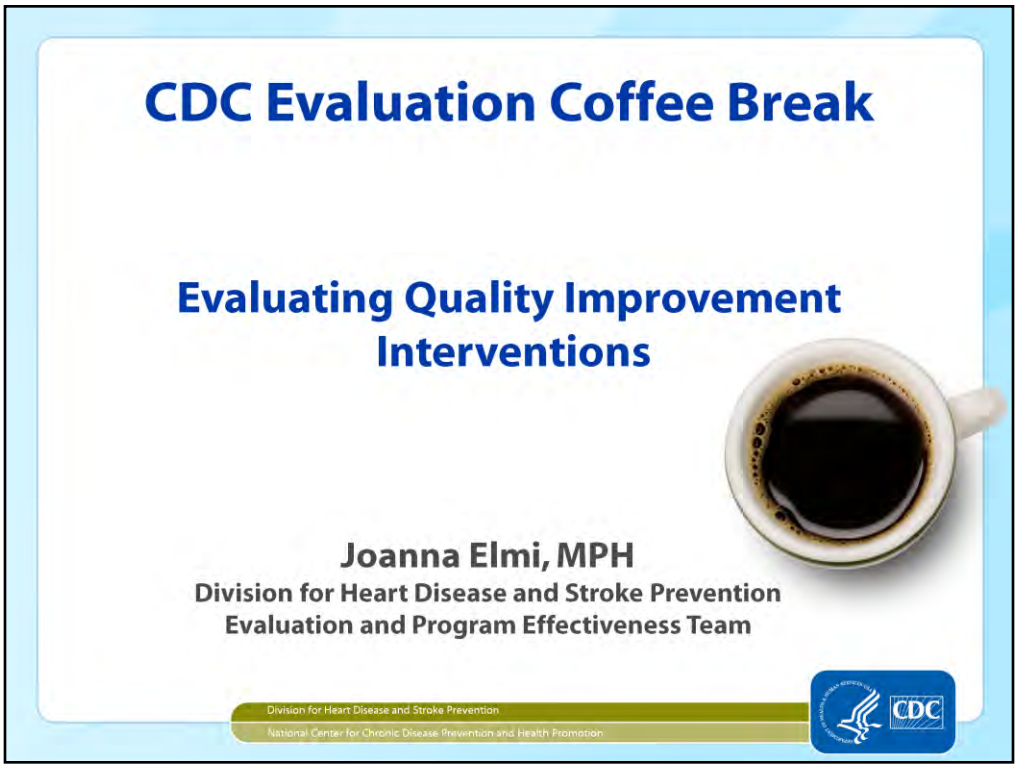
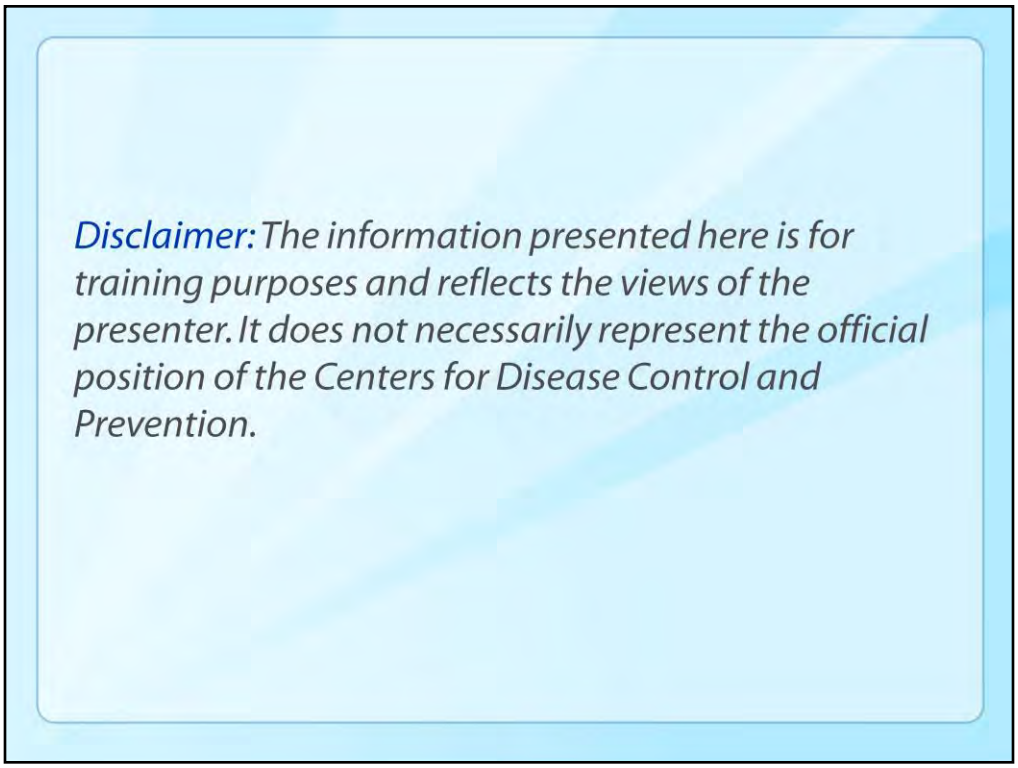


Welcome to today's Coffee Break, presented by the Evaluation and Program Effectiveness Team in the Division for Heart Disease and Stroke Prevention at the Centers for Disease Control and Prevention.

We are fortunate to have Joanna Elmi as today's presenter. Joanna is from CDC's Division for Heart Disease and Stroke Prevention and is a Health Scientist on the Evaluation and Program Effectiveness Team. My name is Rachel Davis and I am today's moderator. I am also a member of the Evaluation Team.

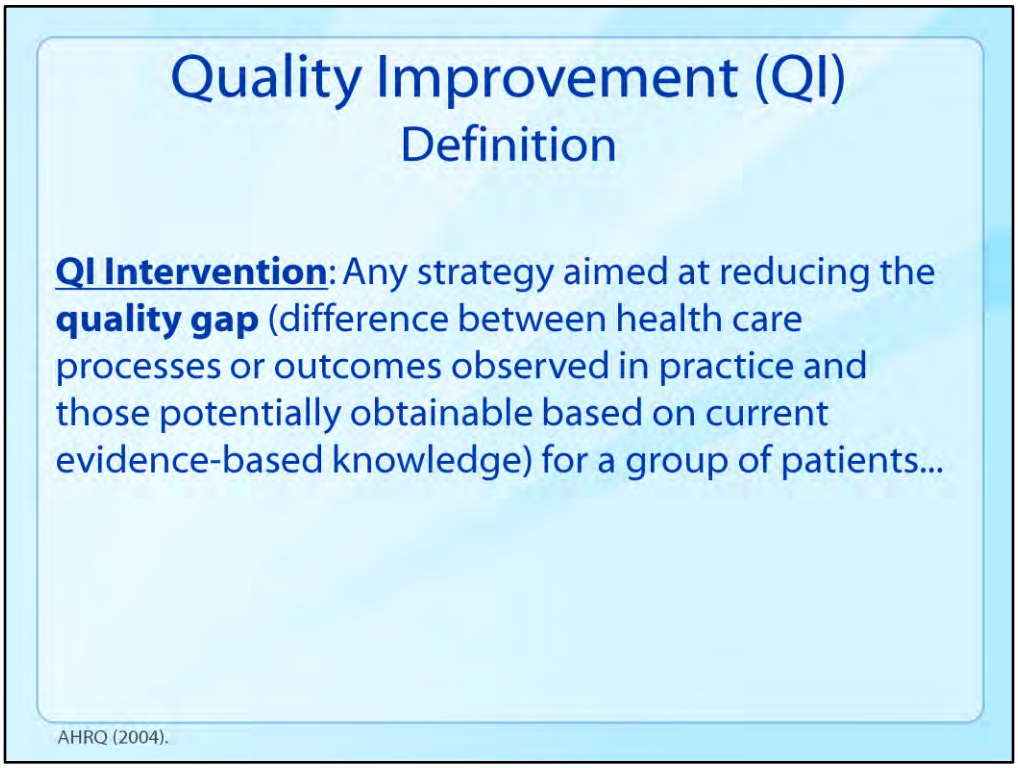


The information presented here is for training purposes and reflects the views of the presenter. It does not necessarily represent the official position of the Centers for Disease Control and Prevention.

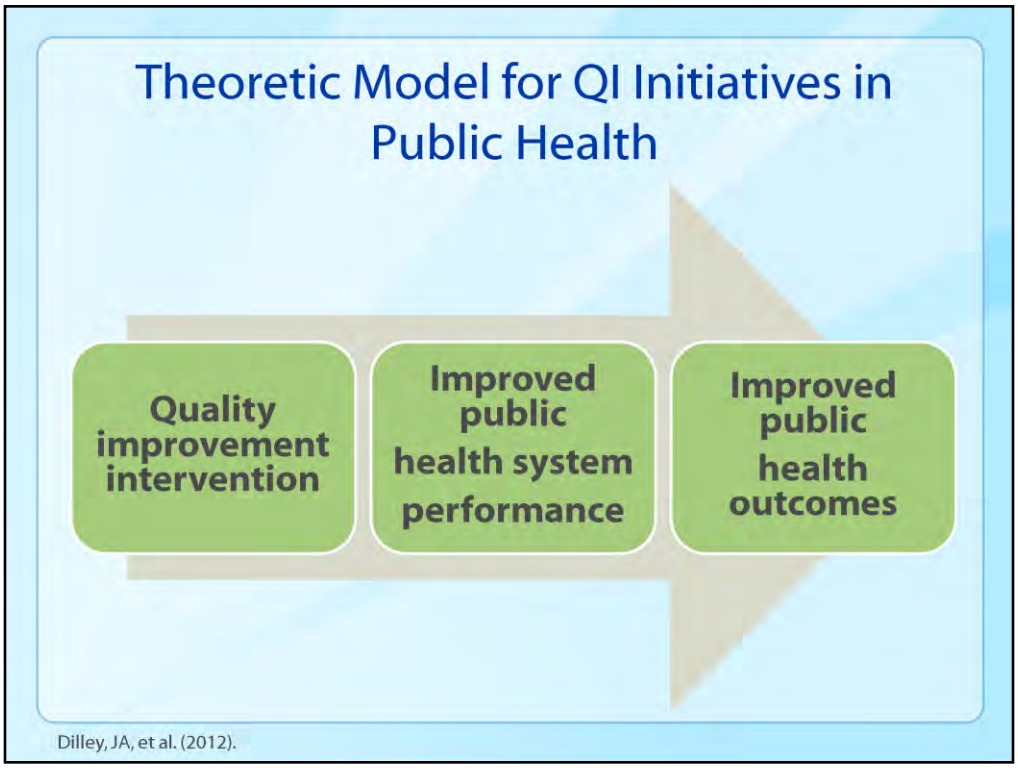
In our brief time together today we will revisit the importance of quality improvement strategies to promote clinical quality and improve chronic disease; describe the potential roles that a state health department may have in implementing QI and who the key partners may be in this work; highlight the need to describe your program, and define what it is you would like to learn as a program through evaluation; and discuss example indicators and data collection methods around these meaningful questions.

Building a relationship between public health and health care to improve chronic disease health outcomes, such as blood pressure control, is a priority of CDC and the National Center for Chronic Disease Prevention and Health Promotion. Dr. Frieden noted in the May 2013 CDC Public Health Grand Rounds on Million Hearts® the importance of this link and stated that we have learned that the three most effective strategies to achieve blood pressure control are:

- Reporting of quality measures monthly to every provider
- Use of Health Information Technology (HIT)
- Implementation of team-based care



This definition from the Agency for Healthcare Research and Quality describes a QI intervention as a strategy that attempts to reduce the disparity between the processes and outcomes from everyday clinical treatment practices and those that could be attained by implementing evidence-based best practices. Quality is achieved by analyzing and measuring performance by compliance to a standard quality measure. Back in 2003, the IOM report entitled "Priority Areas for National Action: Transforming Health Care Quality" identified 20 priority areas for QI. Hypertension diagnosis and treatment was identified as one of these priority areas.

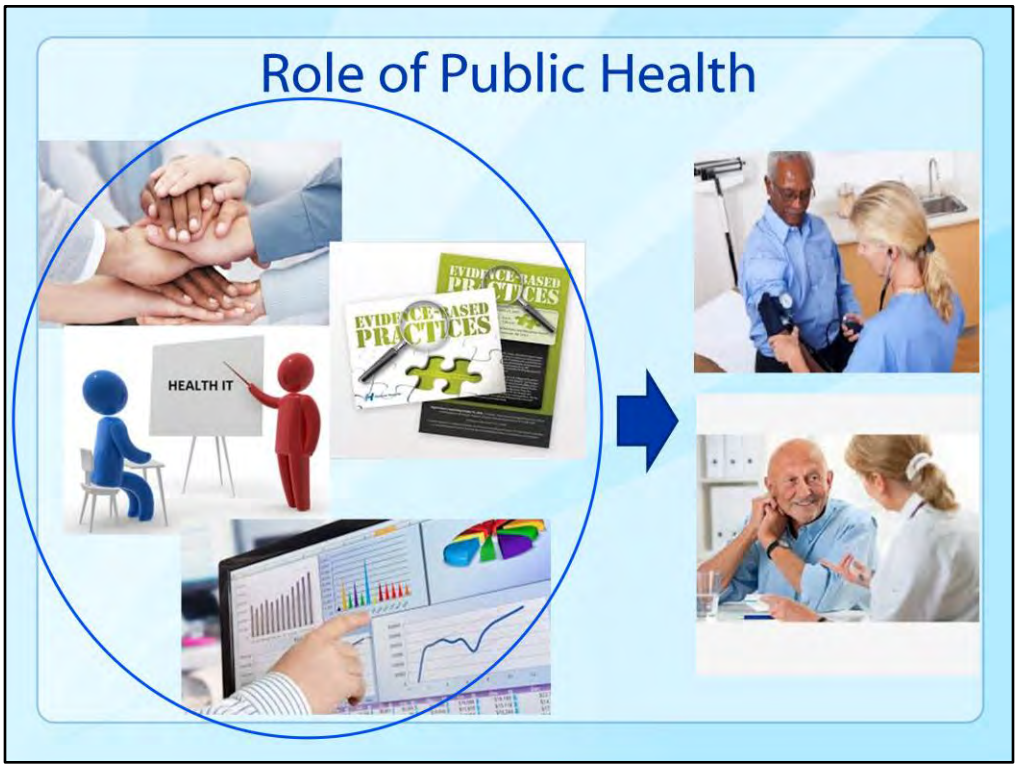


The figure before you shows the flow and change theory of a public health quality improvement intervention. We expect the QI intervention to contribute to a better performing public health system (measured by evidence-based standards) and this will lead to improved public health outcomes.

The CDC and the National Center for Chronic Disease Prevention and Health Promotion provide support and guidance to funded state health departments to focus efforts on implementing QI processes as a strategy within domain 3 "health systems interventions." The Division for Heart Disease and Stroke Prevention supports the implementation and evaluation of QI interventions to address hypertension, as well as acute stroke care in hospitals. This slide lists some of the systems-level change strategies carried out by funded states to improve clinical care practices that lead to improved HBP control:

- Increase EHR adoption and use of health information technology to improve performance
- Increase the institutionalization and monitoring of aggregated and standardized quality measures at the provider and systems level

Funded state programs are working to create a bridge between public health and personal health care because it is the coordinated efforts of both systems that will help us reach population health goals.



In this domain, ultimately the role of the state health department is to influence improvement in clinical practices through clinical system change interventions which will result in “happier” patients who have their blood pressure under control (as you see on the right-hand side of the slide).

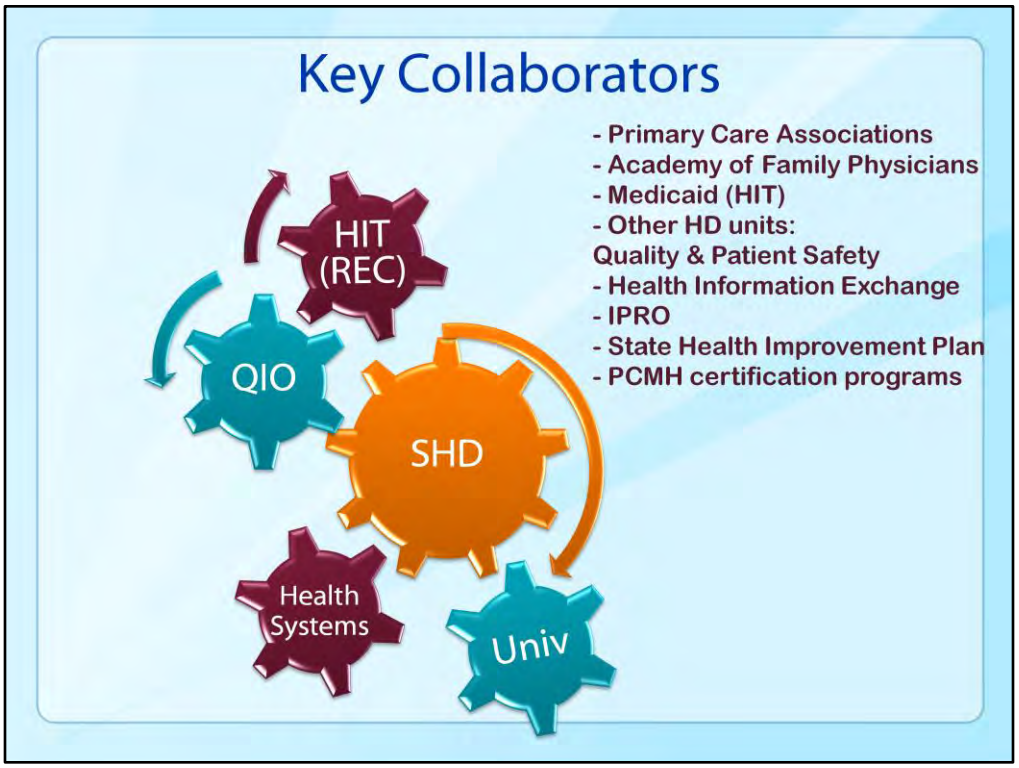
What are some of the actions by state health departments to implement QI processes in health systems? Some key activities are shown on the left.

First activity: Much of the work entails initiating, cultivating, and strengthening relationships with other entities, such as primary care clinics, large and small health systems, as well as other state entities that are promoting quality improvement in health care delivery, or strengthening clinical EHR capabilities and the meaningful use of EHR data. Some of these organizations are the state Medicare quality improvement organization, the Regional Extension Centers, Health information Exchange, and Beacon Communities. State health departments are tapping into existing initiatives to incentivize, acknowledge, recognize health care delivery to collect, report and use data, and use quality measures, and improve clinical practices.

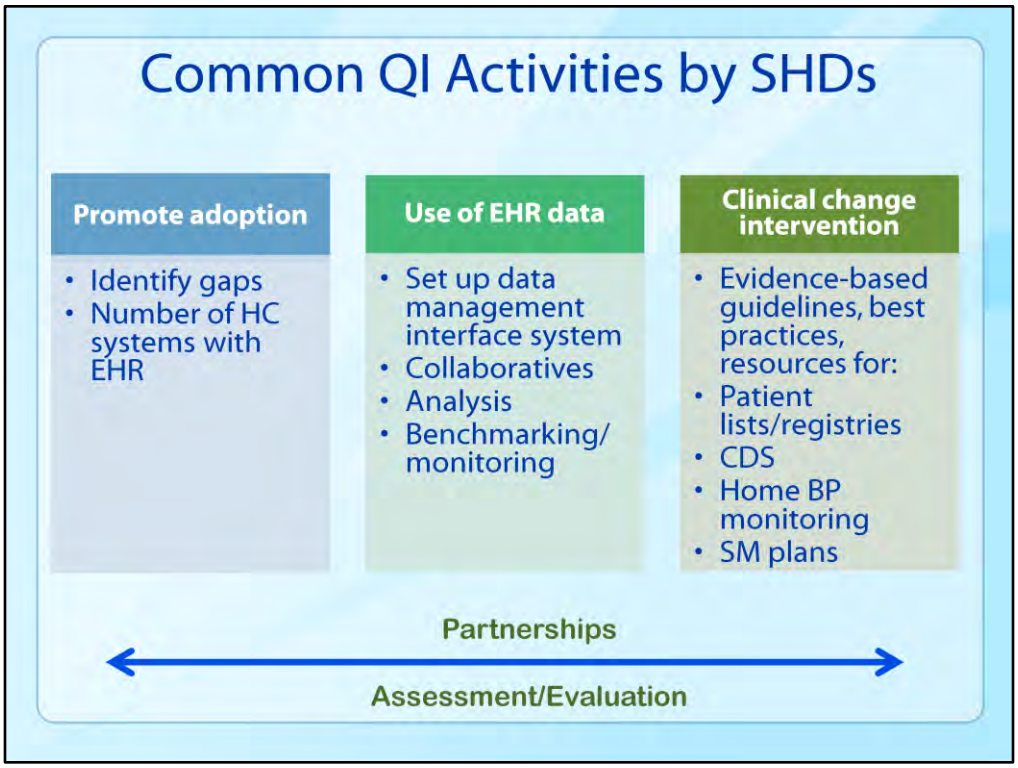
Secondly, using these partnerships to promote adoption of EHR (providing education, presentations, etc.).

Third, a state health department may provide actionable data back to the health system and facilitate prioritizing cardiovascular health and practices to improve outcomes, such as the ABCS.

And, finally, the state health department may serve as a resource to share evidence-based guidelines to clinicians.



The chronic disease prevention unit at a state health department may not have mechanisms in place to work directly with clinical systems in the state. However, there are other entities or initiatives that are in place with the purpose to improve the quality of care in the health care field and in specific health condition areas. It's up to the state health department to seek these partnerships out. The collaborations look different in each state, and are dictated by the opportunities afforded to the state health department based on the state context, current policies, and initiatives that are currently under way. We are learning of creative ways in which health departments are working with others for quality improvement, and sometimes taking on multiple strategic partnerships in order to attain a broad reach of the health care systems in the state.

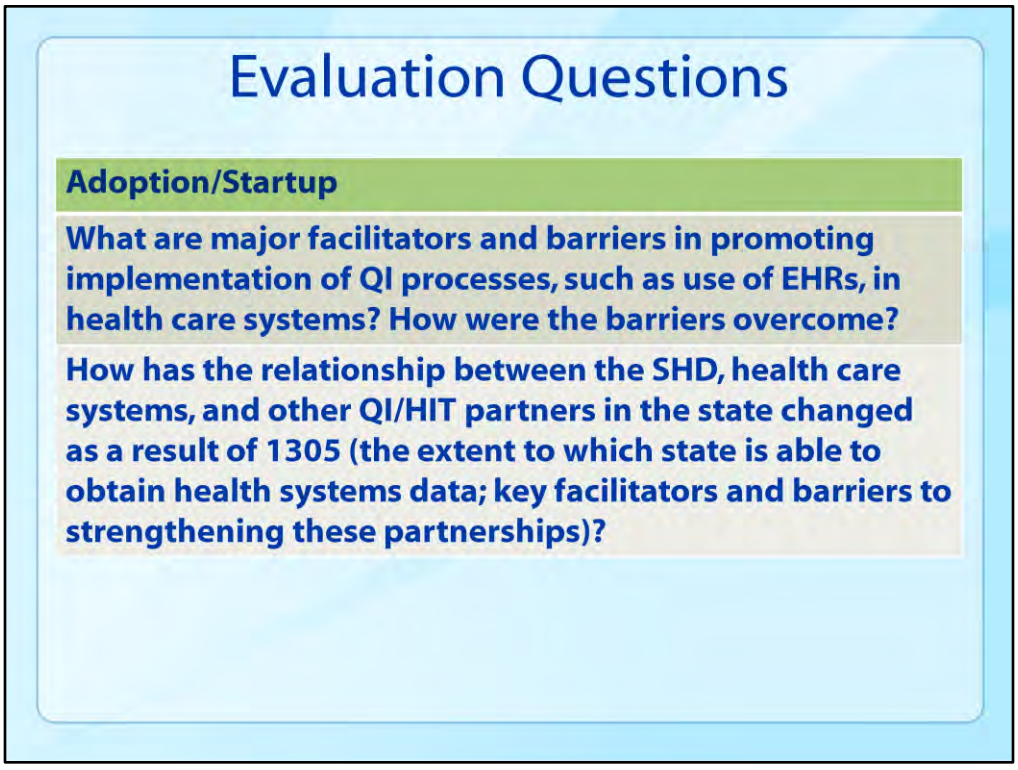


This slide summarizes some of the common QI activities that state health departments are undertaking to implement QI processes in health systems.

What I'd like to emphasize here is the importance of describing your program, identifying the particular phase of implementation that the program is in, and specifying at which points in the continuum or process that your program is intervening. A program's activities may be focusing on promoting adoption of EHR use, identifying the gaps and needs among health systems, and assessing the number or proportion of health care systems with EHRs in place that meet standards to effectively treat patients with high blood pressure.

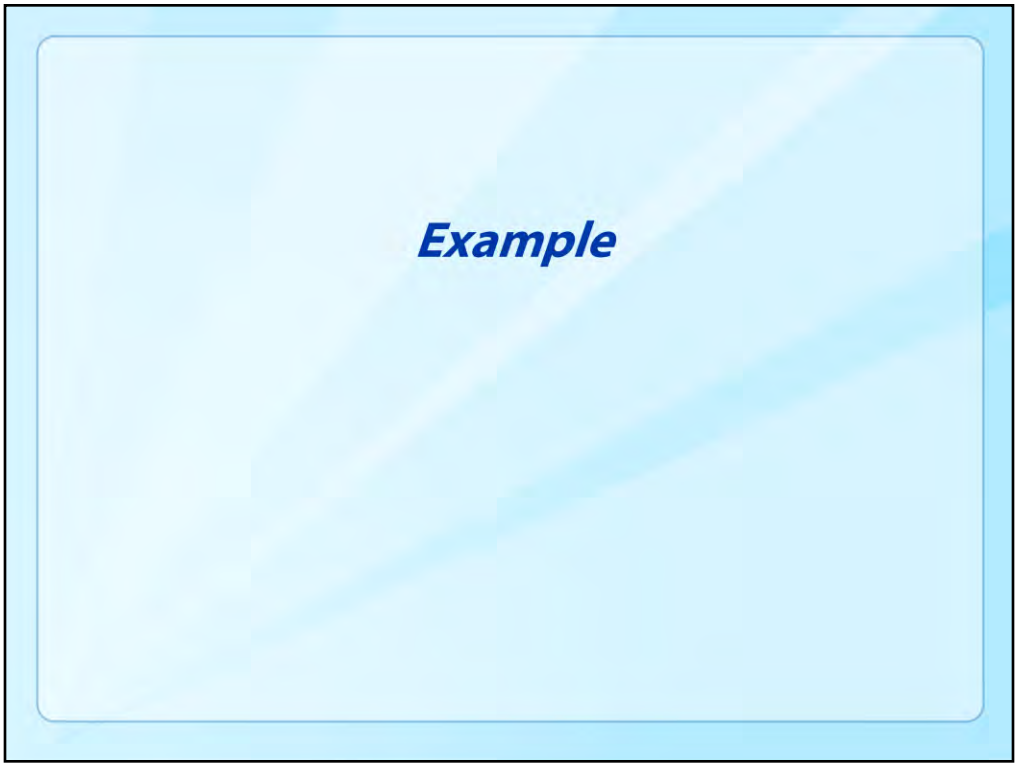
Or some programs may be targeting efforts working with those systems that already have EHRs in place and facilitating use of the data. Some states take the route of collaborating to set up a data management interface system, or sponsor QI collaboratives, or provide data analysis support and data benchmarking and monitoring. Through a study of these data, the dialogue opens up to support a clinical change intervention such as instituting patient lists and registries, clinical decision supports, and self-management plans.

Often a program will be working a little in all three of these boxes to a certain extent, dividing efforts across this continuum and addressing the range of needs of different types of health systems at the same time, moving them farther along the continuum and scaling up successful efforts.



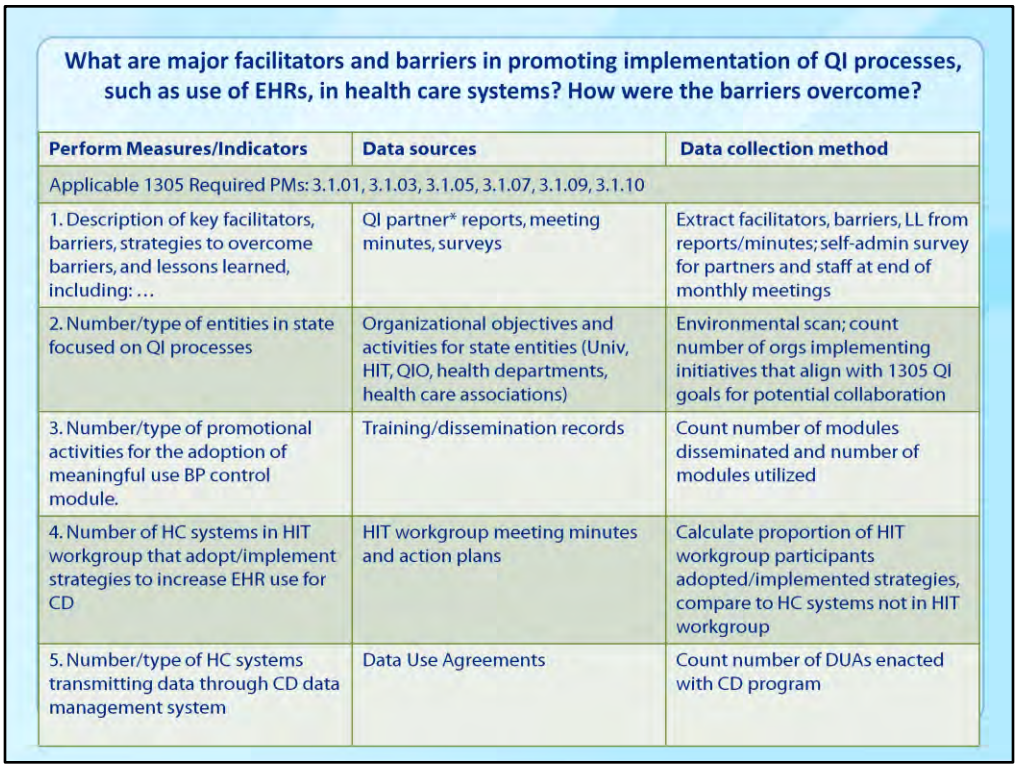
Here are a couple of recommended evaluation questions that a state-funded chronic disease program may want to study if they are in the initial stages of program implementation.

- Assessing the facilitators and barriers in promoting QI? How were barriers overcome?
- And another question evaluating the evolution of partnerships between the health department, health care, and other key state partners.



This is an “example.”

I’ll present some example indicators, data sources, and data collection methods that may be selected to address these questions.



What are major facilitators and barriers in promoting implementation of QI processes, such as use of EHRs, in health care systems? How were the barriers overcome?

Perform Measures/Indicators	Data sources	Data collection method
Applicable 1305 Required PMs: 3.1.01, 3.1.03, 3.1.05, 3.1.07, 3.1.09, 3.1.10		
1. Description of key facilitators, barriers, strategies to overcome barriers, and lessons learned, including: …	QI partner* reports, meeting minutes, surveys	Extract facilitators, barriers, LL from reports/minutes; self-admin survey for partners and staff at end of monthly meetings
2. Number/type of entities in state focused on QI processes	Organizational objectives and activities for state entities (Univ, HIT, QIO, health departments, health care associations)	Environmental scan; count number of orgs implementing initiatives that align with 1305 QI goals for potential collaboration
3. Number/type of promotional activities for the adoption of meaningful use BP control module.	Training/dissemination records	Count number of modules disseminated and number of modules utilized
4. Number of HC systems in HIT workgroup that adopt/implement strategies to increase EHR use for CD	HIT workgroup meeting minutes and action plans	Calculate proportion of HIT workgroup participants adopted/implemented strategies, compare to HC systems not in HIT workgroup
5. Number/type of HC systems transmitting data through CD data management system	Data Use Agreements	Count number of DUAs enacted with CD program

This slide presents a few example indicators, data sources, and data collection methods that can be used to answer the question about facilitators and barriers. These are just examples; however, they have been informed by real-world evaluations. It's unlikely that a program would find all these indicators relevant to the activities that it is conducting. However, during this Coffee Break we wanted to show the breadth and range of possibilities that exist to answer this question. Separate indicators may need to be included to capture the work a program is doing to promote adoption or to increase use of EHR data, and potentially support the implementation of clinical change interventions.

1. Qualitative data collection methods such as gathering information about facilitators and barriers and lessons learned through a self-administered survey for partners and staff, as well as document review of partner reports and meeting notes, can provide a lot of rich information needed to answer this question and to inform program improvement. Note that QI partner reports may be multiple (or sample of clinic systems = survey/interviews).

2. A program may want to conduct an environmental scan to assess how many entities in the state may be focusing on similar QI processes and identify whether they have successfully established collaborations with all potential partners.

3. Count the number and type of promotional activities conducted by the program to encourage the adoption of specific EHR capabilities by health systems.

4. Where programs are working with a health information technology workgroup, the evaluator may be able to do a document review of the meeting minutes and action plans to calculate the proportion of health care systems that have strategies in place to increase EHR use for chronic disease. Similarly, for a program that has dedicated much of its resources to developing a system or interface to access health system chronic disease data to promote use of EHR data, an indicator might be the number and type of health care systems using the system, measured by the data use agreements in place.

How has the relationship between the SHD, health care systems, and other QI/HIT partners in the state changed as a result of 1305 (the extent to which state is able to obtain health systems data; key facilitators and barriers to strengthening partnerships)?

Perform Measures/Indicators	Data sources	Data collection method
Applicable 1305 Required PMs: 3.1.01, 3.1.03, 3.1.05, 3.1.07, 3.1.09, 3.1.10		
1. Number of appropriate partnerships established/strengthened	Database of CD program partners	Monitor and count number/type/activities in partner database quarterly
2. Number/type of CD staff participate in workgroup meetings	Workgroup meeting attendance list	Number of meetings attended by at least 1 CD staff person
3. Description of barriers/facilitators to establishing, strengthening partnerships with HC systems	Meeting minutes and key informant interviews	Extract barriers, facilitators from meeting minutes; telephone interviews
4. Number/types of partnership activities; satisfaction; and effectiveness	Partnership survey	Annual online partnership survey - questions re: satisfaction ratings, open-ended questions
5. Number of HC databases/sets with NQF0018 accessible to CD program	Internal/external datasets available to CD program	Percentage of internal/external datasets that program can access that include NQF0018

Here are some indicators to describe how relationships across entities may have changed as a result of CDC funding.

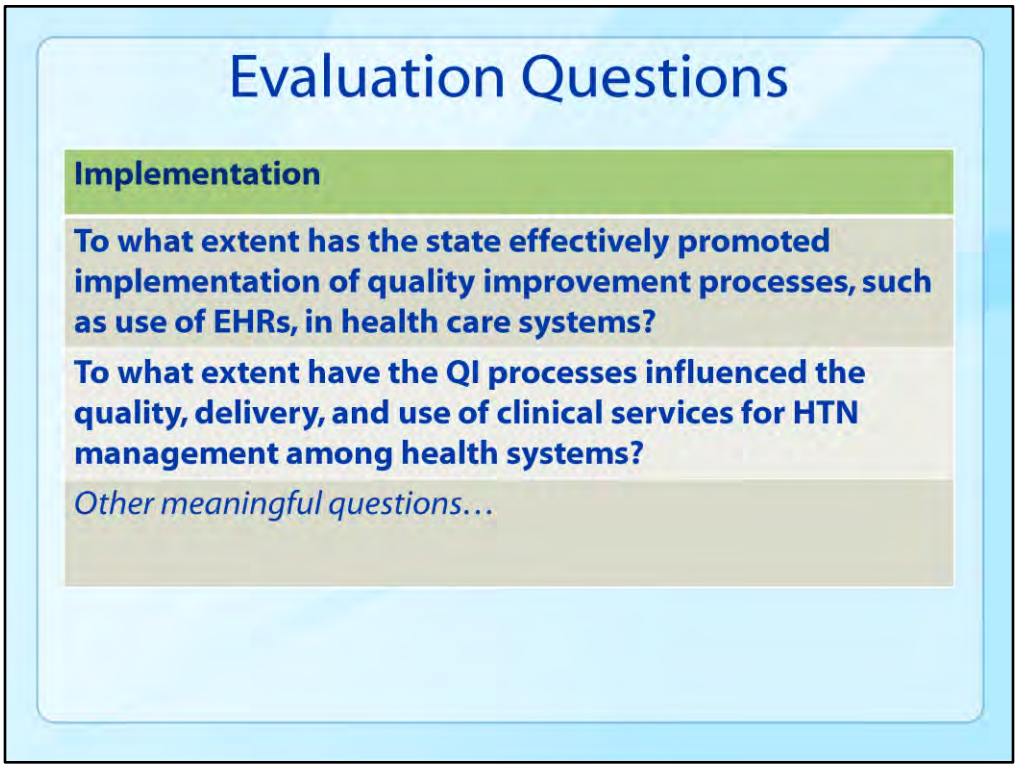
These may include monitoring a partnership database and counting the number and type of partnerships established.

Tracking the percent of workgroup meetings that chronic disease program staff attend.

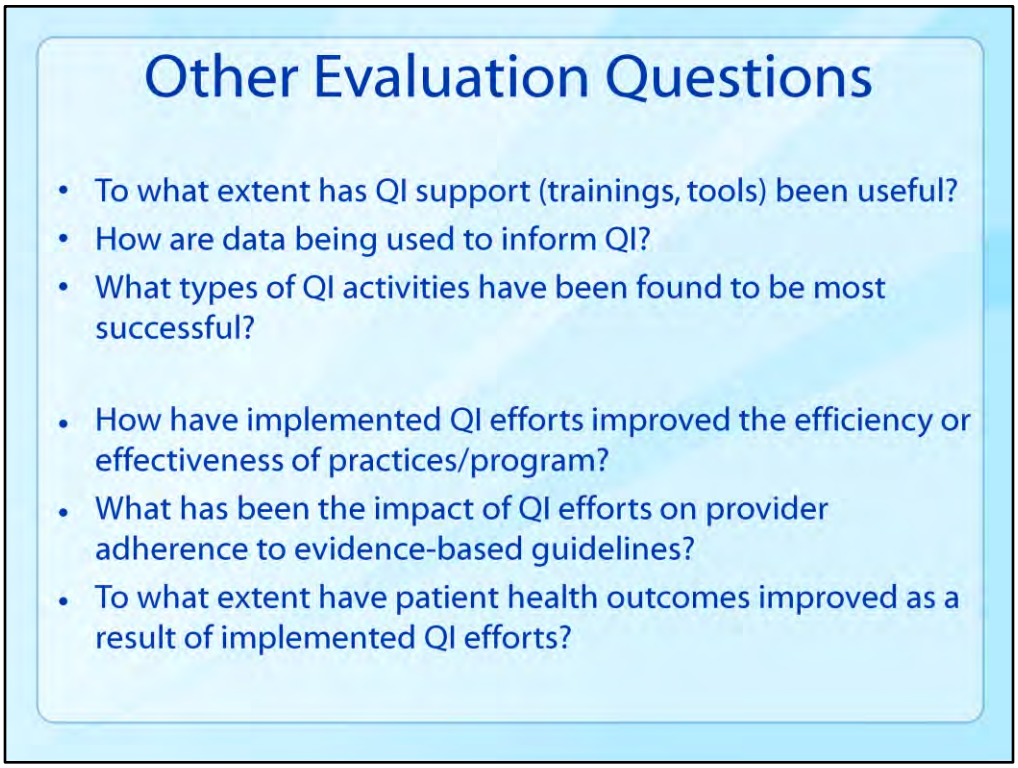
Again, using document review and key informant telephone interviews with partners to describe barriers and facilitators.

Similarly, an annual online partnership survey can reveal partners' perceptions on the effectiveness of the existing partnership.

A great indicator of a successful partnership is the number of databases or datasets that the state chronic disease program has access to that include quality measures of interest.



Once program activities are fully implemented, you may want to assess effectiveness and outcomes using the following questions.



In the implementation phase, other key process evaluation questions that we might want to ask are:

- To what extent has the QI support been useful?
- We might assess whether QI and decisions are data-driven.
- Or we may assess which activities have been most successful.

To assess outcomes of this strategy we may want to ask:

- How have implemented QI efforts improved the efficiency or effectiveness of practices/program?
- What has been the impact of QI efforts on provider adherence to evidence-based guidelines?
- To what extent have patient health outcomes improved as a result of implemented QI efforts?

In summary, some take-home messages are:

- Describe and try to tease out as best as possible the role of the state health department and that of its key partners.
- Institute data collection methods to monitor QI clinical change interventions.
- Look ahead. When your program is fully implemented, plan to measure intermediate and long-term outcomes.

References and Resources

CDC DHDSP/DDT. (2012). Promoting Clinical Quality: A Guide for Public Health Chronic Disease Programs.

Dilley, JA, et al. (2012). Quality Improvement Interventions in Public Health Systems: A Systematic Review. *American Journal of Preventive Medicine*; 42(5S1):S58–S71.

Frieden, T. (2013). May 2013 CDC Public Health Grand Rounds on Million Hearts®.

Shojania KG, McDonald KM, Wachter RM, et al. (2004). Closing the Quality Gap: A Critical Analysis of Quality Improvement Strategies, Volume 1-Series Overview and Methodology. AHRQ Publication No. 04-0051-1. Rockville, MD: Agency for Healthcare Research and Quality.
www.ahrq.gov/clinic/tp/qgap1tp.htm

This slide presents some helpful references and resources.

Question 1: I'm a 1305 funded program, and I have a question about how the required 1305 performance measures tie into the example evaluation plan you presented for evaluating QI interventions.

Response: Great question. Although not all of the required performance measures may serve as a direct measure or indicator of the specific evaluation questions, CDC has asked 1305 states to identify the performance measures associated with the required evaluation questions as part of their 1305 state evaluation plans. Many of the short-term performance measures assess reach and adoption of the strategy. While this is critical information, it does not tell the whole picture on its own. Therefore, it's important to identify additional state-specific indicators for each evaluation question in your evaluation plan.

Question 2: Can you recommend any models that I can refer to that might help me evaluate partnerships?

Response: There is a helpful resource called the "Practical Playbook" produced by de Beaumont, Duke University, and CDC and it includes a model describing different degrees of integration of public health and primary care. This continuum could serve as a high-level way to assess the nature of public health partnerships with clinical partners over time. It includes a spectrum of integration from "isolation" to "cooperation"/"collaboration" through to "partnership."

The CDC DHDSP website also has a downloadable evaluation guide on Evaluating Partnerships.

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