

## Establishing a Baseline as Part of Your Evaluation

Eileen Chappelle, MPH  
Evaluation and Program Effectiveness Team  
Division for Heart Disease and Stroke Prevention  
[EChappelle@cdc.gov](mailto:EChappelle@cdc.gov)

DHDSP Coffee Break Series  
January 14, 2014

National Center for Chronic Disease Prevention and Health Promotion  
Division for Heart Disease and Stroke Prevention



Welcome to today's Coffee Break, presented by the Evaluation and Program Effectiveness Team and the Division for Heart Disease and Stroke Prevention (DHDSP) at CDC. We're fortunate today to have Eileen Chappelle ([echappelle@cdc.gov](mailto:echappelle@cdc.gov)) as today's presenter. Eileen is from DHDSP and is a health scientist on the Evaluation Team. My name is Alberta Mirambeau and I'm going to serve as your moderator today. I'm also a member of the Evaluation Team.

## Disclaimer

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

The presentation today represents the opinion of the presenter and does not necessarily represent the official position of CDC.

## Overview

- **The importance of capturing a baseline**
- **Planning your evaluation early**
- **Considerations for establishing baseline**
- **Considerations for:**
  - using current data with access
  - existing data without access
  - collecting primary data
- **Estimating baseline data**
- **Examples**
- **Lessons learned and helpful tips**

Today's Coffee Break, we're going to talk about establishing a baseline for your evaluation, the importance of capturing a baseline, planning ahead to get that baseline, considerations on the type of data source that you plan to use, ways to estimate baseline data, examples, and lessons learned. The information presented will apply to both evaluation and performance measures, but we're just going to consistently talk about "evaluation" for the rest of the presentation.

## The Importance of Capturing a Baseline

- ❑ **Definition:** Baseline data are initial measurement data collected prior to the program intervention
  
- ❑ **The value of having a baseline:**
  - Serves as a point of reference
  - Demonstrates change over time
  - Helps monitor progress
  - Highlights areas or variables a program hopes to impact

1305 Evaluation Tips: Establishing Baseline and Target Measures (Draft September 2013)

What is a baseline? It's the initial measurement of information collected prior to the start of the intervention of your program.

The value of having a baseline is it really serves as a point of reference. Your evaluation is made stronger by having a point of reference; otherwise you just have the one point in time, and that won't tell you if you've made improvements in your program, and by having a baseline you can determine what progress has been made.

The purpose of the baseline information is to assess the effect of the program and to compare what happens before and after the program has been implemented. Without baseline data, it's difficult to estimate any changes or to demonstrate progress, so it's best to capture baseline whenever possible.

Before capturing your baseline, you want to think about what you want your evaluation to highlight. Therefore, you have to have some initial evaluation planning take place.

## Planning Your Evaluation Early

- Develop your program logic model
- Determine the scope of the evaluation and key evaluation questions
- Clarify or identify the purpose of the evaluation
- Work with key stakeholders
  - Identify indicators
  - Describe future program success



“Planning your evaluation early”: this is a message that you have all heard. We encourage programs to plan their evaluation as they’re building or implementing their program. We’re not going to go into the steps of the CDC framework, but we want to mention a couple things.

It’s important to develop your program logic model, because that helps you describe your program efforts and get a sense of the key outcomes of interest. You want to determine your key evaluation questions. Without having those questions, it’s hard to establish a baseline because you don’t know what you need to gather. You want to make sure you know what your key questions are so you’re gathering the right type of information.

You want to be clear about the purpose of your evaluation to make sure that your baseline meets the needs. Make sure that you identify and work with your key stakeholders. Working with stakeholders in the beginning can help you identify indicators, figure how to establish what is success for your program, and potentially identify data sources. So it’s important to keep them in mind so the evaluation is not happening in a bubble.

## Considerations for Establishing Baseline

- **Data source**
  - Current data with access
  - Existing data without access
  - Primary data collection
- **Using an informed and systematic approach**
  - Covering all the bases
  - Planning ahead



It's important to think about what data sources are available and take an informed and systematic approach.

There are three types of data:

- Current data that you have access to. This is information that you may be very familiar with, already have the necessary consents for, and can run reports from.
- Existing data that you don't have access to. This could be information from a different organization or information from a practice – electronic health records.
- Primary data collection, where the information you're looking for does not exist and you need to develop a new way to gather that information.

Each one of these data sources has implications with regard to cost and time.

You want to be systemic and informed in how you capture a baseline. Make sure you prepare, because you're going to need to get the information for future data collection points. You want to make sure to capture the information you need depending on your evaluation questions. Take the time to be systematic because you're going to have to collect that information the same way in the future.

If you're considering primary data collection, really take a second look to make sure you're not missing an existing source. Talk to your epidemiologist. Talk to any partners or stakeholders that might know of data sources that might need your needs. Take a good scan of what's out there before committing to primary data collection.

## Considerations When Using Current Data With Access

- **Review the consents and data agreements**
  - Make sure that you are using the data in a manner consistent with any established agreements
- **Be mindful of the frequency of data collection of the identified data set**
- **Identify any gaps you may need to address**



Even though you have access to data, it's still important to review any consents or agreements to make sure you're using the information in a way that's consistent with what you've agreed to. You might have to modify those consents depending on what you're planning to do.

Be mindful of the frequency of the data collection. Does it work for what you're trying to evaluate? For example, if the information's gathered every three or four years and your program starts between those years, will you have enough time to have at least two data collection points to indicate change over time?

Be aware of any gaps that the existing data source has. Identify sources that meet your evaluation questions. If there are gaps, you may need to look for other data sources or revisit your key questions.

## Considerations for Existing Data without Access

- **Establish the necessary agreements or consents**
  - If you don't have access to the existing data, try to work with stakeholders or program partners that may help gain access
- **Become familiar with the limitation of the data set**
- **Think about the scope of the data and scope of the program effort**
  - State-level vs. county- or community- level



When you're thinking about using existing data that you don't have access to, establish the necessary agreements. Often, this takes more time than initially planned, so give yourself as much time as you can. Sometimes working with stakeholders or partners to gain access can make the process easier.

Become familiar with the limitations of the data set. You want to understand the data, make sure that it will address your questions, and plan ahead for any gaps.

Think about the scope of the existing data set. For example, does the data reflect the entire state, but the program focuses on a county or region? Consider whether or not this is appropriate.



## Considerations for Collecting Primary Data

- **Complete a thorough scan before committing to primary data collection**
  - **Need a process to obtain appropriate consent**
  - **May be costly and needs to be timely**
  - **Will need to be streamlined into program efforts to gather additional points of data in the future**
- *Note specific for FOA 1305: If existing data sources have been assessed and do not provide needed data, consult with CDC project officer and evaluation lead to explore suitability of primary data collection.*

If you have a key question and there is no data source, stop and do another thorough scan before committing to primary data collection, because it takes time and is expensive – not just to gather the information but to gather the appropriate consents. If you do decide to collect new information, streamline the way you're gathering the data so it's not seen as an add-on but as something embedded in the overall process of the program efforts.

For those who are part of FOA 1305, if you decide to conduct primary data collection, consult with your project officer and evaluation lead to make sure it's appropriate.

## Estimating Baseline Data

- Explore past performance
- Determine a timeframe
- Select a proxy of desired change
- Benchmarks from peer agencies/jurisdictions



If you don't have access to an existing data source or you feel like the data truly doesn't exist, what can you do to estimate a baseline?

- Look at past performance.
- Determine a timeframe. For example, if your funding year started in July, and you're about to start your evaluation, you might decide that May is the best time to start your baseline.
- Think about a proxy, if it's appropriate. You might not have access to specific information about hypertension control measurement, for example, but you might have categories of that or other information that might serve as a proxy.

## Example: Team-Based Care in Health Care System

### Outcome of interest: hypertension control

- **Current data with access**
  - HEDIS
- **Existing data without access**
  - Clinic or practice level data on hypertension control rates
- **Primary data**
  - Survey administered to health providers
- **Estimating a baseline**
  - Exploring claims data for medication costs

I wanted to give you an example of the different data sources. Thinking about team-based care in health care systems with the outcome of interest being hypertension control...

- You can look at current data – for example, HEDIS (Healthcare Effectiveness Data and Information Set). This is a public data set you could potentially use.
- If you know that there's data but there's no access, maybe you could look at practice or clinic information on hypertension control rates and then work on getting access to that. To do that, you might need to talk to partners to help them understand what you're trying to achieve.
- Maybe you decide that you need new data, so you decide to administer a survey with health care providers.
- Or you don't have the time or the funds to commit to primary data collection, and you're looking at a proxy. For example, you're estimating by looking at claims data to see if medication costs have decreased. That doesn't tell you if hypertension control is improving, but it serves as a proxy to see if there's change in that area.

## **Lessons Learned and Helpful Tips**

- **Plan early**
- **Conduct a reality check on feasibility of data collection or access to an existing data set**
- **Collect data before the program is implemented, if possible**
- **Estimating a baseline is better than not having any baseline information**
- **Reach out to the project officer and evaluation liaison for help**

I wanted to share a couple of lessons learned: Plan early. Be realistic in terms of what you want to achieve. Estimating a baseline is better than not having any baseline information. Whenever you need help, reach out to your project officers and liaison leads.

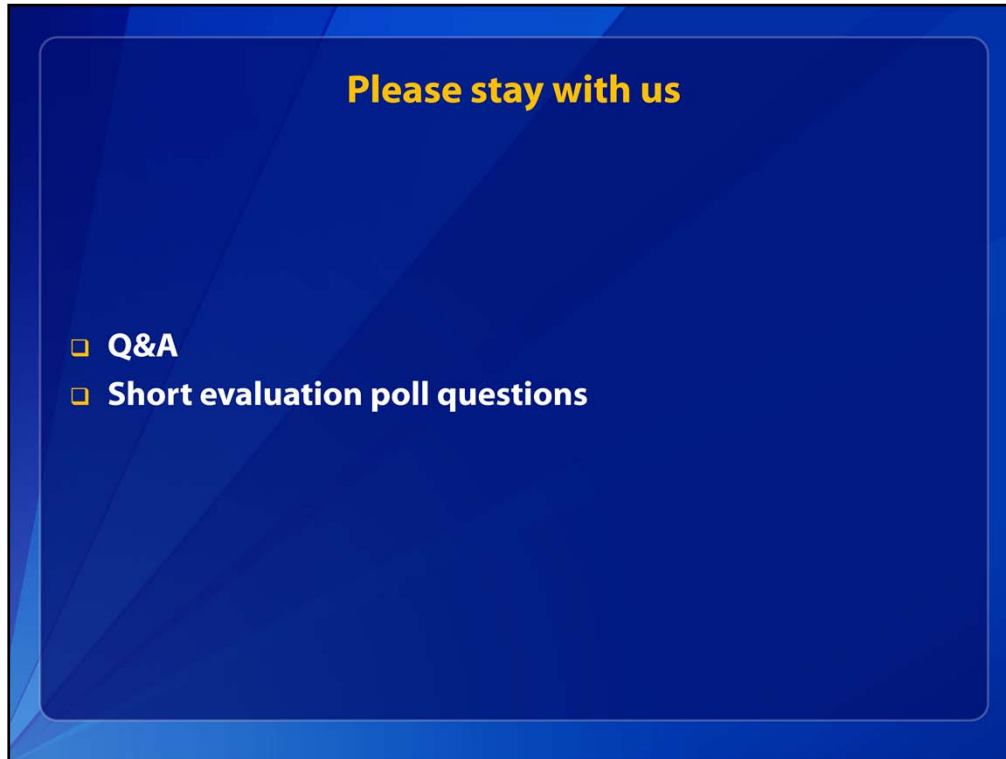
## Resources

- **DHDSP Evaluation Guides:**  
[http://www.cdc.gov/dhdsp/programs/nhdsp\\_program/evaluation\\_guides/index.htm](http://www.cdc.gov/dhdsp/programs/nhdsp_program/evaluation_guides/index.htm)
- **1305 Evaluation Tips: Establishing Baseline and Target Measures (September 2013)**
- **Community ToolBox**  
<http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/developing-baseline-measures/main>

Thank you!

On this slide there are resources that might be helpful as you're trying to establish a baseline.

- DHDSP Evaluation Guides:  
[http://www.cdc.gov/dhdsp/programs/nhdsp\\_program/evaluation\\_guides/index.htm](http://www.cdc.gov/dhdsp/programs/nhdsp_program/evaluation_guides/index.htm)
- 1305 Evaluation Tips: Establishing Baseline and Target Measures (September 2013)
- Community ToolBox:  
<http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/developing-baseline-measures/main>



**Question 1:** How do you establish a baseline if the program or intervention has already started?

**Response:** That's a very good question, and it's often a case that evaluators have to deal with. If a program has already started and you want to establish a baseline, you can see if there's past performance information or some administrative information that the organization has that can serve as a baseline. Or you can decide "next month is our baseline period" and just collect information. Even though it's not a true baseline, it's better than not having a baseline

**Question 2:** Can you provide a few suggestions for searching for existing data sets?

**Response:** I think the best way to find data sources is to speak with your colleagues, partners external and internal to your organization. Don't forget about your internal colleagues. Often we think of partners and we think of folks outside our organization, but sometimes your colleagues or your counterparts within other units of your organization may be very helpful.

Also, take a look at the sources of reports. Conduct a quick search through a university or through Google. If you do decide to do a Google search, please be careful of the source.



All sessions are archived and are available on demand at our website (<http://www.cdc.gov/dhdsp/pubs/podcasts.htm>).

If you have any questions or comments, or if you would like to be on the distribution list for future Coffee Breaks, please feel free to email us at [AREBHeartInfo@cdc.gov](mailto:AREBHeartInfo@cdc.gov).