefits of participating, including if you will share back
 what you learn. Consider if it is possible to provide incentives to your interview participants.
 Incentives can increase the likelihood that people will participate. Incentives could be a
 monetary thank you such as cash or gift cards. If incentives will be offered, that should be
 communicated in the invitation and followed up on at the end of the interview.

☐ Did you develop your interview questions and put them in a protocol?

Interviews are typically structured to some extent, although they may also be done more informally. The interview script or protocol includes the questions. It provides a general direction and sequence for the conversation, while still allowing for flexibility. Interview protocols are useful to ensure that key questions are asked and to provide some consistency from one interview to the next.

Interviews have three parts: the opening, the interview and the wrap-up. The following table describes each of these parts and the elements that should be included in your interview protocol.

Opening	 Introductions Remind the key informant how long the interview will take Review the purpose of the interview, what you'll generally talk about, and how the information will be used If recording, get permission to do so Provide an opportunity for the key informant to ask questions Use an easy, warm-up question to build rapport and get them talking
Discussion	 Guide the key informant through the questions outlined in the guide Use language that is respectful and relevant to the key informant Create comfort by having open body language and actively listening to responses. If you are the phone, this may mean saying "yes" and "I see" after their responses to keep them talking. Use probes to explore ideas in more depth and to get clarification. Good probes to use are: What other ideas do you have about? What other reasons did you have for? What do you mean by? Could you say more about? Could you give me an example of?
Wrap-up	 Be mindful of the allotted time; if more time is needed, check with the key informant about continuing for longer if needed Ask about any outstanding comments or questions

Tips for developing interview guides:

- Create an outline of topics to cover.
- Check if interview questions already exist before writing new questions. Is there something at your organization that you can adapt or modify?
- Formulate questions that:
 - Engage the key informant in a discussion. This means using open ended questions—those that can't be answered with "yes" or "no." These questions lead to longer, more discussion-oriented responses. If you use a "yes" or "no" question, be sure to follow it up by prompting the respondent to explain their answer.
 - Are easy to say—the interviewer should be able to say them naturally, without difficulty.
 - o Are short, clear and easy to hear and understand.
 - Resonate with key informants in words they use in their local context—avoid using jargon, acronyms, and overly technical words, unless that is appropriate.
 - Focus on one thing at a time. For example, do not ask, "How has the program changed the way you eat and exercise?" Instead, ask about eating habits and then ask about changes in physical activity.
- Develop follow up probes, on key topics as needed.
- Determine the logical order of questions. Your goal is to have an interview conversation that will flow naturally from one topic to the next. Typically, questions will start more general and then get more specific as the interview progresses. If you will be asking sensitive questions, it is often best to ask these later in the interview, after rapport has been established.
- Prepare opening and wrap-up remarks. These are important for building rapport and leaving the interview on a positive note where next steps are clear.

☐ Did you identify and train your interviewer(s)?

It is important to think about who is most appropriate to conduct the interviews so that you can get candid responses to your questions. When selecting interviewers, ensure that the interviewer is:

- **Neutral**. If the interview is not directly tied to your program or organization, you may be able to train program staff—for example, if you are conducting interviews with community leaders about community needs that your program could address.
- Familiar with the subject matter, but unbiased/non-judgmental so as to not influence or drive the respondents' comments—they must be able to listen without inserting their own reactions or opinions. The interview is seeking the opinion of the person being interviewed and not providing information to the person.
- Able to facilitate the conversation and get through the important questions during the requested amount of time.

The depth of the training will depend on the level of experience of the individual(s) involved. At a minimum, training should include:

- Build an understanding of the interview guide (i.e., the introduction, the questions being asked, what you need to learn, any follow-up that will be needed, and what will be done with the information) so that they can adequately conduct the interview similarly across multiple interviews, and answer any questions that respondents may have.
- Clarify expectations about how responses will be recorded and what will be done with those notes or transcripts.
- Reviewing how to engage in active listening and how to probe effectively.

When more than one interviewer is involved, training is key to ensure that they carry out interviews consistently. This often means conducting mock interviews (see below) or having two interviewer attend the first few interviews to ensure consistency. After the first few interviews, it is helpful to debrief to resolve any issues that have come up with either the protocol itself or how it is administered. This will also provide a natural check for your systems for recording and storing the interview information.

☐ Did you pilot test your interview guide?

Before beginning interviews, you will want to pilot test the interview guide by doing mock interviews. You can do this with anyone who can keep the goals of your interview and the perspectives of your informant in mind at the same time. Mock interviews can give you a sense of how long the interview will take, if the flow is logical, and whether there are any questions that are unclear or that don't get you useful responses. This can also help your interviewer(s) to become more familiar with the interview guide.

After pilot testing, make adjustments to the interview guide as needed. Do not use the data you collected in the pilot testing for your evaluation unless the respondents are part of your sample and you have not significantly changed the instrument.

Collecting interview data

☐ Did you pay attention to these key tips when conducting your interview?

The interviewer sets the tone of the interview, affecting whether the key informant feels comfortable voicing their opinions. During the interview, a good interviewer:

- Is not biased or judgmental. It is important to be neutral when hearing key informant's responses.
- Lets key informants know that "they're the experts," reinforcing that the purpose of the interview is to learn from them.
- Is comfortable with some silence. Some key informants may contribute more if they have time to consider the question before they speak.

- Uses probes—questions designed to stimulate ideas or encourage further sharing—to gather additional information
- Uses an appropriate pace to ensure that all of the important questions are asked.

☐ Did you keep track and document your completed interviews?

You may do your interviews over the phone or in person, and you may have one or more interviewers or note takers present. Developing a consistent system will ensure you don't lose any information and are learning from each interview as you go.

- Video/audio: If video or audio recording is involved, you will need to get permission from participants beforehand. Be sure to test any equipment before the session begins and make sure there is no background noise so you will have a clear recording. If you don't have a note taker present, you will also need to plan for the recordings to be transcribed later.
- Note taking: If note taking is your method of choice, arrange for a skilled note taker to be
 present. Consider recording the conversation as a backup to the written notes and to retrieve
 verbatim responses as needed.

If you have multiple interviewers, ensure that they are documenting in the same way. Consider looking across the interviews after they have each done a few to ensure consistency.

To keep an eye on what you are learning as you go, set aside about 30 minutes after the interview to give yourself time to record your impressions and clean your notes while the information is still fresh in your mind. If there are multiple interviewers for one interview, debrief the interview together. Record impressions of the overall tone of the interview, as well as important attitudes, phrases and feelings conveyed. This is particularly important when conducting multiple interviews, as it often becomes difficult to distinguish between the different interviews later on.

☐ Did you complete these follow up steps after your interview was complete?

- **Thank participants.** At a minimum, it is important to thank the people you interviewed for their participation and to inform them of any next steps. If other people helped to make the interview possible (e.g., provided space, helped contact potential participants, etc.), you may also want to thank them for their help.
- Plan for data analysis. To analyze the data you need to (1) organize the data that you recorded; (2) conduct the appropriate level of analysis; (3) interpret your findings (i.e., what do the data tell you?); and (4) identify limitations of your data collection efforts. For more information, see the tool Analyze and Interpret Evaluation Data.
- Report back to participants and program planners. When people participate in an
 evaluation effort, they often like to see the result. You should consider appropriate ways to
 report back to participants, and determine how the information will be used to help with
 decision making and program improvement. For details, see the tool How to Use and Share
 Results.

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- University of Arizona, Norton School of Family and Consumer Sciences: The Use of Qualitative Interviews in Evaluation http://ag.arizona.edu/sfcs/cyfernet/cyfar/Intervu5.htm

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- Centers for Disease Control and Prevention: A Framework for Program Evaluation
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- Northwest Center for Public Health Practice: Data Collection for Program Evaluation [online course]

CENTER FOR COMMUNITY HEALTH AND EVALUATION

MEASURING WHAT MATTERS

Collecting data:

How to plan & conduct direct observation

Why choose direct observation to collect data?

Direct observation is the collection of information using your senses. By observing, you can document activities, behavior, and physical aspects of a situation without having to depend on peoples' willingness or ability to respond accurately to questions. Observation is useful when:

- You are trying to understand an ongoing process or behavior, or an unfolding situation or event.
- There is physical evidence, or products or outcomes that can be seen.
- Written or other data collection methods seem inappropriate.

OBSERVATION TOOL OVERVIEW

PLANNING

- Decide who, what & when
- Focus
- Select format & type
- Develop a tool
- Identify & train observers

COLLECTING DATA

- Use the tips
- Key follow up steps

 Observation can occur in public situations, such as observing peoples' participation in a training or documenting how people use a community garden. Observation can also occur in more private settings like observing a patient visit in a clinic.

Planning observation

☐ Did you determine who, what and when you will observe?

The first step in planning your observation is to decide who and what to observe. Typically in evaluation, observation is used to assess the effectiveness of encounters, meetings, trainings or other interactive activities. The timing for doing your observations depends on what you want to learn about. You may only need to observe once, close to the main intervention point of the work or it may be useful to observe multiple meetings or events over time to detect changes.

- Identify what program features are needed
- Assess community needs

Before program

During the program

- Assess progress
- Observe key elements like trainings or visits
- Learn about what is working and not working to improve the program
- Assess if the program achieved the outcomes
- Understand who the program worked for

After program

Other key considerations:

- If possible, observe multiple events/encounters and make sure the event, group or people you observe are a good representation of the people who usually participate. This will help to reduce the likelihood of bias in your observation.
- It is common practice to observe the most successful sites or the most convenient people. If this is your approach, it is important not to suggest that they represent the whole population.
- Did you identify the specific things you will be observing?
- After you have identified what or whom you will observe, you need to focus your observation.
 It is impossible to observe everything that occurs during an event or encounter, so determine what information is most important. Table 1 summarizes components to observe.

Components to observe					
Characteristics	Leaders/ presenters	Interactions			
 Demographics Attitudes toward subject, others, or self Skill and knowledge levels Statements about commitments and values 	 Clarity of communication Facilitation skills Flexibility Knowledge of subject Organization of training/ meeting Use of materials, learning techniques 	 Level of participation and interest Power relationships and group dynamics Level of learning and problem-solving Levels of support and/or feelings on specific issues 			
Non-verbal behavior	Physical surroundings	Products of a program			
Facial expressionsGesturesPostureUse of physical surroundings	 The room (e.g., space, comfort, suitability) Amenities Seating arrangements Built environment (e.g., bike lanes, grocery stores) 	 Demonstrations, plans Brochures, manuals, newsletters 			

Table adapted from materials produced by University of Wisconsin–Extension: Program Development and Evaluation. http://fyi.uwex.edu/programdevelopment/

Finally, you must determine whether or not you will tell people they are being observed, as people may act differently when they know they are being watched.

- It is essential to inform people and obtain their permission for observation in some cases (e.g., observing a patient's physical therapy session)
- If your observations take place in public (e.g., documenting how people use a community garden) you may not need to inform people. However, if participants are not told, make sure the information being collected is not sensitive and that there is no risk of harm.

☐ Did you decide which kind of observation format to use: structured or unstructured?

When planning any data collection activity, it is important to consider what your stakeholders will view as useful and credible information. For observation, this will influence what you observe and who performs the observation. Being thoughtful and systematic upfront will help to ensure credibility.

One important consideration is whether to conduct structured or unstructured observations (see the table below for examples and considerations). It may be beneficial to develop an observation guide that combines a structured and an unstructured approach (see the "keeping track of your observations" section below for examples). Observing what does not happen may be just as important as observing what does.

Examples Considerations Total number of Requires a detailed guide or Structured observation checklist that lists each piece people at the Focuses on observing of information required community garden characteristics or features Numbers of people at Provides quantitative data that provide information the garden by attribute from frequency counts, about the things you need (e.g., sex, age) rankings and ratings to learn about, your Numbers of people Used for standardized indicators. Often these participating in information and a numerical are things you can count different components summary or systematically describe. of the garden Go to the community Is inclusive and describes Unstructured observation garden and write things within a participant's Looks at people, activities context down everything you or physical features as see, hear, touch, More likely to pick up on they naturally exist. This smell, and taste things you may not have should relate to your thought about in advance evaluation questions, but Provides qualitative data is not confined to a pre-set list of items

☐ Did you develop a tool to record your observations?

Observations must be recorded to be credible for evaluation purposes. You'll need to create a tool that captures:

- The date, location and a short description of the context in which the observation occurred.
- The components you chose to focus on with the format you selected (structured or unstructured).

There are lots of ways to do this depending on the time, resources, and the number of observations you'll be doing. Before developing your tool for keeping track of observational data, try to identify if there is an existing tool you could adapt or modify.

Any of the following methods can be used in combination to record your observations:

- Observation guides: Printed forms that provide space for observations. The more structured the guide (i.e., the more specific it is about the things being looked for), the easier it will be to analyze results, but this will also limit opportunities to document unexpected observations. Guides are particularly helpful when multiple people are conducting the observations.
- Recording sheets or checklists: Printed forms where observations can be recorded with yes
 or no (e.g., present or not present) or on a rating scale to indicate the extent or quality of
 something. Use checklists when there are specific actions or attributes to be observed.
- Field notes: Recorded observations in a narrative or descriptive style. This is the least structured approach to recording observations.
- Pictures: Photos and videos. Note: If you are taking photos or videos with people, you may need to have them sign release forms.

☐ Did you identify and train observers?

Observation, even when guided by a checklist, can be the most complicated data collection method for which to train observers. This is because you are generally asking them to record not only what people are saying, but other dynamics that may influence the discussion (e.g., the environment, the emotion, the level of engagement, etc.)

An observer can be either a participant or strictly a neutral observer. While the objectivity of an outside observer can be valuable, a participant has familiarity with the program and may be able to offer more insight about the group.

It is difficult for any one person to capture everything that is going on in a room or other setting, so it is useful to have more than one observer present to make sure the observation is complete and to minimize individual bias. When more than one observer is involved, it is important to make sure there is a common understanding of the checklist items so that they are capturing the same data.

Collecting observation data

□ Did you pay attention to these key tips when conducting direct observation?

Observing an event/encounter in sufficient detail is challenging—you have to be paying attention to everything. If possible, it can be useful to have a team of people conducting the observation to provide a more complete assessment and to avoid any individual biases. Observation is a learned skill that can be strengthened through experience and practice. Observers need to focus on:

- Capturing details of a complex, dynamic situation.
- Discerning what is important to record.
- Interpreting the meaning of what is observed.
- Confirming the findings—this can be done by including different perspectives in the
 observation (i.e., multiple observers) and/or conducting several observations (e.g., multiple
 occurrences of events/encounters) before coming up with a conclusion.

☐ Did you complete these follow up steps after your observation was complete?

Thank participants. At a minimum, it is important to thank the people that helped make the observations possible—the instructors, teachers, practitioners, meeting chairperson—and to inform them of any next steps. If participants knew they were being observed, you may talk to your point of contact to identify an appropriate way to thank them for their participation.

Plan for data analysis. To analyze the data you need to:

- organize the data that you recorded;
- conduct the appropriate level of analysis;
- interpret your findings (i.e., what do the data tell you?); and
- identify limitations of your data collection efforts.

For details on how to do these steps, see the tool How to Analyze and Interpret Data.Report back to participants and program planners. When people participate in an evaluation effort, they often like to see the result. You should consider appropriate ways to report back to participants, and determine how the information will be used to help with decision making and program improvement. For details, see the tool How to Use and Share Results.

Sources:

University of Wisconsin–Extension: Program Development and Evaluation http://fyi.uwex.edu/programdevelopment/

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CENTER FOR COMMUNITY HEALTH AND EVALUATION MEASURING WHAT MATTERS

Collecting data:

How to plan and conduct surveys

Why choose a survey to collect data?

A survey is a questionnaire (written or verbal) that is administered verbally or in writing to your focus population. Surveys are a good method to use to learn about:

- Knowledge—what people know or how well they understand something
- Beliefs—people's attitudes, opinions
- Behaviors—what people do
- Attributes/demographics—who people are

In comparison to many of the other qualitative methods (interviews, focus groups, and observations),

SURVEY TOOL OVERVIEW

PLANNING

- Define the sample
- Decide how & when to administer
- Develop the questions

COLLECTING DATA

- Distribute & collect
- Monitor & record responses
- Calculate response rate
- Key follow up steps

surveys provide more standardized and consistent data that can be more easily combined and analyzed. Surveys can help you to gather both qualitative and quantitative information. Also, survey responses can be anonymous, which is very helpful if you are asking about sensitive or personal information.

Planning and developing surveys

☐ Did you identify the group or sample you'll survey?

A survey is a good choice for collecting data from a large group of people. The people who you are asking to participate in your survey are called your sample. The number of people you include, or the sample size, depends on the level of detail you are interested in collecting, as well as by how much data you need to draw strong conclusions.

- For example, if your program affects the entire county, you would likely survey a large number of county residents but not the whole county. However, if it is a program that reaches a small number people (e.g., a class, conference, etc.), you could survey everyone.
- To be able to detect population-level change and to be able to generalize that information to a larger population requires a large sample size. Consult a sampling expert if you intend to detect statistically significant change in a population in order to define a sample size.

If you have to choose a subset of people to survey, there are many different ways to sample your population, including:

Randomly drawing names from a hat (random sample)

- Choosing systematically from a list (for example, inviting every 5th person on your list) (systematic sample)
- Dividing the group into subgroups based on characteristics (e.g., gender, age, geography, participant, eligible but not participating) and randomly selecting representatives from each subgroup. This method is used when want to compare data across different subgroups.
 (Stratified sample)
- Recruiting people who are easy to reach (convenience sample). For example, you could
 approach individuals who are shopping at a farmers' market. Although this method can make
 it easy to recruit, the ideas expressed may not be representative of the people you're trying
 to get opinions from.
- Snowball sampling. You might also use a method where you start inviting a core group of
 people and ask them recommend other knowledgeable people for you to survey. If you are
 working with a hard-to-reach population or have only a limited list to start with, using this
 method can expand your sample relatively easily. But it also may be subject to the same
 biases as a convenience sample.

If you are administering a survey, but it is not your only method for collecting information, you may consider only including people in the survey sample who haven't already been contacted via your other methods (e.g., interviews.) This helps to avoid over burdening those who participate.

☐ Did you decide how and when you will administer the survey?

To decide how to administer your survey you'll want to focus on the best way to reach your sample. Modes of administration to consider include:

- Paper questionnaire (mailed or handed out)
- Web-based questionnaire
- In-person, verbal survey (i.e., administered one-on-one by a second party, such as an outside evaluator or a member of the program staff)
- Telephone survey (i.e., conducted over the phone)

Ask yourself these questions to choose how to administer your survey:

- 1. What kind of access you have to your sample: is it a pre-existing group of people that you can meet with in-person? Is it a wider, more disparate group?
- 2. The resources available to them (e.g., do they have computers with internet, phones?)
- 3. The willingness of your sample to invest time responding to your survey?

In-person and telephone surveys can be time consuming and costly and may limit how many people can be included in your evaluation. Although much less costly, web-based surveys are limited to people with access to a computer and, like mailed surveys, often result in low response rates. Follow-up reminders or other measures are typically needed to get an adequate number of respondents. To increase response rates and thank people for participating, you may consider providing incentives to respondents, such as gift cards or raffles.

☐ When should we administer a survey?

The timing of the survey depends on what you want to learn. You may only need to do a survey one time, however, depending on what you want to learn, it may be useful to do them at multiple points. It's also important to consider your stakeholders and the timing that is ideal for them. To decide when to administer your survey, consider the elements below.

During the program · Identify what program Assess if the program features are needed achieved the outcomes Assess progress · Get baseline data for later • Understand who the program Learn about what is working worked for comparison and not working to improve • Assess community needs the program After program Before program Surveys can be given before and after or, pre and post, as well. For example, a training Before and after program could administer a survey at the beginning and end of the training top assess program whether participants learned what was intended.

☐ Did you develop the questionnaire you will use for your survey?

A questionnaire is the data collection instrument generally used when conducting a survey. *Survey* refers to the method; *questionnaire* refers to the tool you use. Questionnaire design is complicated because you are using short questions that you hope everyone will interpret and answer in a similar way. Poorly designed questions can result in misleading data and, consequently, erroneous conclusions. Plan to involve others to get a variety of ideas and opinions, and plan to have multiple drafts before the questions and format are finalized. Before writing your questionnaire, be sure to research whether there is something you could adapt or modify.

Tips for developing questionnaires:

- Make questions short and clear, ideally no more than 20 words.
- Ask about one thing at a time. For example, the question, "Have you increased your
 awareness of the importance of physical activity and nutrition?" involves two concepts and
 would be difficult to respond to clearly.
- Do not use jargon and define or write out all acronyms.
- Keep in mind the people who will be completing the questionnaire. Questions should be tailored to the group's characteristics (e.g., age, culture, language) and written at an appropriate reading level. This is true whether the survey will be conducted in written form, online, in-person, or by telephone.
- **Be neutral in the wording** of the questions to avoid introducing bias. Slanted questions will produce slanted results. For example, instead of, "Do you agree that the park has benefited the neighborhood?" ask, "In your opinion, how has the park affected the neighborhood?"

- **Give exact instructions** to the respondent on how to record answers, like, "check all that apply" in a list of possible answers.
- **Decide how many questions to include.** A general rule is to limit questions to only those you *need* to know in order to answer your evaluation questions. Purge questions that would merely be *nice* to know. The more quickly and easily a questionnaire can be completed, the more likely it is that people will respond and finish the entire thing.
 - Consider how much time the survey will take to complete (see pilot testing section below); think about the context in which it will be administered (who, how, where, when), and balance your need for data with the burden you can reasonably place on participants.
 - o Limiting the number of open-ended questions will shorten the amount of time it takes.
- Pay attention to the sequencing/flow of questions:
 - Questions should flow logically from one to the next.
 - Start with general questions and progress to more specific ones.
 - Questions should go from least sensitive to most sensitive.
 - Generally, demographic questions are asked at the end of a survey, though there
 may be reasons to start with demographics (e.g., if the survey is long and you want
 to make sure to these questions are answered, or if you will use demographics to
 direct respondents to different sets of questions).
- Make a written or web survey visually appealing using clear formatting and blank space, so that it doesn't look overwhelming or confusing.
- Proofread your survey—poor grammar and typos look unprofessional and can result in bad data.

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Types of survey questions

Questions with a set of responses to choose from					
Type of question	Example	Considerations			
Closed-ended responses provide a set of possible responses from which to choose. Includes: Ordered responses (see below) Unordered responses (see below)	How often to do you use our community garden? 1. Never 2. A few times a year 3. Once a month 4. A few times a month 5. Once a week 6. More than once a week	 Provides uniform answers Responses can be easily compiled for quantitative analysis Easily administered to large groups Easy for respondents to complete Imposes fixed ideas/values on respondents by forcing them to choose from limited options Less likely to uncover surprising information Little room for nuance/deeper understanding 			
Ordered responses provide a set of possible responses organized in a sequence. Includes: • Yes/no questions • True/false questions • Rating scales (see below)	How many people currently live in your household? 1. 1 2. 2 3. 3–4 4. 5–6 5. More than 6	 Can be used to answer, "how much," "how many," or "how often" Each response option in the sequence should be distinct from the others without overlap. 			
<u>Unordered responses</u> provide a set of possible responses, but the options don't follow a particular sequence.	Which of the following is the most valuable component of the park? (Select only one.) 1. Community garden 2. Playground 3. Walking trails	 Each response should contain only one item Instruct respondents clearly, e.g., "select only one" or "choose all that apply" Can add an "other" response and ask respondents to "please specify" to make sure you capture any additional thoughts. This is called a partially closed-ended response 			

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Questio	ns with	a rating	scale
_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			

Type of question Example Considerations

<u>Rating scales</u> provide a set of responses along a continuum.

Includes scales, which:

- May or may not be numeric
- May or may not have a mid-point or neutral option

How satisfied were you overall with the class?

- 1. Very satisfied
- Somewhat satisfied
- Neither satisfied nor dissatisfied
- 4. Somewhat dissatisfied
- 5. Very dissatisfied

Can ask the extent to which respondents agree with a statement (e.g., "strongly agree, agree, disagree, strongly disagree")

- Can ask respondents to rate the quality of something (e.g., "excellent, good, fair, poor")
- If deciding whether to include a neutral option, consider the nature of the question and what you want to learn from the results
- When using a rating scale, make sure the stem of the question matches the format of the responses. For example, if the question asks about the level of <u>interest</u>, the options might be "very interested, interested, somewhat interested, not interested"

Questions where people write in their answers

Type of question Example Considerations

Open-ended responses stimulate free thought by asking people to write their answer in their own words, rather than choosing from a set of response options.

How do you think the community garden can be improved?

- Provides relatively rich information.
- Allows participants to report thoughts, opinions and feelings
- People may be reluctant to write opinions
- Only ask for <u>brief</u> responses in selfadministered questionnaires
- If more in-depth responses are needed or if there are many open-ended questions, a self-administered questionnaire may not be the best method
- May make analysis more complex

☐ Did you pilot test your survey?

It is always a good idea to test your questionnaire before you send it out, leaving time to make a few tweaks before you send it to your sample. You do not need to pilot test your questionnaire with a large number of people, but your testers should be representative of your sample or at least familiar with the perspective of the respondents so that you are getting an accurate sense of how someone will actually respond to your questions.

Ask pilot testers to respond to your questions and then provide you with feedback about their experience (e.g., clarity, appropriateness of length, etc.). Pilot testing provides valuable information about:

- How long it takes to complete the questionnaire
- Whether the instructions and the questions are clear
- Whether questions are well suited to the group being surveyed (e.g., appropriate terminology and reading level)
- How easy it will be to implement

After pilot testing make any necessary adjustments to your questionnaire. Do not use the data you collected in the pilot testing unless the respondents are part of your sample and you have not significantly changed the questionnaire.

Collecting survey data

☐ Did you distribute and collect the survey?

Surveys can be distributed and collected in several ways. The people responsible depend on *how* the survey is being administered.

	Who should introduce and distribute the survey?	How are responses submitted?
Web-based (email or web link)	Introduced by a known person to invite participation and explain the purpose of the survey.	Web-based surveys are gaining popularity because they are relatively easy to complete and submit.
	In this initial email, this person may send a link to the survey or let people know to expect to receive a follow-up email from the entity that is administering the survey.	Sample is limited to those who have access to a computer and the internet.
	Note: If the survey includes identifiable or sensitive information, it may be important for it to come from a neutral third party so that people feel like they can be candid.	

	Who should introduce and distribute the survey?	How are responses submitted?
Paper (mailed)	Introduced by a known person to invite participation and explain the purpose of the survey. For example, if you are doing a community survey, you may have a city or county leader send a cover letter with the survey to introduce it and ask for participation.	With the survey you should provide a postage-paid return envelope and/or identify drop boxes in convenient locations. Note: If the survey includes identifiable or sensitive information, it may be important for the survey to be returned to neutral third party so people feel like they can be candid.
Paper (in- person)	Introduced and distributed at end of event by the person who has been working with respondents. If multiple people are introducing the survey, ensure the same introduction and directions are provided.	Participants are usually asked to turn in the questionnaire before they leave. Response rates can be improved by allowing participants time to complete the questionnaire during the event.
Verbally (in- person or phone)	Introduced by a known person to invite participation and explain the purpose of the survey. Ideally a neutral person or people—unknown to the respondents—will conduct the survey. Training is very important to make sure the survey is administered the same way every time.	Responses are recorded by the person administering the questionnaire verbally.

☐ Did you monitor your responses and send reminders if needed?

You and your team are hoping to reach the entire sample you have contacted to answer the questionnaire. If needed, you may send one or more follow-up reminders or resend the questionnaire with the reminders to increase your response rate. Most commercial, web-based survey tools have an reminder feature built-in. If you expect a poor response, you might need to increase the sample size or offer an incentive, such as a gift card or entry into a drawing.

☐ Did you develop a way to track and record your responses?

Establish a plan for how you will track and record survey responses as they come in. For example, will you use a spreadsheet or statistical software to track responses? Web-based survey programs will usually compile and code the results for you. Either way, you will need to develop a database (simple or complex) to record responses. You may need to assign and train people to do data entry. You will also need to make decisions about how you will deal with missing or incomplete data. For example, if respondent only answers 5 of your 20 questions will you count all/none/ part of their survey? (See the tool How to analyze and interpret data to support survey analysis.)

☐ Did you calculate your response rate?

A response rate is the percentage of people who complete and return a survey. For example, in a web-based questionnaire, 100 people were sent a questionnaire and 72 people responded, this makes a 72% response rate (72/100). The response rate is calculated by dividing the number of people who responded to the questionnaires by the total number people who received it. It is common to calculate the response rate during a survey to know when/if reminders are needed, and at end of the survey to identify whom you reached. Knowing how many survey respondents you reached, and who wasn't included (as they did not respond), can be helpful as you interpret results.

☐ Did you do these follow up steps after your survey was complete?

- Thank participants. At a minimum, it is important to thank the people who responded to your survey for their participation and to inform them of any next steps. If other people helped to administer the survey you may also want to thank them for their help.
- Plan for data analysis. To analyze the data you need to (1) organize the data that you recorded; (2) conduct the appropriate level of analysis; (3) interpret your findings (i.e., what do the data tell you?); and (4) identify limitations of your data collection efforts. For details on how to do these steps, see the tool How to Analyze and Interpret Data.
- Report back to participants and program planners. When people participate in an evaluation, they often like to see the result. You should consider appropriate ways to report back to participants, and determine how the information will be used to help with decision making and program improvement. For details, see the tool How to Use and Share Results.

Sources:

- Dillman, D.A., Smyth J., & Christian, L.M. (2009). *Internet, Mail and Mixed-Mode Surveys: The Tailored Design Method* (3rd ed.). Hoboken, NJ: John Wiley Co.
- University of Wisconsin–Extension: Program Development and Evaluation http://fyi.uwex.edu/programdevelopment/
- W.K. Kellogg Foundation: Evaluation Handbook. https://www.wkkf.org/resource-directory/resource/2010/w-k-kellogg-foundation-evaluation-handbook

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CENTER FOR COMMUNITY HEALTH AND EVALUATION MEASURING WHAT MATTERS

How to analyze qualitative data

Qualitative analysis involves looking for **themes and patterns** across the stories and descriptions (narrative data) that respondents have shared as part of your data collection. Narrative data often comes from:

- People writing in answers to open-ended survey questions
- Interviews transcripts
- · Focus groups transcripts
- Observation notes

Start by deciding how you are going to analyze your narrative data and making sure you have all of it in one place for your analysis. Simple analysis can be done using basic Word tables. Another option is to print the transcripts or open-ended responses and highlight themes or patterns by hand. (For more complex analysis, there are software programs to assist you—e.g., Atlas.ti, NVivo—but most of these require additional cost and training.)

When analyzing qualitative data, here are some guidelines to keep in mind:

- Make the analysis fit the purpose for the evaluation. How will this information be used? What
 do stakeholders really want to learn?
- It is tempting to include too much in your analysis because qualitative data can have a lot of interesting, rich detail. To conduct analysis effectively, focus on the needed information.
- Interpretation is more than description—think about the significance of the findings.
- Allow adequate time for analysis.

What are the steps for analyzing qualitative data?

- Carefully read through and get to know your data.
- Identify themes that you will focus on in your analysis, which you will categorize as codes.
 They can emerge as you begin reading through your data, or you can identify them in advance.
- Read through transcripts and open-ended responses and highlight key quotes using highlight functions in Word or hand-written brackets. Add the corresponding code by each highlighted section.

NOTE: If more than one person is coding, it is a good idea to check that everyone is using the codes in the same way (inter-rater reliability). To do this, select one interview and compare your codes to ensure that you are coding consistently.

- Sort quotes into groups based on the codes (themes) so you can look at all the quotes that were coded the same way at the same time. You can cut and paste similar responses (either in Word or by hand) or use Word table to sort and group responses.
- Interpret patterns. As you look at the data for each theme, note the specific patterns you see and what new insights should be highlighted.
- Determine if there are themes for which additional analysis would be beneficial. For example, are there ways to sort your data that might provide you with additional insight? Are there themes that you would like to break down further into sub-themes?
- Pull relevant quotes from the data to help tell the story when reporting.

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CENTER FOR COMMUNITY HEALTH AND EVALUATION MEASURING WHAT MATTERS

How to analyze quantitative data

Quantitative analysis involves counting or performing summary calculations. The table on the following page provides a description of common techniques and calculations you could use. For these simple calculations you can use a spreadsheet program like Excel to organize and analyze your data. After completing the initial calculations, you may identify areas where more detailed analysis could provide you additional insight.

✓ **Accurate.** Do you know who your respondents are for each question? Respondents are the people who responded to *each particular question* in your data collection method (e.g., your survey or interview). Sometimes people skip a question and would not be counted as respondents for that question in your analysis!

Quantitative analysis guidelines

When analyzing quantitative data, here are some general guidelines to keep in mind:

- When you are looking at your findings, provide both the number and percentage for each
 response. Percentages alone can be misleading because people don't have a sense of the
 number of people that responded to that question. This is particularly a problem when you
 have a small number of respondents. In general, avoid reporting percentage if the number is
 less than 20.
- It is important to figure out correct base (denominator) for each item you analyze. Use the actual number of responses to *that particular item/question*, not the overall number of responses to the entire survey. For example, sometimes people will skip answering a particular question and they shouldn't be included in the base (denominator) for analysis that particular question.
- Do not average percentages this won't give you an accurate calculation. Use the original numbers when calculating overall percentages.
- Be careful when collapsing response options into bigger categories for your analysis. You can lose a lot of detail in your data by doing this.
- Do not automatically use averages instead of using more complete information. Averages are useful, but don't take into account people who responded very positively or very negatively (i.e., outliers), which can provide useful information.
- If you are interested in more sophisticated analysis of quantitative data you will need access to an analysis program (e.g., SPSS, SAS, STATA) and training on how to use it.

Once you are satisfied with your analysis, you need to determine the best way to share the data and report on the results. This typically entails creating tables, charts and/or other data displays to show the data.

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Quantitative analysis techniques

Response rates. Often you will want to calculate and track the response rate for a given method. For example, how many of surveys that you sent out were returned? And of those, how many were usable?

To do this calculation, you need to know how many questionnaires fall into each step of the process. The response rate of completed surveys or interviews divided by the number of surveys distributed or people contacted (sample size). E.g., if 120 surveys were distributed and 76 responded, the response rate is 76/120, or 63%.

Purpose	Analysis technique	How to do the calculation	Sample question and answer
Do you want to know the number of respondents that	Frequency	Count the number of responses for each response option	How many respondents indicated that they had participated in the class?
selected a response?			14 students participated in the class
Do you want to know what percentage of respondents	Percentage	Calculation: the # of respondents selecting option 'A' ÷ total number	What percentage of respondents indicated they attended the class monthly?
answering the question selected each response?		of responses = PERCENT	10 students selected option A (attending monthly) ÷ 20 students that responded = 50% of students attended the class monthly.
Do you want to know the full range of scores/values to a question?	Range	Identify the highest and lowest value. Describe this as "low # - high #"	What is the range of number of people in a household?
		g	Household size ranged from 1-6 people
Do you want to know the	Mean	Add up (sum) all the responses ÷	What is the average number of people in a household?
average of all items in a numerical set of data?	(average)	total number of responses = MEAN (average)	You have 21 responses, as follows: 1, 1, 2, 2, 2, 2, 3, 3, 3, 4, 4, 4, 4, 4, 4, 4, 4, 5, 5, 6, 6
			The total of all responses is 73, divided by the number of responses (21), means the average household size is 3.5.

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Purpose	Analysis technique	How to do the calculation	Sample question and answer						
Do you want to know the mid-point in a range of scores/values when you have some significant outliers (i.e., very high or very low numbers)?	Median	Sort all responses values in ascending (or descending order). The median will be the value at the mid-point of the list (e.g., if you have a list of 21 responses, the median would be the value listed 11 th).	Υοι 1, 1	What is the median number of people in a household? You have a list of 21 responses, as follows: 1, 1, 2, 2, 2, 2, 3, 3, 3, 4, 4, 4, 4, 4, 4, 4, 4, 5, 5, 6, 6 The median is 4, which is the 11 th number.					
		If you have an even number of responses, the median is the average of the two values at midpoint (i.e., with a list of 20 responses, average the 10 th & 11 th responses).	-						
Do you want to understand the average when you are using a rating scale like satisfaction with the program?	hen you are average "weight" to each response opt scale like in the rating scale				What is the weighted average of satisfaction with the program? The weights range from 1 (not at all satisfied to 5 (very satisfied) For example:				
		times the option was selected. Calculate the subtotal (weight X # responses) for each response option.		Response Option	Weight	# Responses	Weight x # Responses		
		Divide that total by the # of		1 (not at all)	1	4	4		
		responses.		2	2	8	16		
				3 (neutral)	3	9	27		
				4	4	15	60		
				5 (very)	5	14	70		
				TOTAL		50	177		

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Purpose	Analysis technique	How to do the calculation	Sample question and answer			
Do you want to compare the responses of two different groups?	Cross tabulation	Identify "groups" that you are interested in and calculate frequencies and percentages for each group's responses; compare and look for similarities and differences. (Requires statistical analysis to determine if the difference	Which participants were more satisfied with the classes? For example, your crosstabs table might look like this.			
				Satisfied	Not satisfied	
			Sex			
			Male	46%	54%	
			Female	45%	55%	
		between groups is significant.)	Has primary care physician?			
			yes	65%	35%	
			no	26%	74%	
			Has been diag	nosed with chr	onic condition?	
			yes	47%	53%	
			no	44%	56%	

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