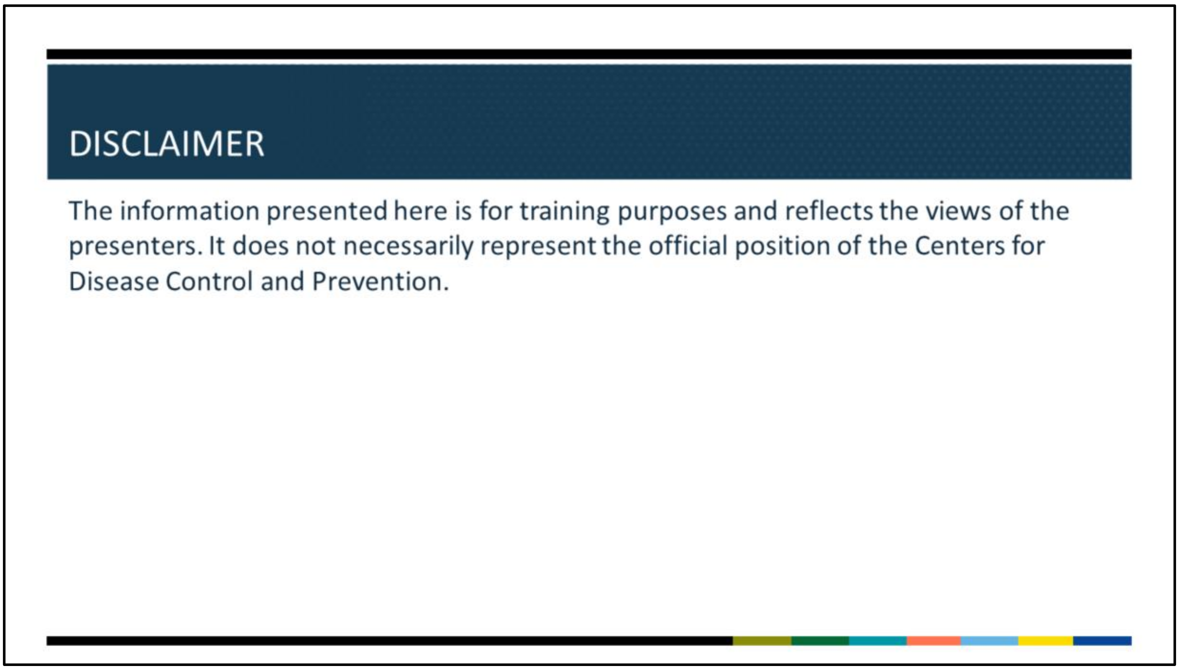
MODERATOR:

Welcome to today's Coffee Break presented by the Applied Research and Evaluation Branch in the Division for Heart Disease and Stroke Prevention at the Centers for Disease Control and Prevention.

We are fortunate to have **Rachel Davis** as today's presenter. She is a lead Evaluator from the CDC's Division for Heart Disease and Stroke Prevention and sits on the **Evaluation and Program Effectiveness Team**.

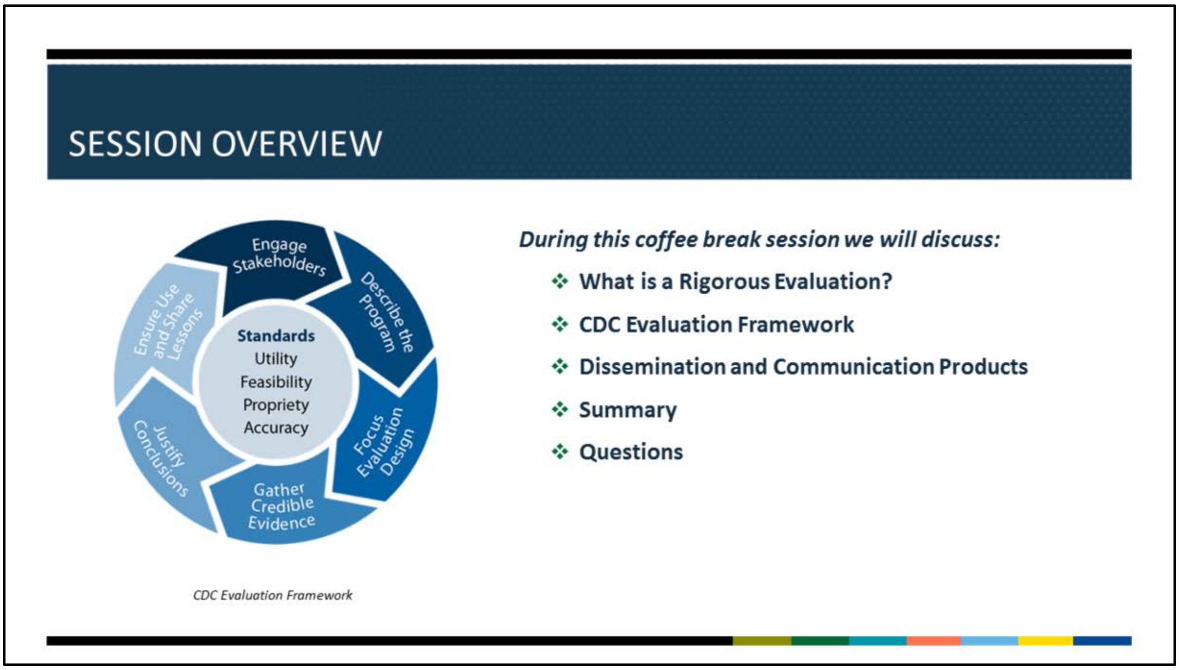
My name is **Nicole Dickerman** and I'll be today's moderator. I am also on the **Evaluation and Program Effectiveness Team** within the **Applied Research and Evaluation Branch**.



MODERATOR:

The information presented here is for training purposes and reflects the views of the presenters. It does not necessarily represent the official position of the Centers for Disease Control and Prevention.

So, without further delay. Let's get started. **Rachel** the floor is yours.



Thank you, Nicole! During today's coffee break session we will discuss what a rigorous evaluation is, how you can apply the CDC Evaluation Framework to your rigorous evaluation planning, provide examples of dissemination and communication products, and I'll close with a brief summary and then we'll open it up for questions.

As defined by the International Initiative for Impact Evaluation, a rigorous impact evaluation comprised of "analyses that measure the net change in outcomes for a particular group of people that can be attributed to a specific program using the best methodology available, feasible and appropriate to the evaluation question that is being investigated and to the specific context“.

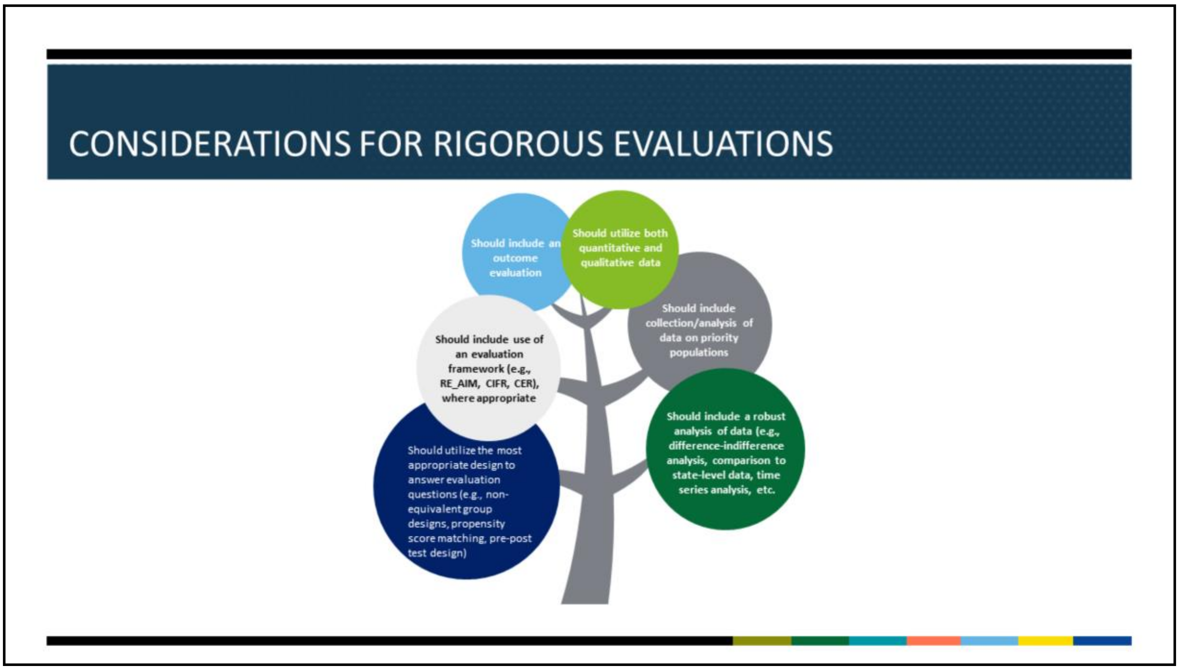
Rigorous evaluations can be challenging and should not be mistaken for or conducted in place of program monitoring, process evaluation or experimental research study.

HOW MUCH RIGOR DOES AN EVALUATION NEED?

- There are many reasons to conduct evaluation:
  - Improve programs
  - Be Accountable
  - Demonstrate Effectiveness
  - Assess Results of Replication
  - Add to practice based evidence
- Considerations for rigor should include:
  - Reason for evaluation
  - Feasibility
  - Gaps in the literature

Program improvement, accountability, determining effectiveness, assessing the findings from replicating a program, and expanding practice based evidence are just a few reasons to conduct rigorous evaluations.

In addition to considering the aforementioned reasons, also decide whether this method is practical, attainable and findings will fill gaps in the literature.



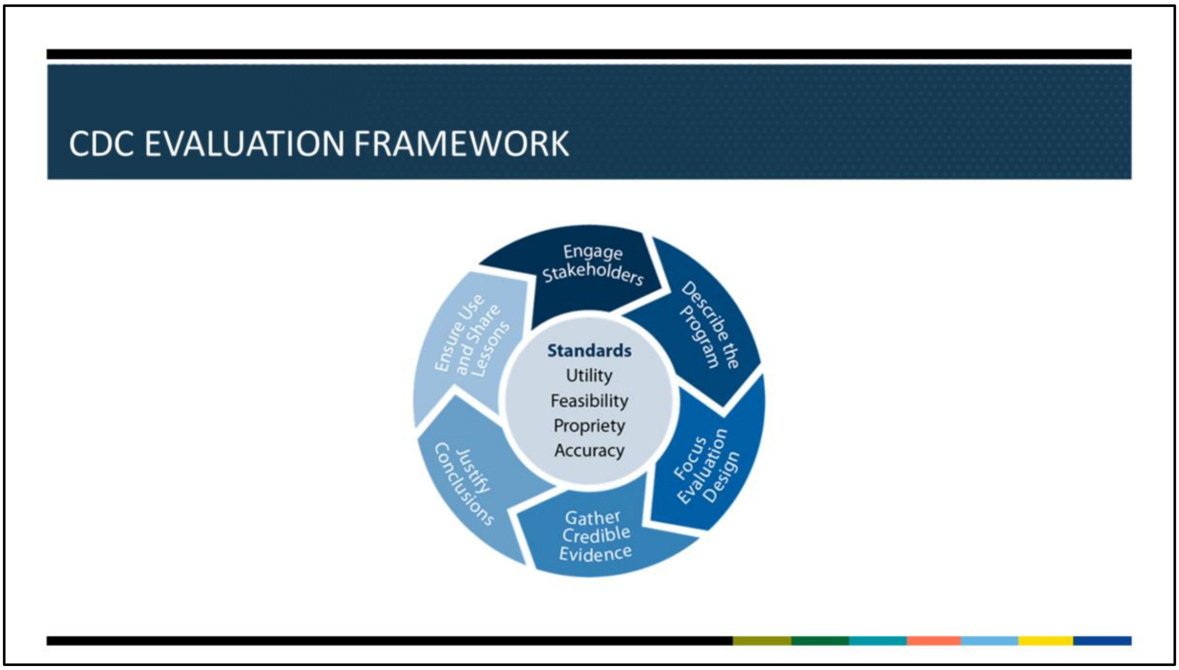
If you decide that a rigorous evaluation is the best method for you, the evaluation should:

- ❖include an outcome evaluation.
- ❖utilize both quantitative and qualitative data.
- ❖utilize an evaluation design that is appropriate for answering your evaluation questions. Some examples include non-equivalent group designs, propensity score matching, and pre-post test design
- ❖include use of an evaluation framework for

example, Reach, Effectiveness, Adoption, Implementation & Maintenance (RE-AIM), Consolidated Framework for Implementation Research (CIFR), Claim, Evidence & Reasoning (CER) Model, where appropriate

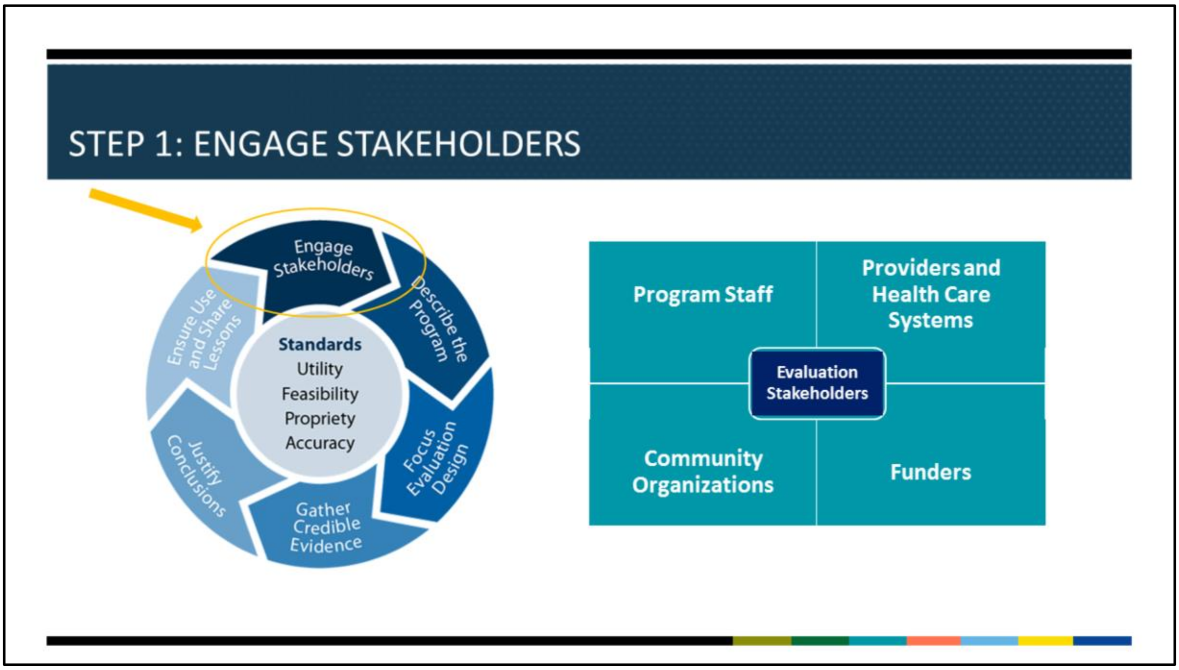
- ❖ And include a robust analysis of data
- ❖ You might also include the collection and analysis of data on priority populations.

When planning your rigorous evaluations, please keep these elements in mind so that you create the best opportunity to produce meaningful findings that contribute to practice based evidence around the innovative work your programs are doing.



This is the CDC Evaluation Framework that many of you have seen before. Briefly, the cycle begins by engaging your stakeholders, then describing the program, and focusing your evaluation design.

Then you move to gathering credible evidence, justifying conclusions, and ensuring use and sharing lessons learned. The CDC Evaluation framework is an iterative process, in that each of these steps are continuously updated throughout the project life cycle. In today's presentation, we'll walk through each step to help you as you're developing your plans for rigorous evaluation.



The first step in the framework is to engage stakeholders. Stakeholders are any people or groups of people that may be involved or have a vested interest in the outcomes of your work. This means talking to your partners, engaging your funder, and assessing how your evaluation results can contribute to the public health literature.

Examples of these stakeholders may be your programmatic staff and leadership, the providers and health care systems that you work with, community organizations with whom you have partnered, CDC, and others.

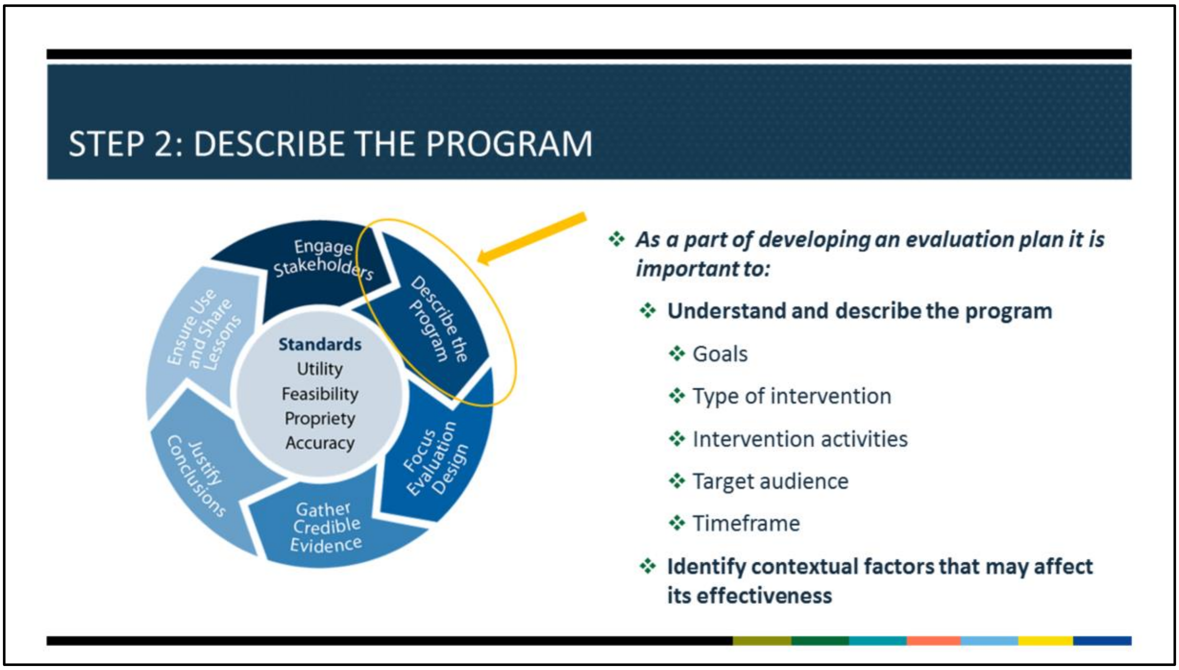
IDENTIFYING AND ENGAGING EVALUATION STAKEHOLDERS

Criteria	Question
Role	Who are the key staff members involved in the activities?
Effort	How are you able to contribute to program implementation and data collection?
Timing	Are there any barriers that might affect data collection activities?
Dissemination	How frequently would you like to receive program updates?
	What type of information is most useful to you when engaging with stakeholders?
	In what format would you prefer to receive dissemination products?

Before program implementation, consider engaging potential stakeholders in an information-gathering session to gauge their interest and investment in the evaluation early in the planning process.

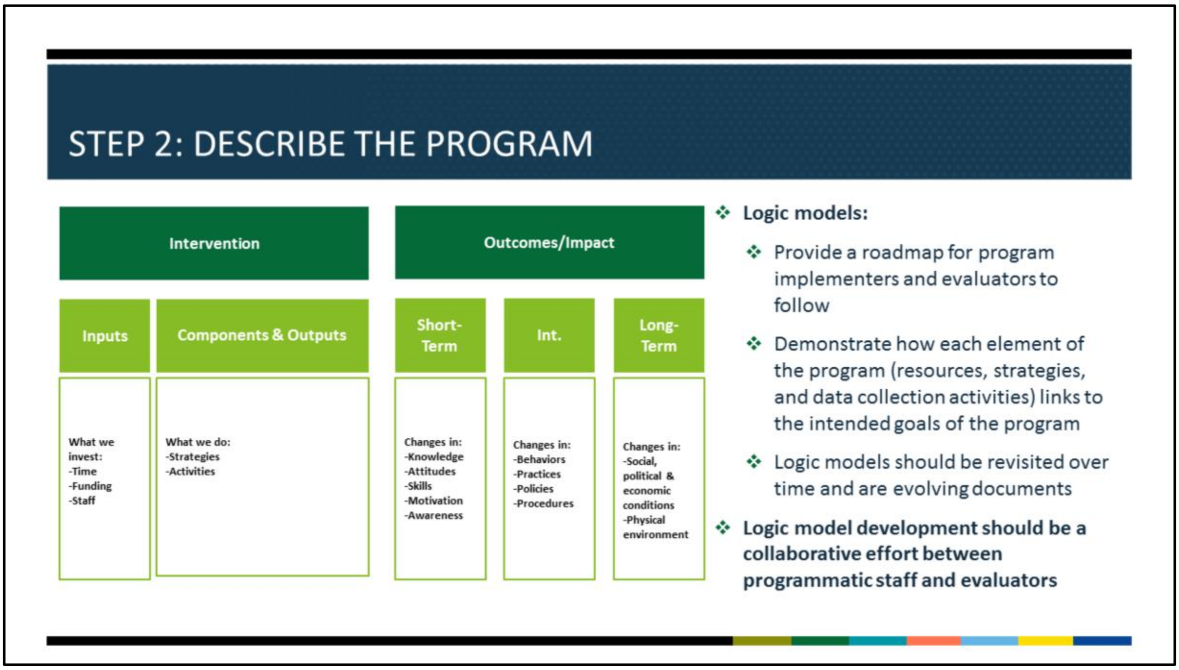
This table includes important elements to consider when engaging stakeholders.

Stakeholders can help you to understand what the focus of the evaluation should be during the planning process. By sharing your potential evaluation questions with your stakeholders, you can get their buy-in early and understand how the evaluation can be the most useful to your program and to your stakeholders. It can also help your program operate smoothly and help you to obtain data.



The second step in the CDC Evaluation Framework is to describe the program and identify contextual factors that may affect its success.

As a part of developing an evaluation plan, it is important to understand and describe the program by taking note of the goals of the program, the types of interventions, the activities, the target audience, and the timeframe of the intervention. Also, identify contextual factors that may affect the program's effectiveness. Contextual factors are external conditions that may have influence or somehow impact the implementation of the program. Understanding contextual information can help programs modify program activities and better understand program outcomes.



Part of describing the program is often to develop a logic model. Logic models provide a roadmap for program implementers and evaluators to follow and demonstrate how each element of the program (including resources, strategies, and data collection activities) links to the intended goals of the program. The development of logic models should be a collaborative effort between programmatic staff and evaluators. Also, logic models should be revisited over time and be seen as evolving documents.

LOGIC MODELS

Component of Logic Model	Definition
Inputs	Human, financial, and organizational resources that programs need for implementation
Activities	Specific, defined efforts employed by programs to implement the program
Outputs	Immediate results of program activities. Each activity should have a corresponding output
Outcomes	Results of the program that may affect the knowledge, awareness, and behaviors of the target audience. These may be broken into short-term, intermediate, and long-term outcomes
Impact	The health outcome change that the program aims to affect

Traditionally, logic models include inputs, activities, outputs, outcomes, and impact.

Logic models can help to describe how the inputs facilitate implementation of the strategies and activities, which directly relate to the outputs. These activities are designed to reach the intended short, intermediate, and long-term outcomes and eventually, impact the health of the selected or identified population. So, developing a logic model can help as you plan for your final communication products and publications down the road.

STEP 3: FOCUS THE EVALUATION DESIGN

- **Evaluation Questions**
  - **Process Evaluation**
    - Evaluation Core Area: Approach, Efficiency
  - **Outcome Evaluation**
    - Evaluation Core Area: Effectiveness, Sustainability, Impact
- **Evaluation Design**
  - **Quasi-experimental:** compare outcomes between nonequivalent groups and do not have to involve random assignment
  - **Non-experimental/Observational:** time-series analysis, cross-sectional, or case studies

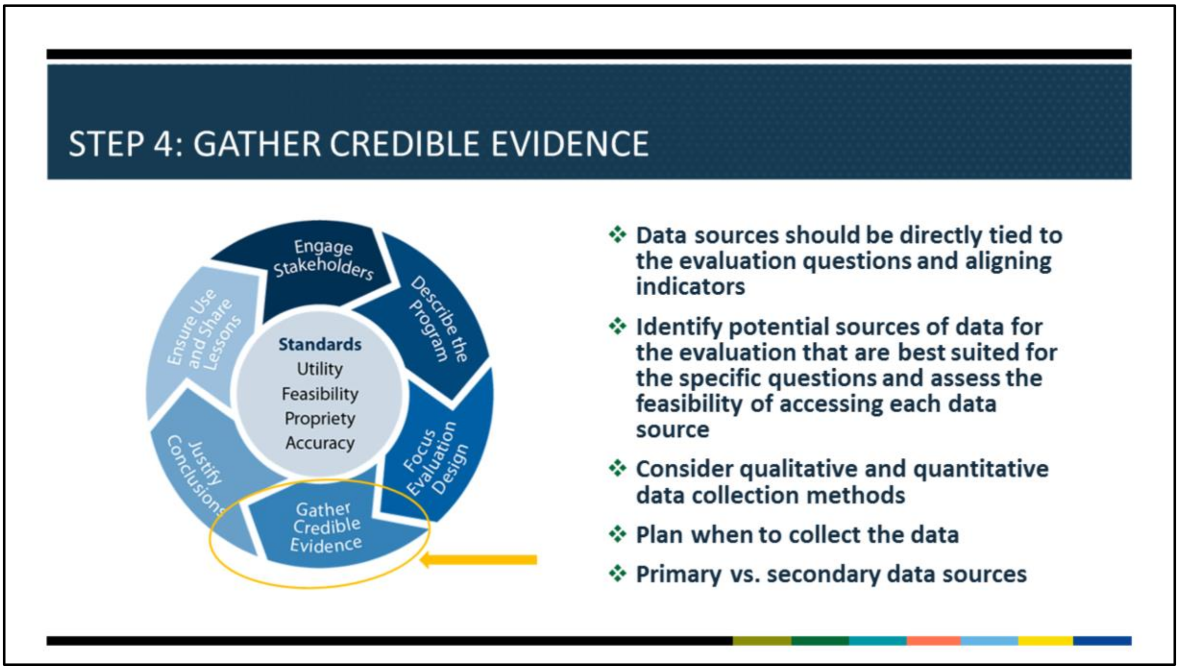
The next step in the CDC Evaluation Framework is to focus the evaluation design. In order to select the most rigorous, feasible and appropriate evaluation design, it is helpful to focus on developing core evaluation questions.

When developing your evaluation questions, it is important to remember to engage your stakeholders as stated earlier so that you can develop an evaluation that is meaningful to them. Programs should develop process and outcome evaluation questions. Process evaluation questions may evaluate how the program is being implemented, if it's being implemented as intended, and what the facilitators and barriers of implementation are. This aligns with understanding your programs' approach to implementation and efficiencies. Outcome evaluation questions will dig deeper into the actual outcomes of the program and ask whether the program is meeting its goals and objectives. Findings from these questions allow you to understand things like how effective and sustainable as well as how impactful your program or intervention is. It is also important to consider what type of design you will want to use for your evaluation. Consider quasi-experimental methods, or non-experimental, observational methods.

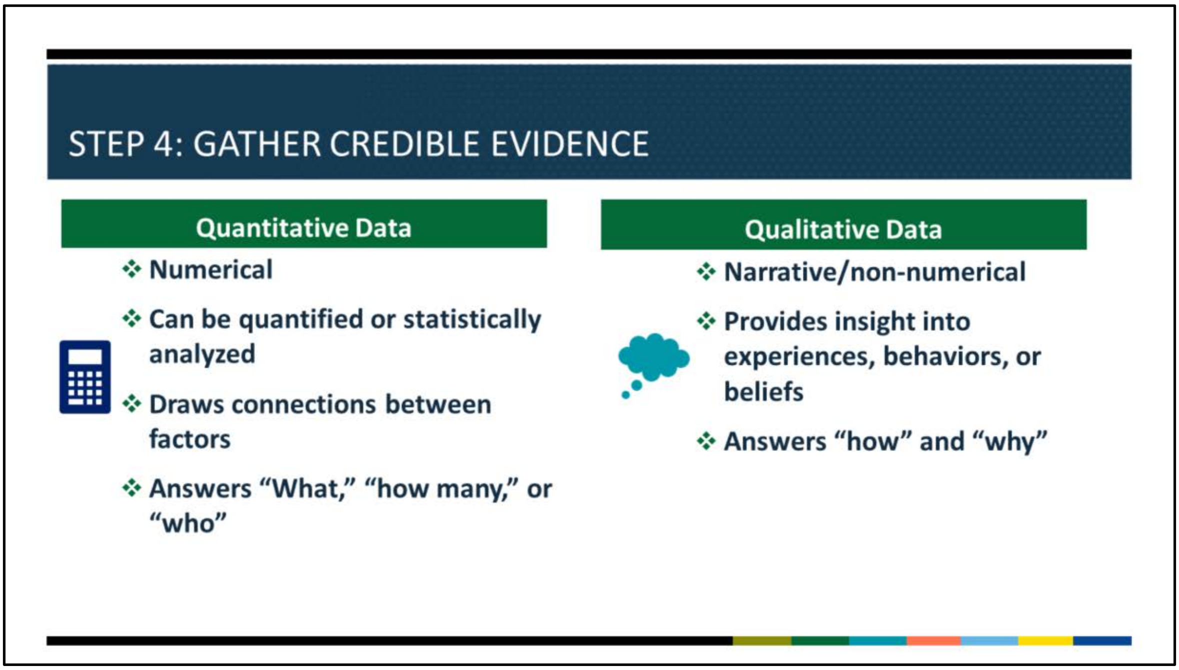
STEP 3: FOCUS THE EVALUATION DESIGN

Evaluation Question	Indicator(s)	Data Source	Data Collection Method	Data Collection Timing	Data Analysis	Person Responsible	Dissemination Strategy
What you want to know	Specific, observable, measureable characteristic that shows progress toward achieving a specific objective or outcome	Where you will collect the data List a source for each indicator	How you will collect the data	When you will collect the data	What time of analysis you will apply to the data	Who is responsible for collecting the data for this indicator	How you will share findings with your stakeholders and how findings will be used by the program

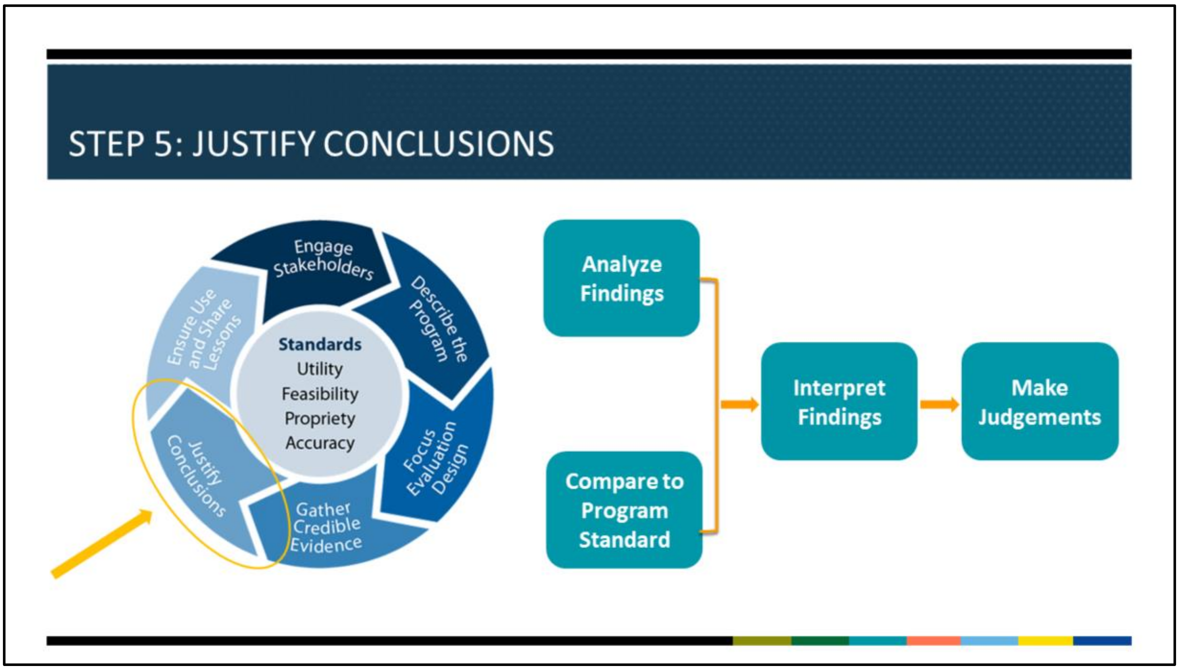
When designing your evaluation, it is important to ensure that all components align. Once you have your evaluation questions finalized and have shared them with your stakeholders, you can begin to think about the indicators that you can use to demonstrate progress, as well as what data sources and methods you will use to collect the data. After you have developed your indicators and decided on a data source and methods, you can think about the timing of the data collection, how you will analyze the data, the person responsible for collecting the data, and how you will disseminate the data. This should be done for each evaluation question that you have in your evaluation plan.



The next step in the CDC Evaluation Framework is to gather credible evidence. Gathering credible evidence enhances buy-in and establishes the legitimacy of the evaluation findings. Now that you've identified your core evaluation questions and selected indicators that meaningfully address the evaluation questions, you should use data that speaks to the strategy you are evaluating to answer your identified evaluation questions. When gathering your evidence, it is important to make sure that the data sources are directly tied to the evaluation questions and aligning indicators. Think about the feasibility of accessing each potential data source and what is best suited for the specific evaluation questions. Consider qualitative and quantitative data collection methods and plan when you are going to collect the data. You also should consider whether to use primary data or secondary data. Your evaluations will likely use a combination of primary and secondary data sources.

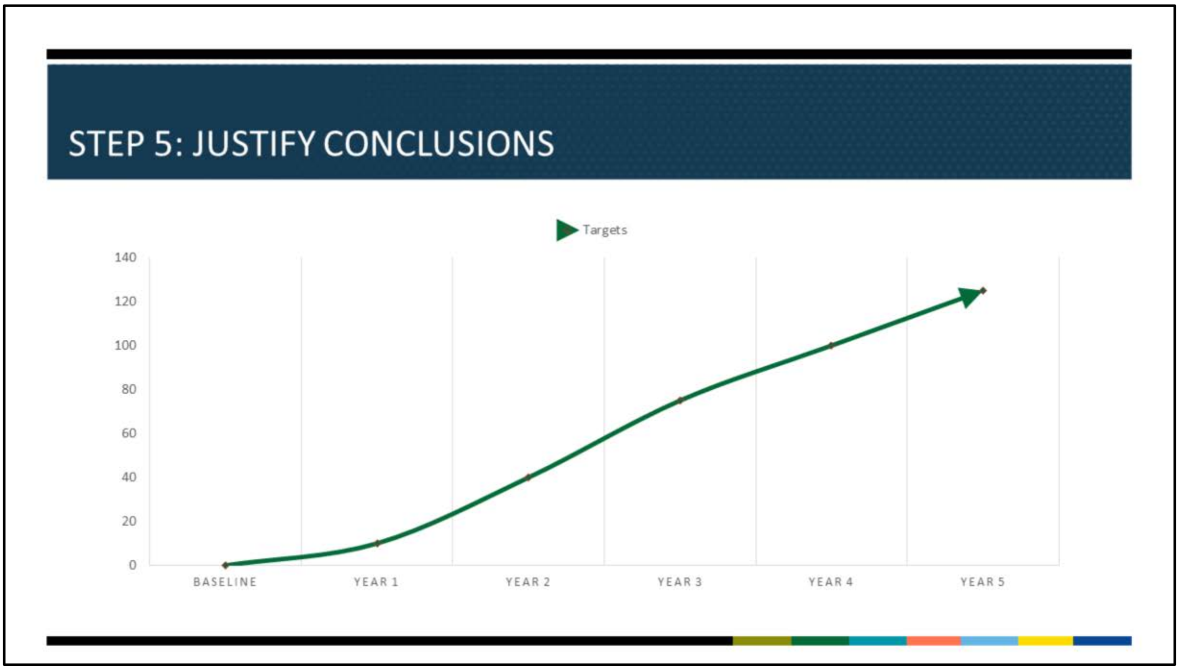


Data usually falls into two categories – quantitative and qualitative. Your evaluation may use a mixed-methods approach which will incorporate both quantitative and qualitative methods.

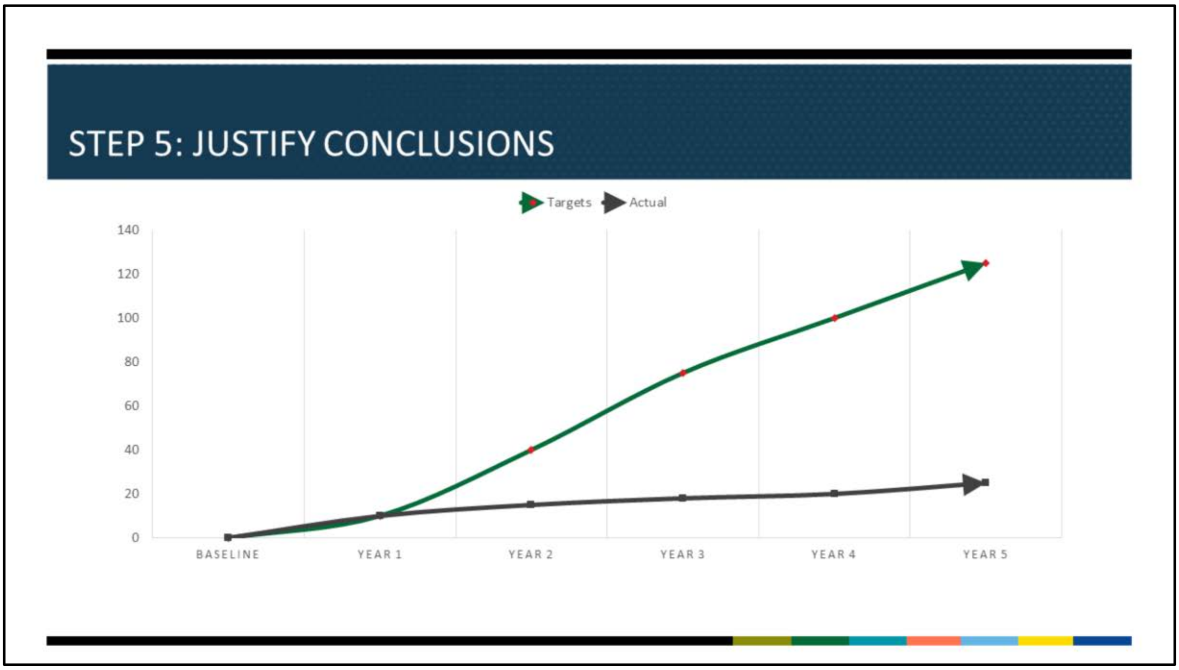


The next step in the CDC Evaluation Framework is justifying conclusions. This requires analyzing the data and interpreting and drawing conclusions from the findings. This step is necessary for programs to examine 1) whether program activities are reaching desired goals and outcomes; and 2) the extent to which the program is effective or efficient.

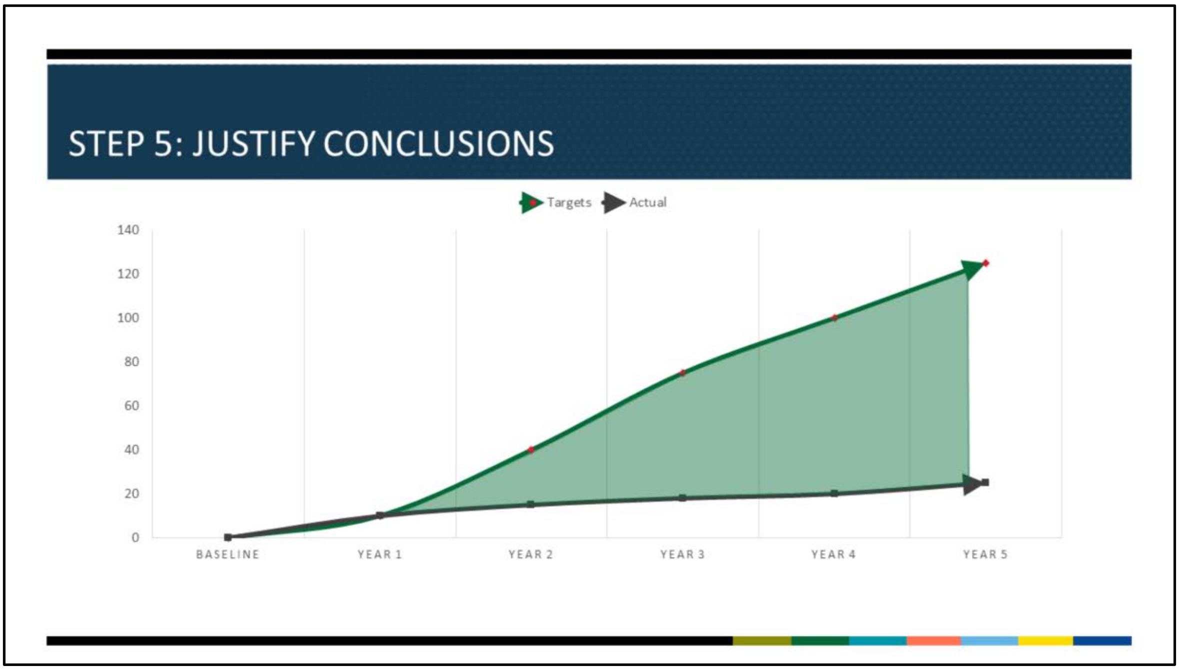
For each indicator, programs must analyze data, compare the findings against proposed targets, and determine if implementation or data collection methods are sufficient and appropriate or should be altered.



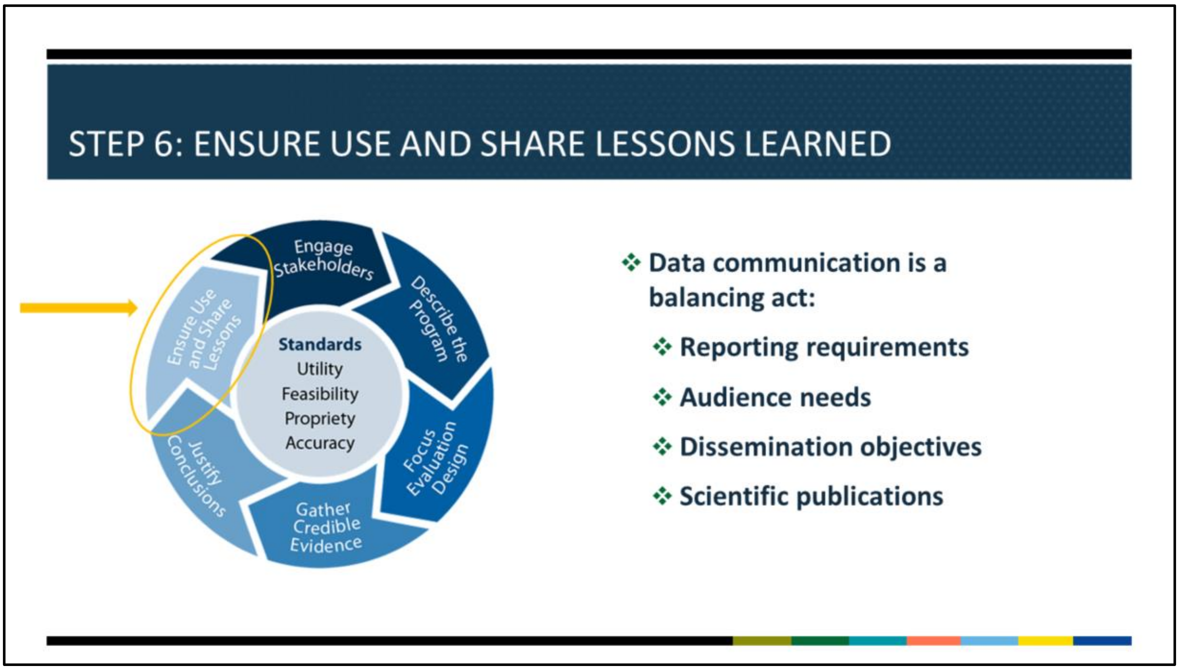
In the ideal world, this is what your data would show in a graph for a 5-year program and what we plan on when we set targets for the program. Recognizing that you expect to start out slower at the start of implementation as you build partnerships and get contracts in place, you set a lower target but then in Years 3-5, you expect to see strong growth in the data.



But in reality, that's not always how our programs work. Due to various challenges, we might never see that ramp up that we were expecting in Year 2-5. Some efforts may prove to be very successful and others may not have the same success. These are things you want to be sure to document through evaluation.



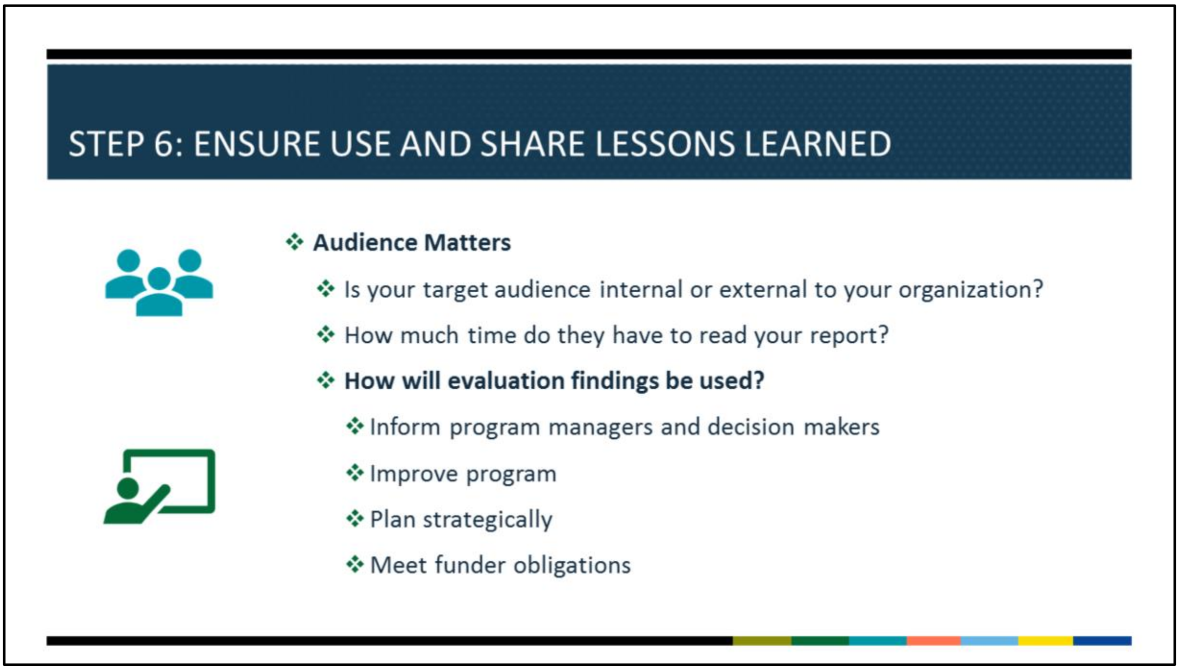
What evaluation is really trying to address in this step of the framework is the area shaded in green-the gap between what's actually happening and what we're hoping for. Every year as you're interpreting your data and justifying your conclusions, you should be thinking about whether there are ways you can improve your program if you're not quite meeting your targets. The expectation at the end of every year is that you will be able to discuss your results and discuss program improvements to be made in the upcoming years



The final step in the CDC Evaluation Framework is ensure use and share lessons learned. Dissemination of evaluation findings is a key ingredient to stakeholder engagement and program sustainability. Think back to the first step of the framework and engaging your stakeholders. You should have already started thinking about dissemination during this step so you know how best to present your results to your stakeholders and know that your evaluation questions are meeting their needs.

Evaluators must consider a variety of conditions and needs when developing evaluation reports. Evaluators typically are asked to consider reporting requirements for the program, their audience’s needs, the key dissemination objectives, and the contributions of their work among the peer reviewed literature.

Data communication can be quite challenging given all of these factors, plus any resource constraints you may experience in your setting.   Often, it seems easiest to produce and circulate a one-size-fits-all document that can be shared with all levels of stakeholders.



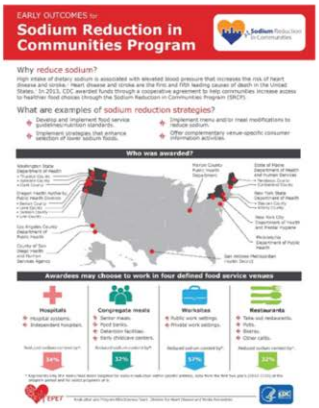
However, it is important to format your evaluation findings strategically.

Consider that multiple reporting types may be required to address the unique needs of various audiences and stakeholders. Brainstorm about a few of your key target audiences and keep them in mind when designing various dissemination products. Your target audiences may be internal or external to your organization which may impact the level of detail you may need to convey. Also think about how your evaluation findings will be used when crafting your report writing style.

In general, it is important to streamline data communication, and present the main findings where they are easily accessed by readers.

A couple of considerations when thinking about the audience of an evaluation product are whether or not they are internal or external to the organization, how much time they may have to read your report, and how the reader will use the evaluation report and findings.

INFOGRAPHICS

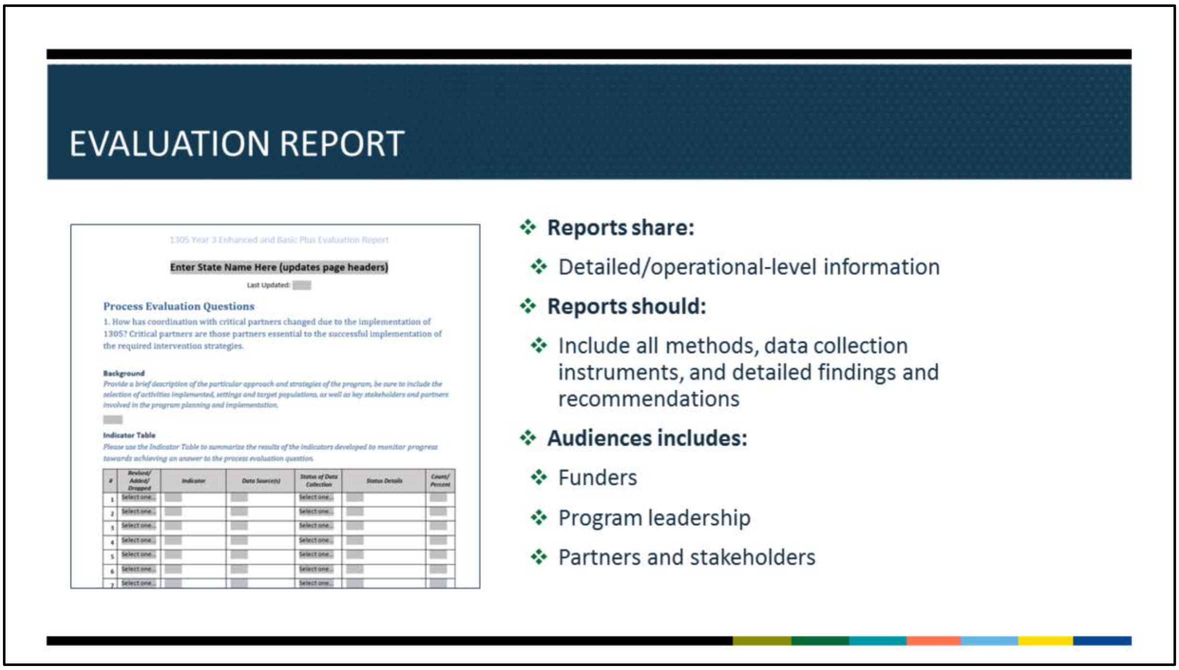


- **Infographics share:**
  - Strategic information
  - Overall trends
  - Key findings
  - Success stories
- **Infographics should:**
  - Convey a few pieces of information
  - Engage the audience visually
- **Audiences includes:**
  - Strategic decision makers
  - General public

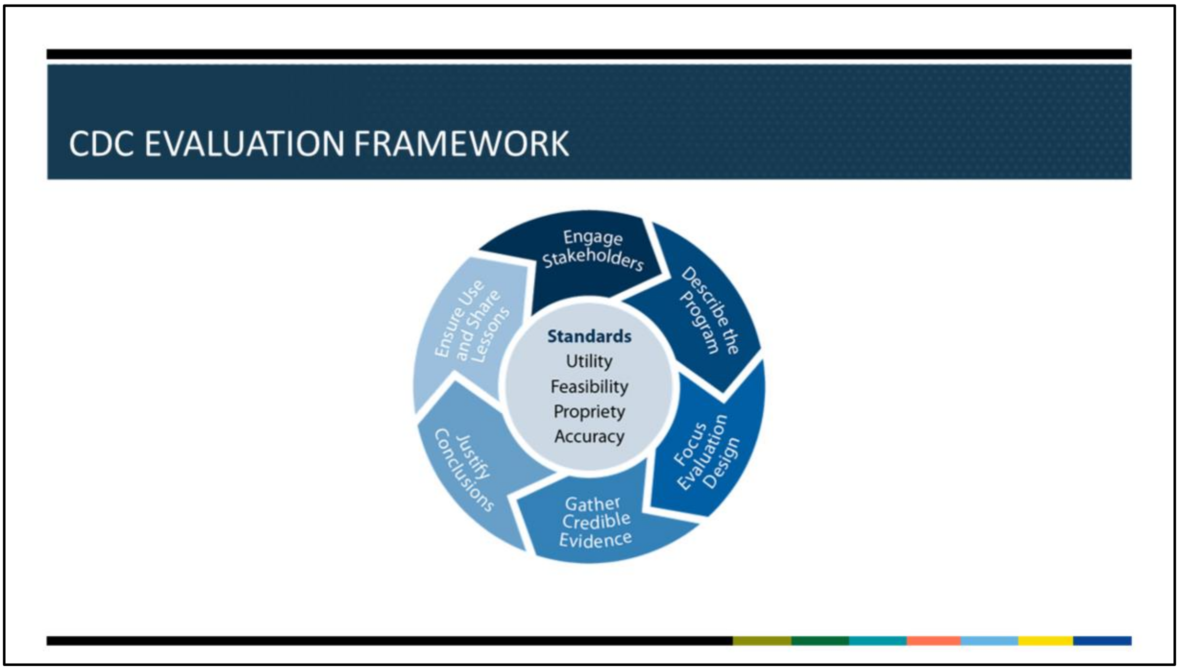
Dissemination products such as infographics typically convey big picture findings such as one or two strategic pieces of information and they utilize visualizations to engage the audience with the content.

Visualizations may include graphs, maps, icons, images or a combination of these tools. This is a nice way to communicate findings to the general public, community members, or community partners.

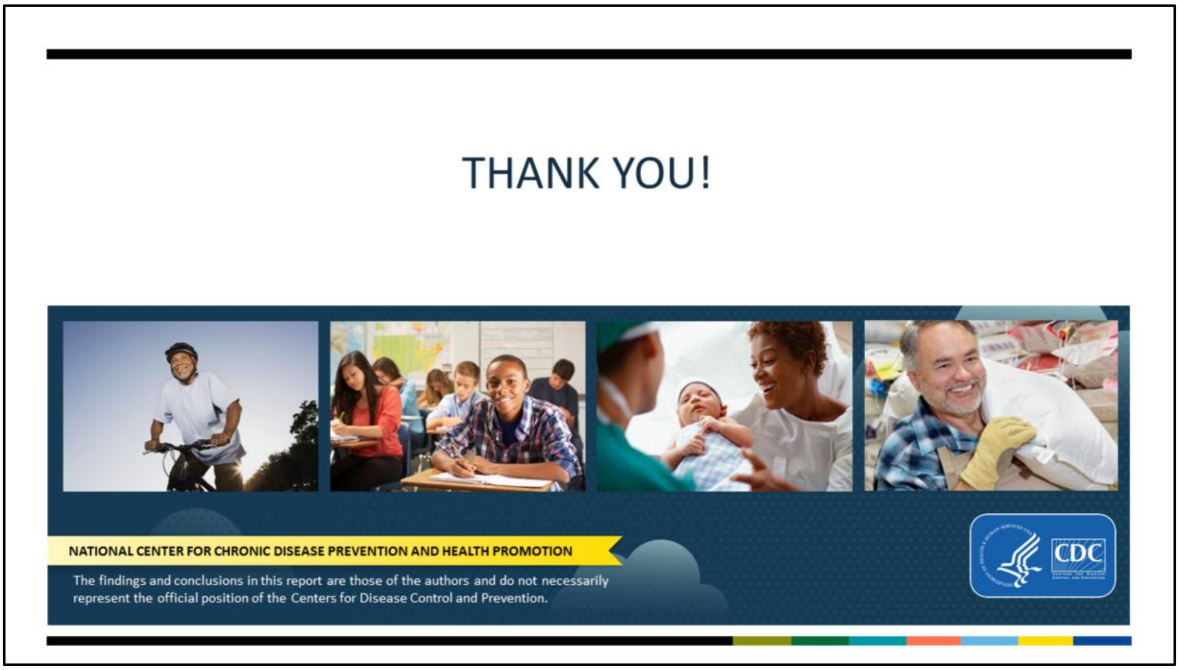
Executive summaries generally have more detail than an infographic but less detail than a full evaluation report. Executive summaries are a common strategy for summarizing a longer report. However, they can also be useful stand-alone documents that share a bite-sized amount of information about your evaluation findings. You should utilize graphics and font styles to emphasize key points.



Evaluation reports are familiar territory for most evaluators. They provide lots of detail and operational-level information. They include information about methods, data collection instruments, and detailed findings and recommendations. Reports are useful tools that can serve as a roadmap for future program improvements. However, they are a not a one-size-fits all approach. I encourage you to write your evaluation reports so that they might be broken down in to smaller chunks that you can circulate to key stakeholders. Organize reports strategically and consider places where using other reporting approaches, like infographics and executive summaries, might be more useful.



In summary, the CDC Evaluation Framework is a cycle and ongoing process. As you are sharing lessons learned with your stakeholders, you may decide to make programmatic changes which would affect your logic model and affect your evaluation design. You can evaluate how changes are incorporated into your program, whether your program is effective and impacting your population as intended. This cycle allows you to rigorously evaluate your program.



I'd like to thank you for tuning in to this coffee break session and would like to turn it back over to Nicole.

MODERATOR:

At this time, we'll take any questions but first we'll check to see if any questions have come in through the Q&A box.

Since it appears that we have no questions at this time from the audience, we have some questions that we wanted to ask that might be insightful to our participants.

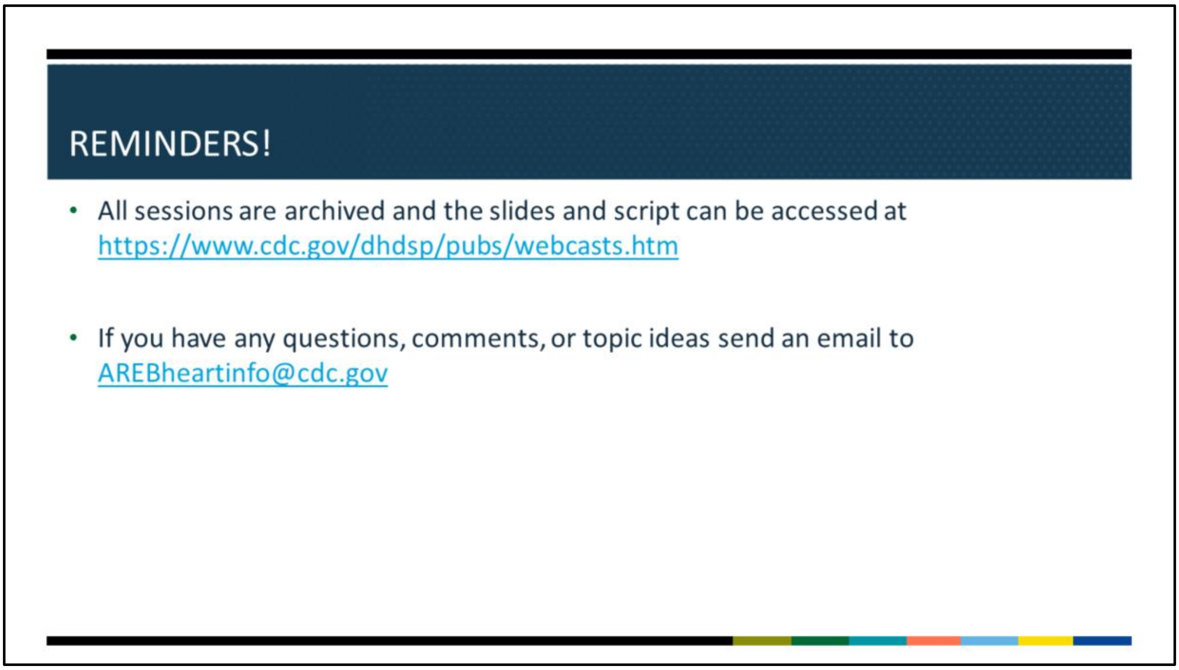
Questions:

1. ***Can you provide some examples of quasi-experimental evaluation designs that would be appropriate for a rigorous evaluation?***

Sure, that's a great question, examples include the most commonly used which is a non-equivalent group design, pre-post test design and propensity score matching. *Non-equivalent group design* is a between-subjects design in which participants have not been randomly assigned to conditions**.** *Propensity score matching* is the statistical analysis of observational data, it is a statistical matching technique that attempts to estimate the effect of a treatment or intervention by accounting for the covariates that predict receiving the treatment or intervention.

2. ***Are rigorous evaluations more costly and timely than your typical process and outcome evaluations?***

The short answer is it depends on the evaluation design and what questions you're trying to answer. Remember when planning your rigorous evaluations to consider feasibility and timeliness. You can implement a rigorous evaluation in a reasonable amount of time using similar resources if you plan well.



Thank you for your participation!

As a reminder, all sessions are archived and the slides and script can be accessed at our Division website at the link shown. Today's slides will be available in about 3-4 weeks.

If you have any ideas for future topics or questions, please feel free to contact us at the listed email address on this slide.

MODERATOR:

Our next Coffee Break is scheduled for Tuesday, August 13th and will focus on Medication Therapy Management Services.

Thank you for joining us. Have a terrific day, everyone. This concludes today's call.