

## **CDC Coffee Break: Using NVivo to analyze qualitative data**



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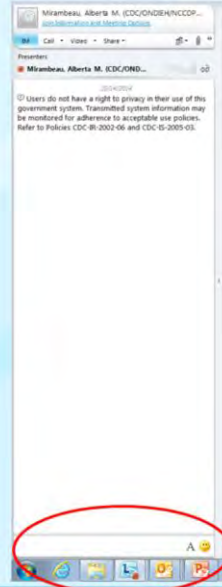
Applied Research and Evaluation Branch  
May 12, 2015

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



## Before we begin...

- All phones have been placed in SILENT mode
- To ask a question, simply click in the chat box located in the bottom left corner of your screen
- Time permitting, your question will be answered at the end of the presentation



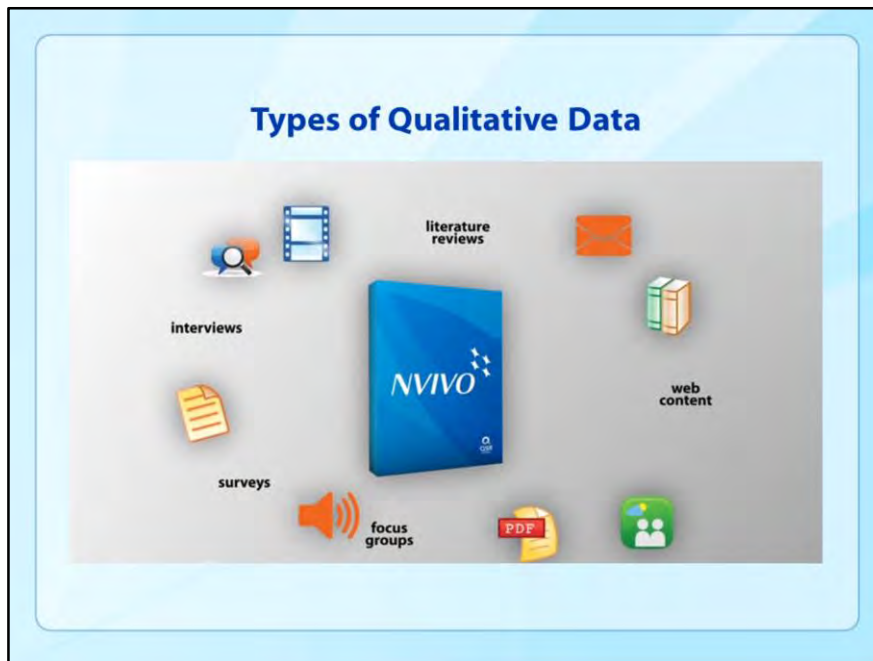
**Disclaimer: The information presented here is for training purposes and reflects the views of the presenter. It doesn't necessarily represent the official position of the Centers for Disease Control and Prevention.**

## Overview

1. The uses and cost of NVivo
2. Analyzing interview transcripts
3. Reporting qualitative outcomes
4. Considerations
5. Useful resources
6. Q &A

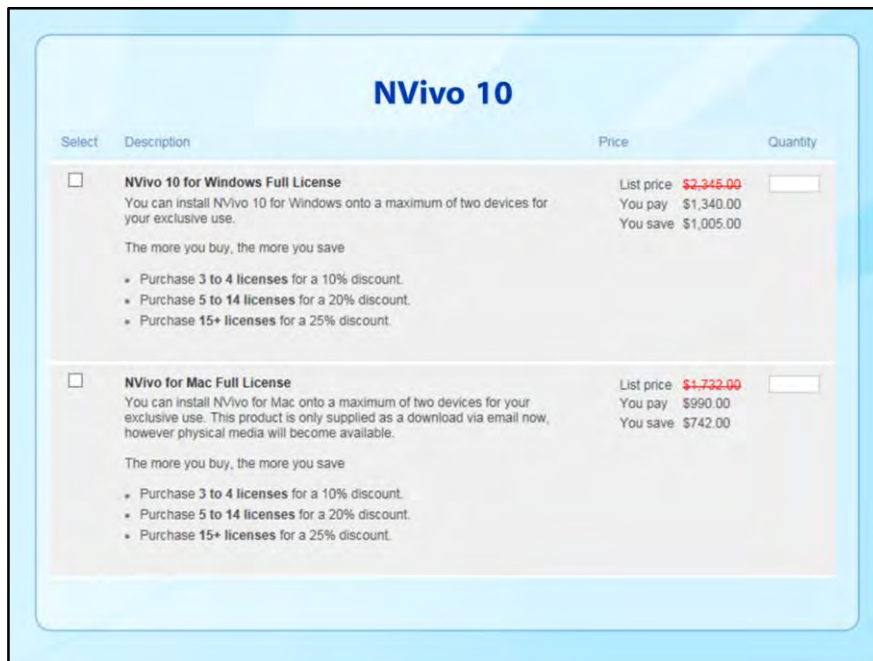
\* Citations, references, and credits – Myriad Pro, 11 pt

Today's Coffee Break will begin with a discussion of the various uses of NVivo in analyzing qualitative data. An example discussing how NVivo can be used to analyze interview transcripts to evaluate and report the outcomes of a program, will then be provided. It will conclude with considerations to keep in mind, a few useful resources, and a short question and answer period.



Qualitative methods are useful for sharing outcomes to gain a deeper and richer understanding of people’s experiences and perspectives. NVivo is a qualitative data analysis software package that can be used for these evaluation purposes. NVivo lets you import a wide range of materials from interview transcripts and journal articles to audio/video recordings and social media content.

While today’s Coffee Break will not go into the details of conducting qualitative data collection methods (such as interviews and focus groups), you can find more information on these qualitative methods on our website from earlier coffee breaks titled, “Using Qualitative Methods to Evaluate Public Health Programs,” by Dr. Aisha Tucker-Brown and “Using Qualitative Data to Share Programmatic Success” by Rashon Lane. M..A.



Without utilizing a software to analyze qualitative data, your efforts may be more time consuming and challenging to manage. It provides a way to manage your data and analyze it in the same space.

If you belong to a federal, state or local government department or agency that is undertaking research, or you work for a not-for-profit organization (that is not a registered charity), then the following pricing applies. Discounts are available when purchasing multiple licenses.

There is also 30-day trial available free of cost to consider for small short term projects, or to determine if the software is something you'd ultimately want to invest in long-term.

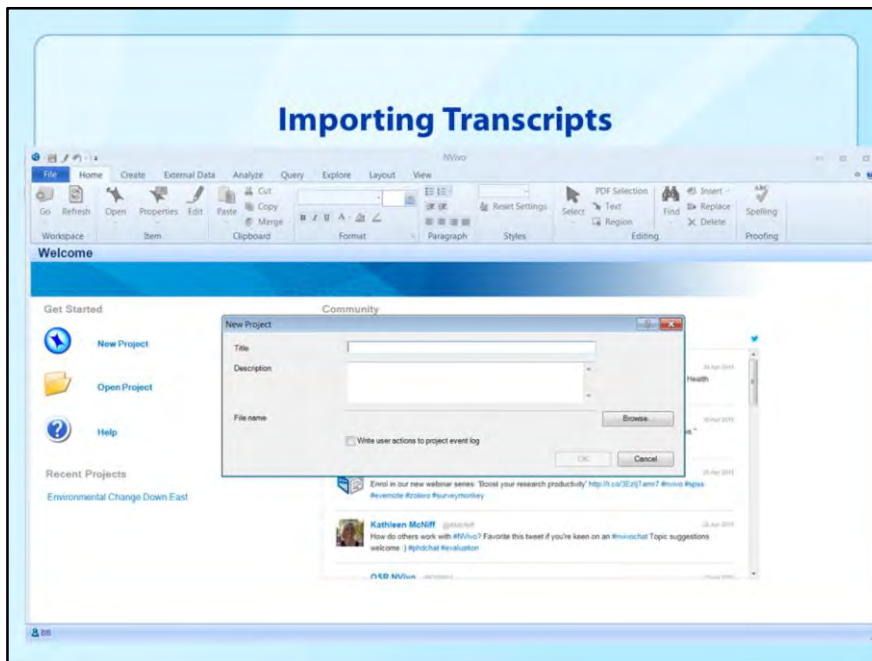
## Analyzing Interview Transcripts

1. Importing Transcripts
2. Auto-Coding



Analyzing interview transcripts may be helpful in evaluating a public health intervention based on in-depth information about stakeholders and/or intervention participants' experiences and perceptions.

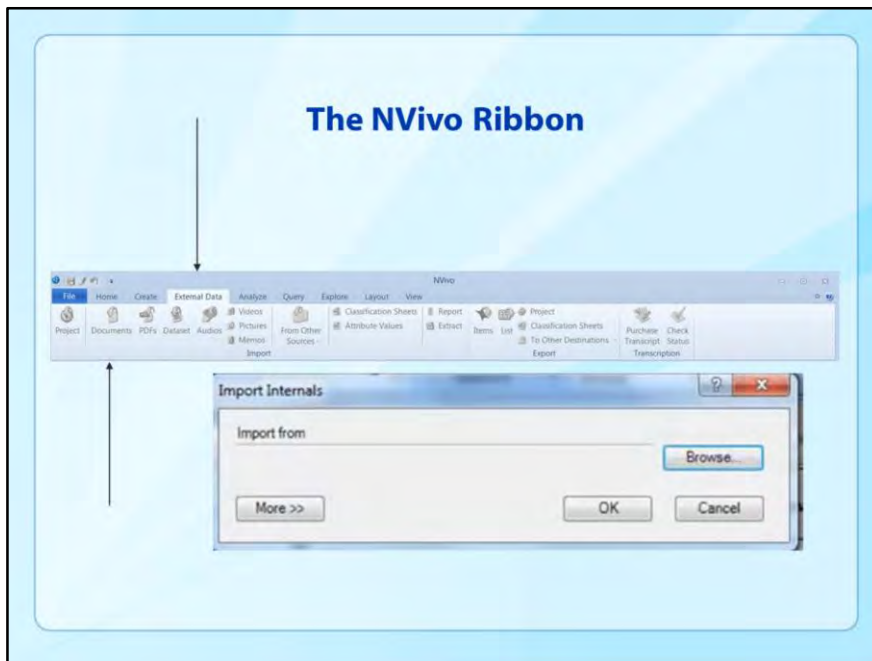
One approach is to: import your transcripts and auto-code them.



If you already have an NVivo license or if you are planning to purchase one, we'll walk through a few basic steps to analyzing interview transcripts.

Once you open NVivo, you would click on "New Project", and then type in a title for it. If you'd like, you can also type in a small description of the project.

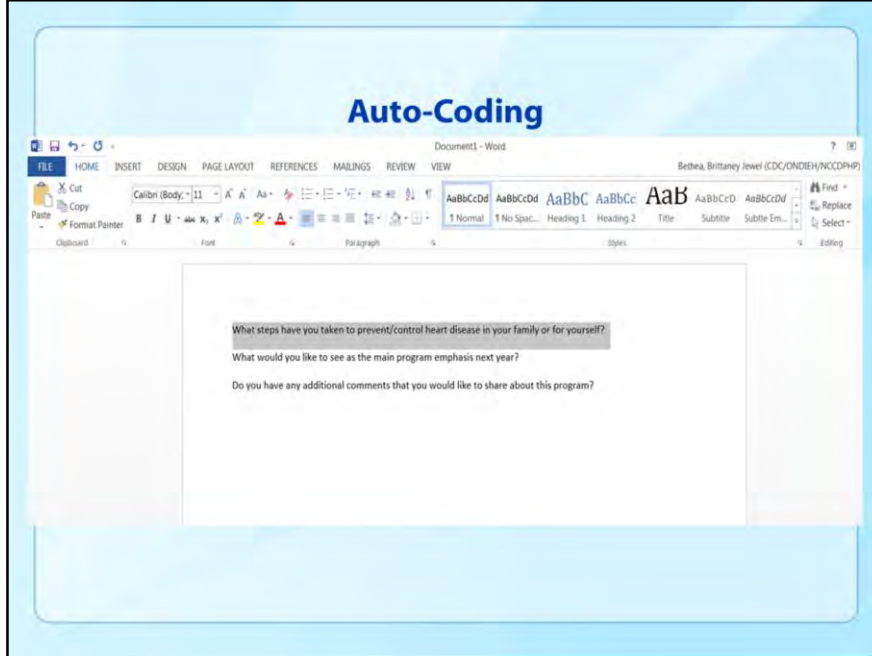




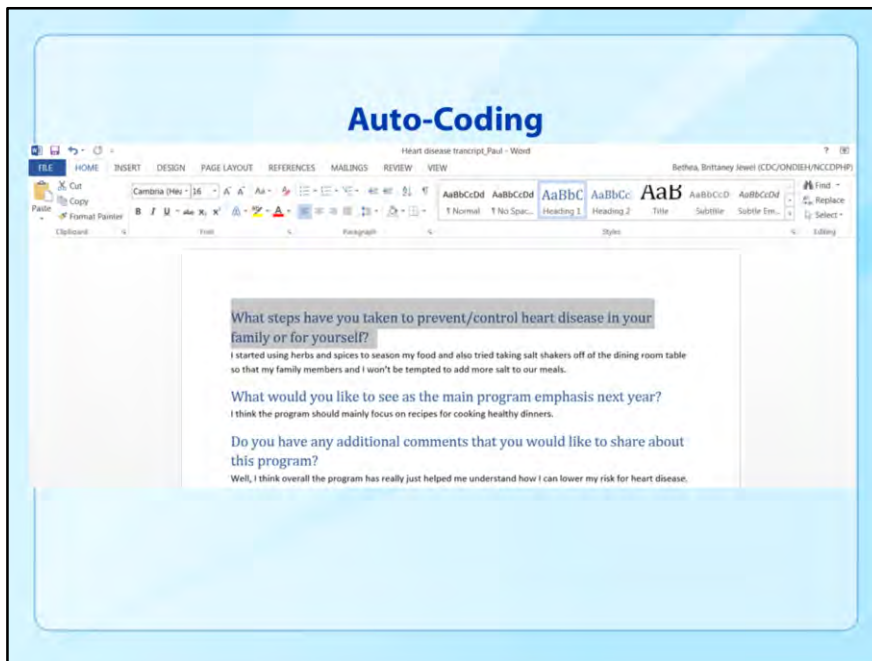
If your interviews have already been transcribed and saved on your computer, in NVivo, you would then click on the External Data Tab, then Documents, and select your transcriptions to import from a file folder on your computer.



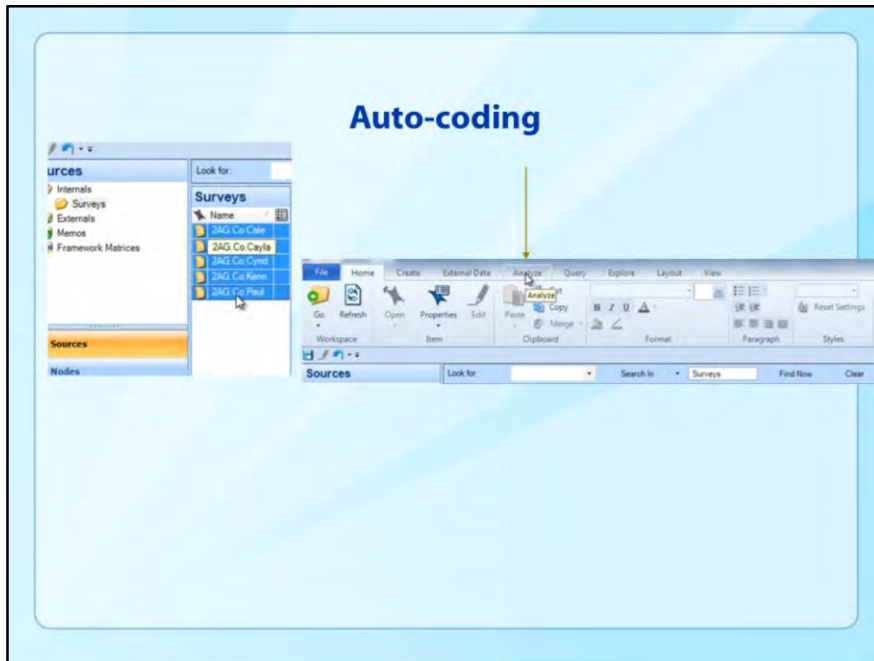
NVivo provides a space to not only store but also organize the data you've collected. Here, a transcript for each interview respondent is saved in one survey folder.



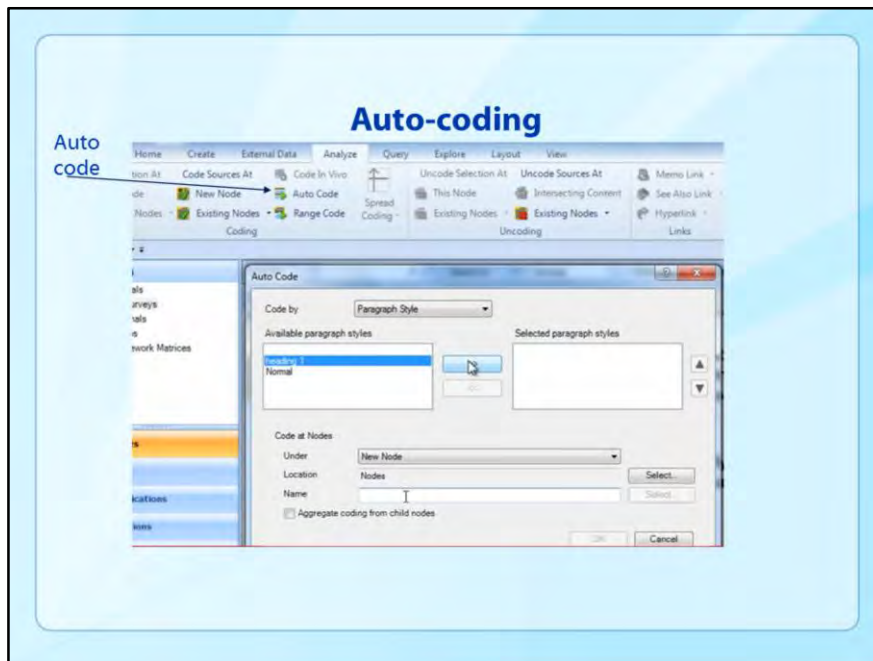
You'll want to aim to have all of the data from question 1 for each respondent in one particular node. The same applies to Q2, Q3, and so on, so that each node will align with a separate question. Nodes let you access concepts, topics, or themes.



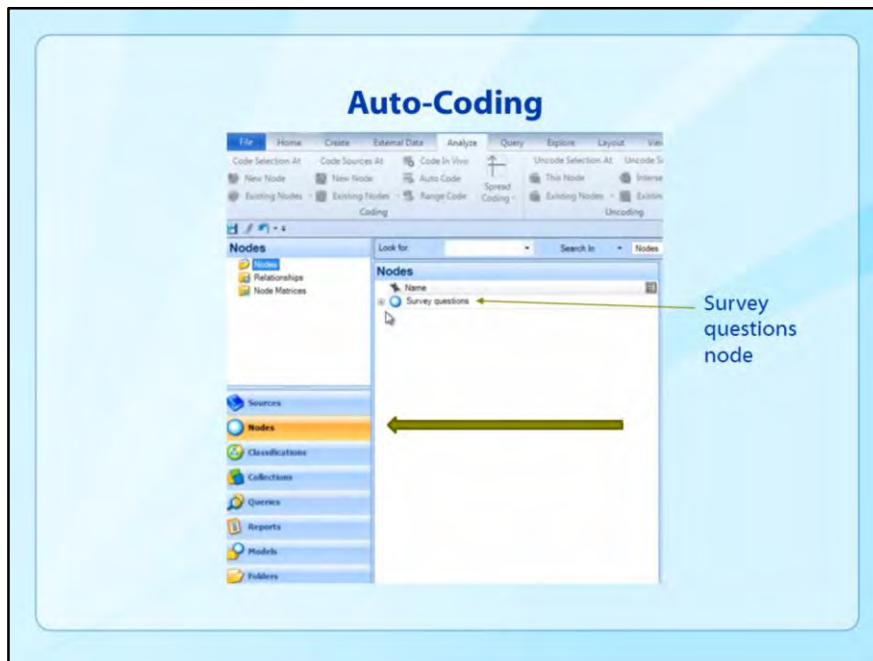
Lets say you're interviewing participants of a heart disease and stroke prevention program and you're asking them a series of questions about their perceptions or behaviors. A step to ensure ease of automatic coding is to highlight each question of each transcript and click on the Heading 1 option in Microsoft Word to change the format of the text. This step occurs prior to uploading the transcripts into NVivo.



You would select all the transcripts that you want to analyze.  
Then you'll click on the analyze tab.



You'd then select "Auto-Code," which will present a dialogue box. In the dialogue box you'll select code by paragraph style-Heading 1, because that's the format we applied to our transcripts. Then click the arrow button to add the selected style. Because we hadn't created a node, we don't have an existing one to select from. So we'll click the drop down box to select New Node. You can title the Node "survey questions"



When you click on the plus sign that is next to the survey question node, it will then list each question from your interview, with each participant's response to that question. So essentially you'll be able to see everyone's response to Q1 together, everyone's response to Q2 together, and so on. This allows you to see common themes among different participants responses for the same question.

## Reporting Qualitative Analysis Outcomes

- **Thematic Analysis Report**
  1. **Researchers review their data**
  2. **Make notes**
  3. **Sort it into categories**



The reporting of these themes is called a Thematic Analysis. In its simplest form, a thematic analysis is a categorizing strategy for qualitative data. It helps researchers move their analysis from a broad reading of the data towards discovering patterns and developing themes.



## Reporting Qualitative Analysis Outcomes

### Steps Participants took to prevent heart disease

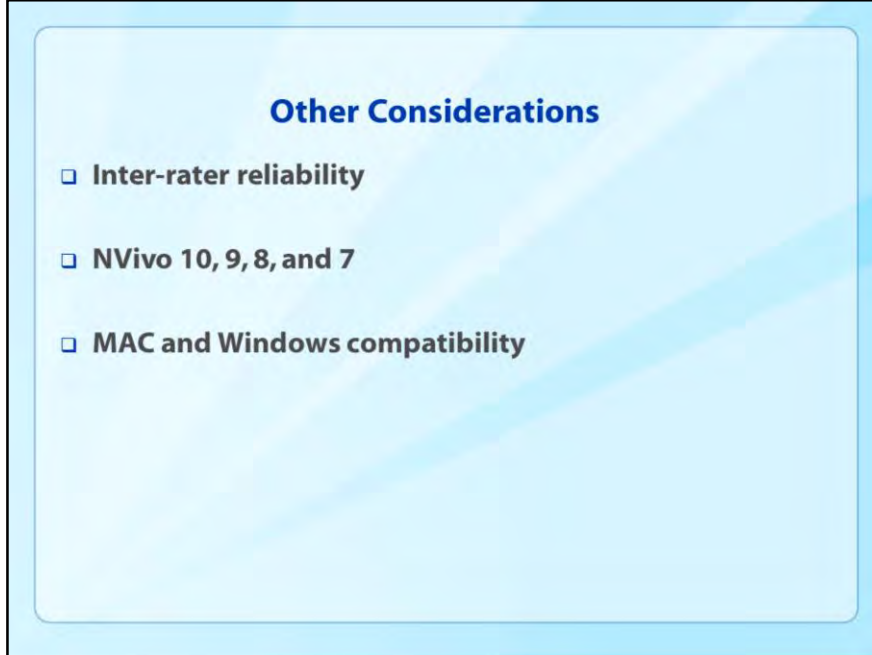
(Q1: What steps have you taken to prevent/control heart disease in your family or for yourself?)

#### > Sodium Reduction

- *I started using herbs and spices to season my food and also tried taking salt shakers off of the dining room table so that my family members and I won't be tempted to add more salt to our meals. [Participant 1]*
- ..... [Participant 2]
- ..... [Participant 4]
- ..... [Participant 6]
- ..... [Participant 7]
- ..... [Participant 8]
- ..... [Participant 9]

So let's say that after reviewing the data, 7 of the 10 participants mentioned they reduced their salt intake as a step to prevent themselves or their family members from having heart disease. A researcher would identify "Sodium Reduction" as one theme, and report "70% of program participants decreased their salt intake as a step to prevent heart disease". Supporting evidence would include the 7 participants statements regarding sodium reduction.

This theme identification would occur for each question on the interview transcripts.



There are a few considerations to keep in mind when analyzing qualitative data such as interview transcripts in NVivo. One is inter-rater reliability measured by the Kappa statistic or percent agreement. This demonstrates consensus in analysis among multiple researchers of the same data.

Note that the most updated version of the software is NVivo 10, which has the most updated and advanced features and whether you're using a MAC or Windows PC, the software is compatible for both.

## Useful Resources

**Free online Demos:**

[http://www.qsrinternational.com/training-and-events\\_calendar\\_listing.aspx?eventypeid=3](http://www.qsrinternational.com/training-and-events_calendar_listing.aspx?eventypeid=3)

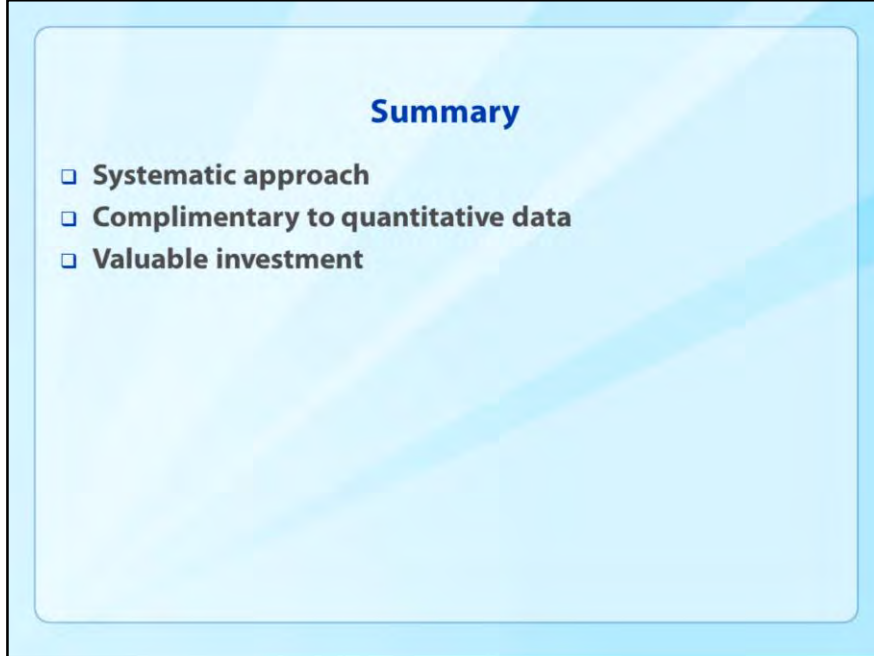
**Text Analysis:**

<https://youtu.be/ypo6lrpwDZ8>

**NVivo Blog:**

<http://blog.qsrinternational.com/>

NVivo has monthly free online demos and a blog that covers issues, trends and best practices in qualitative and mixed methods research.



Overall, using Nvivo to analyze qualitative data is a systematic approach to evaluating programs, that may be used to compliment quantitative data collected.

Purchasing the software would be a valuable investment if you're planning to evaluate content from existing documents, future interviews, or focus group to conduct a needs assessment; It will help minimize the time it takes to analyze data from these various methods and organize the data in one central location.

## Questions

## 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 email to:

**[AREBheartinfo@cdc.gov](mailto:AREBheartinfo@cdc.gov)**

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 email address on this slide.

## **Next Coffee Break**

**When: June 9<sup>th</sup>, 2015 at 2:30 ET**

**Topic: Evaluating Health Equity**

**Presenter: Rachel Davis & Derrick Gervin**



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



Our next Coffee Break is scheduled for Tuesday, June 9th and is entitled “Evaluating Health Equity”.



**For more information please contact Centers for Disease Control and Prevention**

1600 Clifton Road NE, Atlanta, GA 30333  
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348  
E-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov) Web: [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

National Center for Chronic Disease Prevention and Health Promotion



This concludes today's call. Thank you for joining us.