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 (CDC).

We are fortunate to have **John Whitehill** and **Julia Jordan** as today's presenters. They are on the Evaluation and Program Effectiveness Team.

My name is **Joyce Dieterly** and I am today's moderator. I am an **ORISE Fellow** on the Evaluation and Program Effectiveness Team.

Before We Begin

All phones have been placed in SILENT mode.

Issues or questions:
- ❑ Q & A box on your screen
- ❑ AREBheartinfo@cdc.gov

MODERATOR:
Before we begin we have a few housekeeping items.

All participants have been muted. However, to improve audio quality please mute your phones and microphones.

If you are having issues with audio or seeing the presentation, please message us using the chat box or send us an e-mail at AREBheartinfo@cdc.gov.

If you have questions during the presentation, please enter it on the chat box on your screen. We will address your questions at the end of the session.

Since this is a training series on applied research and evaluation, we do hope you will complete the poll and provide us with your feedback.
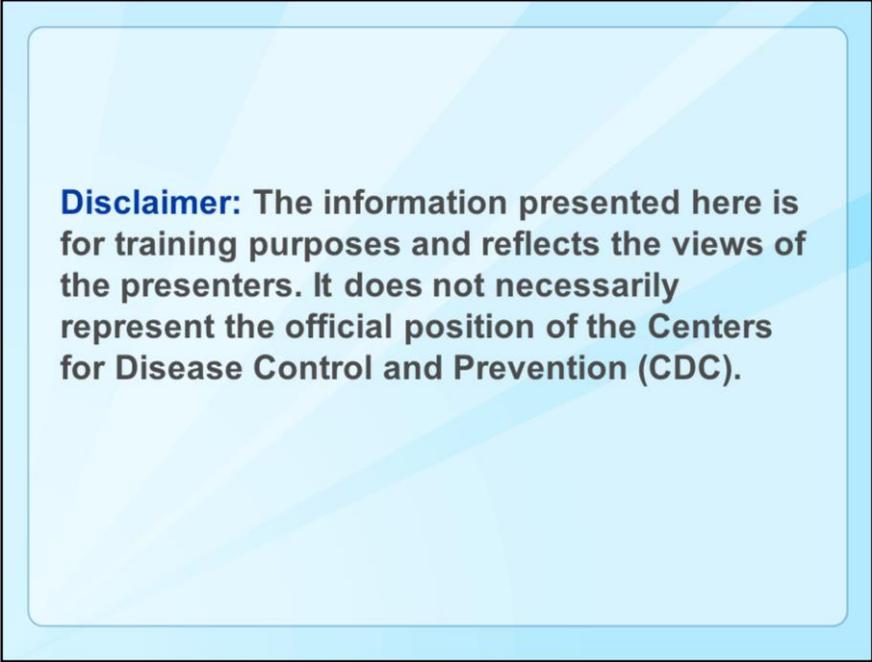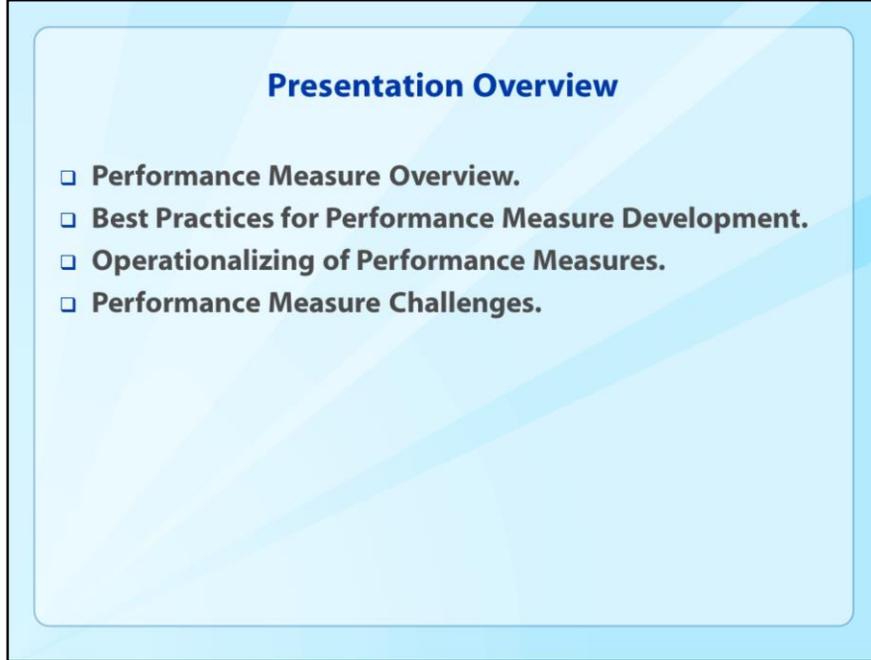
Disclaimer: The information presented here is for training purposes and reflects the views of the presenters. It does not necessarily represent the official position of the Centers for Disease Control and Prevention (CDC).

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

Presentation Overview

❑ Performance Measure Overview.
❑ Best Practices for Performance Measure Development.
❑ Operationalizing of Performance Measures.
❑ Performance Measure Challenges.

[Julia]

Thanks Joyce.

In today's presentation, we will provide you with a performance measure overview, highlight some best practices for performance measure development, describe how we operationalize performance measures, and discuss some challenges related to performance measures. The information in today's presentation can help you in developing performance measures and indicators for your local evaluations, as well as help you understand the Division for Heart Disease and Stroke Prevention's model for performance measure development and operationalization.
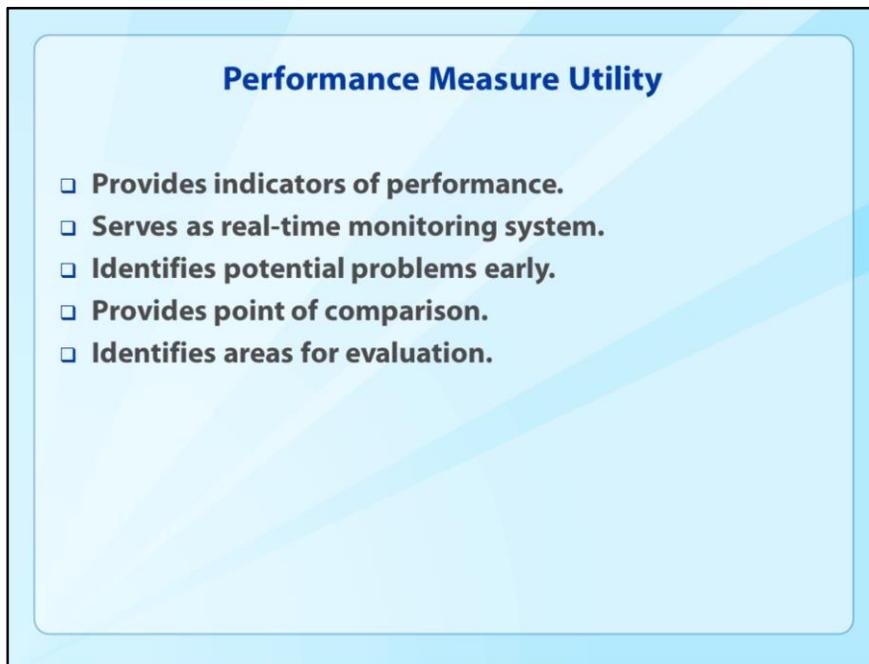
Performance Measure Overview

❑ **Performance measurement is the process of defining, monitoring, and using objective (usually quantitative) indicators of the performance of programs on a regular basis.**

❑ **Communicates program priorities to implementers.**

Poister TH. *Measuring Performance in Public and Nonprofit Organizations.* San Francisco: Jossey-Bass; 2003.

[Julia]

Performance measurement can be thought of as the process of defining, monitoring, and using objective (usually quantitative) indicators of the performance of programs on a regular basis. Performance measures also help to communicate the program's priorities to the implementers. CDC uses performance measures for almost all of our funded cooperative agreements for ongoing monitoring and management of our programs.

Performance Measure Utility

- ❑ Provides indicators of performance.
- ❑ Serves as real-time monitoring system.
- ❑ Identifies potential problems early.
- ❑ Provides point of comparison.
- ❑ Identifies areas for evaluation.

[Julia]

Performance measures can be used as a management tool and provide indicators of performance that are used in real-time to monitor program progress towards strategic goals. Measures should be assessed fairly frequently to recognize potential problems early so you can take action if needed. For most of the programs at CDC, measures are collected and reported annually. Performance measures can also be used to provide a point of comparison to established targets and demonstrate how the program is progressing from year to year. When performance measures are used correctly, they can actually help your intervention or program avoid challenges or help your intervention or program course correct and achieve desired outcomes. Finally, performance measures can be used to identify areas for evaluation. If your performance measures demonstrate that you are not meeting a target in a certain area, you may choose to conduct an in-depth evaluation to understand why. Performance measures can be used as a monitoring strategy that can go hand-in-hand with evaluation.

Performance Measure Overview

❑ Performance measures are part of the Evaluation and Program Effectiveness Team's (EPET) three-pronged evaluation approach.

❑ Performance measures are standardized quantitative information that all grantees are asked to report to CDC in order to CDC to monitor program implementation.

[Julia]

The Evaluation and Program Effectiveness Team in the Division for Heart Disease and Stroke Prevention uses a three-pronged evaluation approach for many of their cooperative agreements. This evaluation approach consists of the national evaluation, local evaluations conducted by the grantees, and performance measures. The performance measures provide CDC with a way to track program progress across all grantees. For our cooperative agreements, performance measures are standardized quantitative information that all grantees are asked to report to CDC. Performance measures are also used for accountability and shared with Congress, partners, and the public to demonstrate that we are effectively using our funding.

Best Practices for Performance Measure Development

❑ **Performance measures are aligned with the logic model:**
  - Program activities.
  - Short-term outcomes.
  - Intermediate outcomes.
  - Long-term outcomes.

❑ **Performance measures allow public health professionals:**
  - To collect reliable data on the effectiveness and efficiencies of a program.
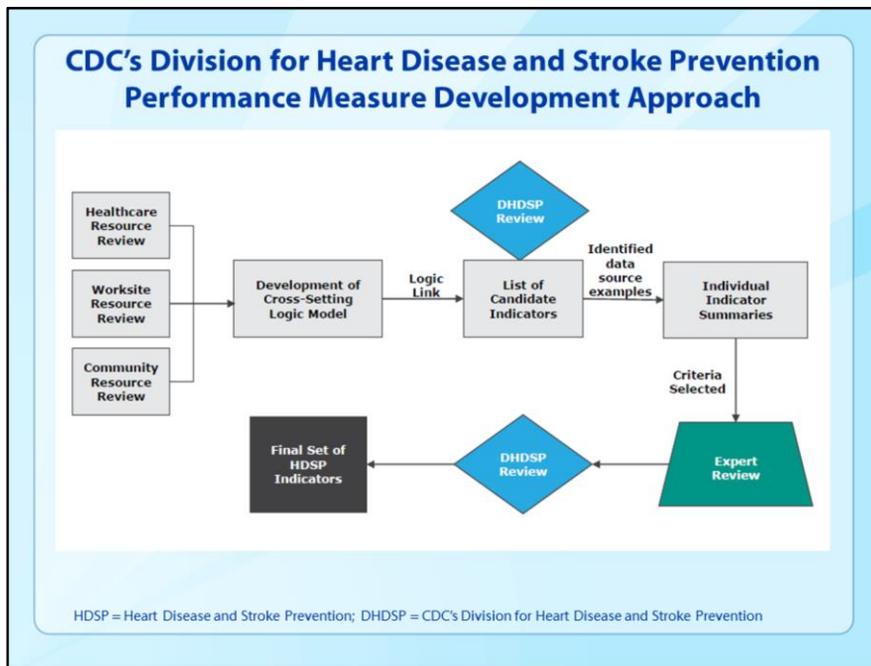 - To quantify the progress of a program toward an intended goal.

[Julia]

Performance measures are aligned with program activities and short-term, intermediate, and long-term outcomes outlined in the logic model. When used effectively, performance measures allow us to collect reliable data on the effectiveness and efficiencies of a program and to quantify the progress of a program toward an intended goal.

Best Practices for Performance Measure Development

❑ **Indicator Rating Criteria**
- Overall quality.
- Resources needed.
- Strength of scientific evidence.
- Face validity.
- Utility.
- Real world practice.

[Julia]

When developing performance measures consider the following rating criteria before finalizing your measures:
- First, consider the overall quality of the measure. This is a summary rating that reflects expert reviewer opinion of the overall quality of the indicator.
- Also consider the resources needed. This takes into account the amount of funds, time, and effort needed to collect reliable and precise data on the indicator.
- Next, consider the strength of the scientific evidence. This considers the extent to which the literature supports the use of the indicator for program evaluation.
- Next, consider the face validity of the measure. This considers the extent to which judgements about measurement of the indicator appear valid and relevant.
- Next, consider the utility of the measure. This is the extent to which the indicator would help to answer key program evaluation questions.
- Finally, consider the real world practice. This is the extent to which the indicator is consistent with currently accepted practice.

CDC's Division for Heart Disease and Stroke Prevention Performance Measure Development Approach

HDSP = Heart Disease and Stroke Prevention; DHDSP = CDC's Division for Heart Disease and Stroke Prevention

[Julia]

Consider these steps as you're developing performance measures. Indicator or performance measure development begins with reviews of literature and available resources. Once the logic model is developed, potential indicators from literature reviews are linked to the logic model and a list of potential indicators is developed. Examples of data sources are then identified and indicator summaries are developed for each potential indicator. An expert review is conducted and each indicator is rated based on existing science, expert opinion, and state practices. A final set of indicators is then developed. Specifically, here is how the Division for Heart Disease and Stroke Prevention at CDC developed their indicators for the Heart Disease and Stroke Prevention program. These indicators were then used for State Public Health Actions.

Now I'll turn the presentation over to John to discuss how we operationalize our performance measures in the Division for Heart Disease and Stroke Prevention.

Operationalizing of Performance Measures

- Definitions of key terms.
- Unit of analysis.
- Calculation.
- Example data sources.

[John]

Thanks, Julia. On this slide, we describe the process that the Division for Heart Disease and Stroke Prevention uses to operationalize our performance measures. These components or terms may vary slightly across our cooperative agreements, but we generally try to have all of these components for each measure. By operationalizing our performance measures, we hope to standardize the data reported across all of our grantees and ensure accurate reporting.

The definitions of key terms help to clarify what definitions of key terms are as it relates to that specific measure. Many times, terms have multiple definitions and this helps to provide clarity on the specific measure.

The unit of analysis describes the unit for measuring performance measures. For example, this could be health systems, people, or milligrams of sodium.

The calculation describes how to calculate and report a performance measure. This could be as the numerator and denominator, rates, percentages, or counts.

The example data sources provide data sources or methods to obtain or calculate the data.

Over the next three slides, we will be highlighting different operationalized performance measures from three CDC cooperative agreements to show what these components would look like in the field. We understand that up to this point, there has been a lot of performance measure theory and description and it might help to see some finalized measures to visually see what we have been discussing.

Sodium Reduction in Communities Program (SRCP)

❑ SRCP PM Short-Term 1: Percent and number of entities implementing comprehensive nutrition standards and practices, including sodium reduction standards and practices.

Definition of Key Terms in the Performance Measures	• **Comprehensive Nutrition Standards and Practices** = Food procurement policy and customary procedures adopted by an institution or organization requiring that the food it purchases, provides, or makes available contains key nutrients at levels that do not exceed criteria established by public health authorities. To be comprehensive, a set of standards is not limited to focusing on one nutrient (in this case, sodium) but considers other key nutrients of concern (refer to the *2015-2020 Dietary Guidelines for Americans*). The *Food Service Guidelines for Federal Facilities (2016)* is one model of nutrition standards that can be used in government settings and other foodservice venues. • **Entity** = Specific institutions/places within the venue where the sodium reduction intervention is taking place (e.g., John's Deli and Bistro, Julia's Coffee House). • **Implement** = To put a change into place (such as changing procurement practices or modifying recipes used in a menu cycle). • **Venue** = The food service setting type where the sodium reduction intervention is targeted (e.g., hospitals, work sites, or restaurants).
Unit of Analysis	Entity (see definition)

[John]

Here is an example from Sodium Reduction in Communities cooperative agreement. This performance measure is percent and number of entities implementing comprehensive nutrition standards and practices, including sodium reduction standards and practices. You can see that four terms have been defined from the measure to clarify what they mean in the context of the Sodium Reduction in Communities Program (SRCP).

For this measure it was important for CDC to define what exactly we meant by a comprehensive nutrition standard and practice. Here we defined it was food procurement policy and customary procedures adopted by an institution or organization requiring that the food it purchases, provides, or makes available contains key nutrients at levels that do not exceed criteria established by public health authorities. To be comprehensive, a set of standards is not limited to focusing on one nutrient (in this case, sodium), but considers other key nutrients of concern (are we give an example to refer to the *2015-2020 Dietary Guidelines for Americans*). We also included the *Food Service Guidelines for Federal Facilities* (2016) is one model of nutrition standards that can be used in government settings and other food service

venues. As you can see, it was important for CDC to put as much detail into the key terms for this measure to help any users understand exactly what CDC was referring too.

You can also see that the unit of analysis for this measure is entity.

Paul Coverdell National Acute Stoke Program

❑ **Coverdell PM 20: % of state acute stroke admissions in participating hospitals.**

Calculation	• Numerator: Count of the number of stroke patients admitted to Coverdell-participating hospitals in a state.
	• Denominator: Total number of stroke patients admitted to all hospitals in a state.
	• Patients included in both the numerator and denominator must be admitted to a hospital as an acute stroke patient. Patients that are not admitted or do not have a confirmed stroke diagnosis should not be counted in the numerator or denominator for this calculation.
	• Administrative codes available through hospital-level and state-level databases should be used for this calculation (i.e., ICD-9, ICD-10).

[John]

Performance measures may be reported as numerators, denominators, rates, and percentages. Depending on what you're trying to collect, this section needs to be very basic in language so the user who is collecting the data can understand exactly what needs to be collected and how to accurately report the numerator, denominator, or percentage. Here we define how to calculate the numerator and denominator, which can then be used to calculate the percentage. This is a Paul Coverdell National Acute Stroke Program performance measure which asks for the percentage of state acute stroke admissions in participating hospitals. The numerator should be calculated as the number of stroke patients admitted to Coverdell-participating hospitals in the state and the denominator should be the total number of stroke patients admitted to all hospitals in a state. The measure also clarifies that the patients must be admitted to a hospital as an acute stroke patient.

Many times, evaluators will need to collaborate with outside subject matter experts (SMEs) to determine the best way to calculate a performance measure. The SMEs can also provide input on whether this calculation accurately describes the indicators. The SMEs can also provide important information on how data will be collected, the

feasibility of data collection, and what data will best reflect the performance measure. Without these SMEs, you may run into challenges when collecting, reporting, and disseminating performance measures.

State Public Health Actions (1305)

- 1305 PM 3.1.01: Proportion of health care systems with electronic health care records (EHRs) appropriate for treating patients with high blood pressure.

Data source(s)	The following data sources can be used to collect data for this measure:
	• Health Resources and Services Administration (HRSA) Uniform Data System (UDS) http://bphc.hrsa.gov/healthcenterdatastatistics/reporting/index.html • The Office of the National Coordinator for Health Information Technology (ONC) Product List http://oncchpl.force.com/ehrcert?q=chpl • ONC dashboard http://dashboard.healthit.gov/HITAdoption/?view=0 **Not Appropriate:** • An individual local practice

[John]

Here is an example from our State Public Health Actions cooperative agreement, also known as 1305. This performance measure is "proportion of health care systems with electronic health records (EHRs) appropriate for treating patients with high blood pressure. Grantees may use a variety of appropriate data sources that include Health Resources and Services Administration (HRSA) Uniform Data System (UDS), or Office of the National Coordinator for Health Information Technology (ONC) data but they should not be using data from individual local practices. Again, when it comes to potential data sources for your indicator or performance measure development, our team often refers for our SME panel to help brainstorm what data sources best fits the measure to meet utility and feasibility.

Performance Measure Challenges

- Collecting
  - Definitions.
  - Timeline.
- Analyzing
  - Incomplete data.
  - Data accuracy.
- Reporting

[John]

Finally, we will discuss some challenges related to performance measures, specifically related to collecting, reporting, and analyzing performance measures.

When you are collecting your performance measure data, you may encounter challenges related to unclear definitions and the timeline. The key terms or the units of analysis may not be specific enough for the user to understand which data should be collected. To alleviate this issue, CDC operationalizes their performance measures early in the cooperative agreement so grantees can understand exactly what is included in the measure. You may also encounter challenges related to your data collection timeline. Make sure to plan ahead and recognize that data collection or accessing the necessary data can be very time consuming. Work backwards from your reporting deadlines to make sure you get everything collected in time.

You may also run into challenges related to analyzing your performance measure data. If you are receiving incomplete data from partners, you cannot fully understand the data and how the program is progressing. Data can also be reported inaccurately if the data does not reflect the defined numerator and denominator. Make sure to be

thoughtful when planning your data collection to ensure that you are collecting complete and accurate data.

The challenges listed for collecting and analyzing will also affect reporting. If you have incomplete information or you don't meet the timeline, you will not be able to report the data as desired.

Summary

❑ Performance measures are a useful tool in monitoring program progress.
❑ By planning and developing performance measure thoughtfully, you can avoid some of the challenges.

[John]

In today's presentation, we have discussed what performance measures are and how they can be used in your programs, some best practices for developing performance measures and how CDC's Division for Heart Disease and Stroke Prevention develops their measures, discussed how we operationalize our measures, and discussed some common performance measure challenges and how you can avoid them.

And now we will give it back to Joyce.

Any Questions?

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

What are some potential data sources for our local evaluations?
The *Surveillance and Evaluation Data Resource Guide for Heart Disease and Stroke Prevention Programs* is available on the DHDSP website and the performance measure guidance from your program can provide examples. Also, contact your CDC evaluation TA provider for additional guidance.

How do you know when to bring in subject matter experts?
This is a great question. There are no real timelines when you should bring in SMEs. It is probably more beneficial to bring SMEs in earlier and more often than you think to help ensure you are putting together strong components for the performance measure. I know from experience on cooperative agreements where we have consulted SMEs earlier in the developmental performance measure process, we experienced far less challenges and questions from grantees in the field compared with when we did not consult SMEs more. The moral of the story, the more you collaborate with SMEs, the better your indicators or performance measures will be.

Please Stay With Us

❏ Short evaluation poll questions.
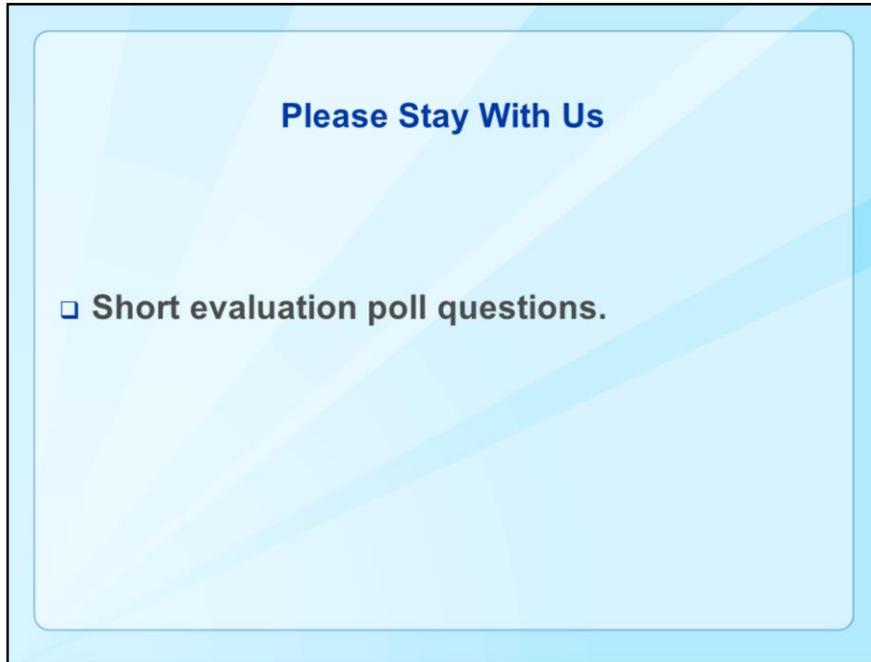
Please stay with us to answer a few poll questions.

This quality of the presentation was:
- Excellent.
- Good.
- Fair.
- Poor.

The information presented was helpful to me.
- Yes.
- Somewhat.
- Not at all.

Reminders!

All sessions are archived and
the slides and script can be accessed at:
http://www.cdc.gov/dhdsp/pubs/podcasts.htm

If you have any questions, comments, or topic
ideas send an e-mail to:
AREBheartinfo@cdc.gov

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All sessions are archived and the slides and script can be accessed at our Division website. Today's slides will be available in 2-3 weeks.

If you have any ideas for future topics or questions, please contact us at the listed e-mail address on this slide.

Next Coffee Break

When: August 8, 2017

Topic: Public Access Defibrillation

Presenters: Erika Fulmer and Andrew Kunka

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

CDC

Our next Coffee Break is scheduled for Tuesday, **August 8** and is entitled "Public Access Defibrillation: The what, where and how of policy alignment with best available evidence."

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