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Using Surveys for Community Health Needs Assessment

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Susan Brownlee, PhD of the Center for State Health Policy contributed to this presentation.

Questions for Today

- What does the Affordable Care Act (ACA) say about collecting data for Community Health Needs Assessments (CHNAs)?
- What is a survey?
- Surveys in context: what are the alternatives?
- How can you be a savvy user of surveys?

What does the ACA says about CHNA data collection?

Section 9007(a) of the ACA requires non-profit hospitals to conduct and publish CHNAs once every three years and adopt implementation plans addressing the identified needs

- Hospitals free to define their "community" so long as vulnerable (e.g., poor, uninsured) or high-need (e.g., multiple chronic conditions) populations are not excluded
- Must take into account information from persons with special knowledge in public health, including public agencies with current data or other information relevant to community needs
- Little methodological guidance, some examples mentioned: "meetings, focus groups, interviews, surveys, written correspondence, etc."

Source: US Treasury Department, Internal Revenue Service, Notice and Request for Comments Regarding the Community Health Needs Assessment Requirements for Tax-Exempt Hospitals, Notice 2011-52, July 7, 2011

What is a survey?

"…measurement procedures that involve asking questions of respondents."

Source: Research Methods Database. http://www.socialresearchmethods.net/kb/survey.php

Surveys in context: what are the alternatives?

- Analysis of existing data (secondary analysis)
  - Census information (demographics)
  - Mortality records (e.g., causes of death, places of death)
  - Birth records (e.g., timing of prenatal care, births to teens)
  - Hospital billing records (e.g., ambulatory care sensitive hospital use, readmissions)
  - Electronic medical records (e.g., prevalence of diagnosed conditions, adherence rates)
- Key informant interviews (e.g., local public health experts)
- Focus groups (e.g., patients/users, members of vulnerable groups)
- Public meetings
- Surveys
  - New analysis of existing surveys
  - Build your own

Some Pros and Cons of Information Sources

Source	Pros	Cons
Existing Data	Available, low cost Small area estimates	Limited content Can be messy to work with
Key Informants	Valued perspectives Low cost	Hard to generalize Hard to quantify needs
Focus Groups	Valued perspectives Fairly low cost	Hard to generalize Hard to quantify needs
Public Meetings	Low cost Engages interested parties	Hear “squeaky wheels” May raise expectations
Existing Surveys	Quantifies needs Low cost	May not be right geography May not ask right questions
New Surveys	Quantifies needs Can tailor content	Hard to design, execute Expensive

How can you be a savvy consumer of surveys?

Start With Three Goals

1. Be clear about what you want to learn
2. Know what surveys can and can't tell you
3. Spend resources wisely

Then Ask Yourself Seven Critical Question

1. Will existing data suffice?

- Using existing survey or other data will almost always be cheaper, quicker, and easier
- Build-your-own surveys should be designed to fill gaps in available information
- Can be used to quantify needs mentioned in key informant interviews of focus group discussions

2. Do I need to represent a population or can I just pick interesting respondents?

- Convenience or purposeful samples can prove very interesting, but can suffer from selection bias and limited generalizability

The reader response: Oyvey
Science; May 21, 1993; 260, 5111; ProQuest
pg. 1055

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EDITORIAL

The Reader Response: Oyvey

Science has recently published a number of issues on special topics, such as women in science, in which we have invited a reader response. Moreover, we published a summary of these responses, for example, saying that 76% of the respondents felt one way about this question and 39% said something else about the other question. This tabulation provoked an avalanche of letters from distinguished statisticians who were not answering the questions we posed but instead were concerned with the use of the words survey or poll for a collection of responses that are not scientifically organized.

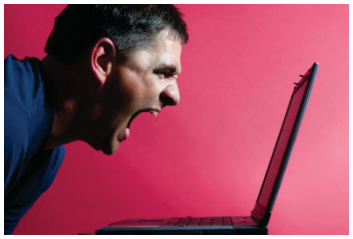
It is well known in the social science world that self-selected polls tend to select for groups that are more committed and more opinionated than would be representative of a general population. Therefore, a statistically accurate survey of AAAS members' opinions would involve a random selection of members from whom opinions would then be solicited. Such an accurate scientific survey, however, was not what the editor or staff had in mind. We

2. Do I need to represent a population or can I just pick interesting respondents?

- Convenience or purposeful samples can prove very interesting, but can suffer from selection bias and limited generalizability
- Selecting representative samples requires special expertise of survey research firms

3. How many respondents do I need?

The dreaded "Margin of Error"



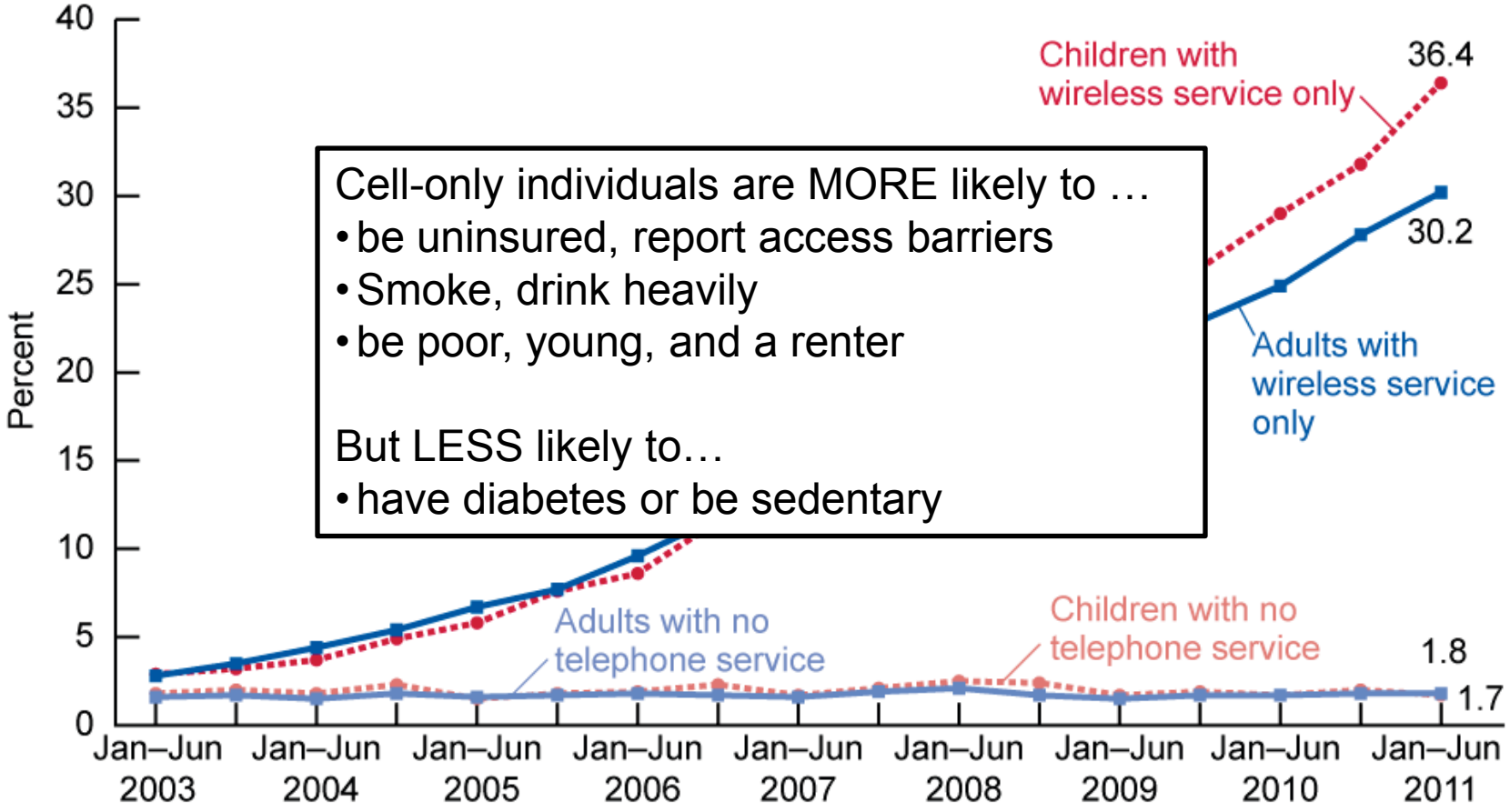
- "Sampling error", depends on number of interviews
  - Best known, but only one of many sources of survey error
    - Probably not the most important potential source of error
      - Formal statistical methods can help pick optimal sample size
        - **Instead - think through what subgroups are of interest**

For Example
--Your population is 10% African American
--If you pick a sample size of 200
--You might get interviews from 9 AA men and 11 AA women, with maybe just a couple over the age of 65

4. How can I be sure a "representative" sample is, in fact, representative?

- "Response rate" is important, but
  - Probably gets too much attention
  - Focus on 'effort', i.e., # of interview attempts with each sampled person at various times of the day, days of the week
  - Pay respondent incentives if you can
- Pay attention to the "mode of administration"
  - **Internet** surveys miss people without broadband access or are Luddite
  - **Paper and pencil** surveys get low response rates and require high literacy
  - **Landline phone surveys** miss people without phones or with just cell phones
  - **In-person interviews** (if you have to ask, you can't afford them)
- Consider languages and literacy levels
  - Translated questionnaires, bilingual interviewers
- Survey firms use demographic "weighting" to improve representation

Percentages of adults and children living in households with only wireless telephone service or no telephone service: United States, 2003–2011



NOTE: Adults are aged 18 and over; children are under age 18.
DATA SOURCE: CDC/NCHS, National Health Interview Survey.

5. What questions should I ask?

- First, focus on what you want to learn, then turn to questionnaire
- Writing unbiased survey questions is hard, best to use previously tested questions
  - See resource bibliography
  - Drawing questions from other sources has benefit of providing benchmarks

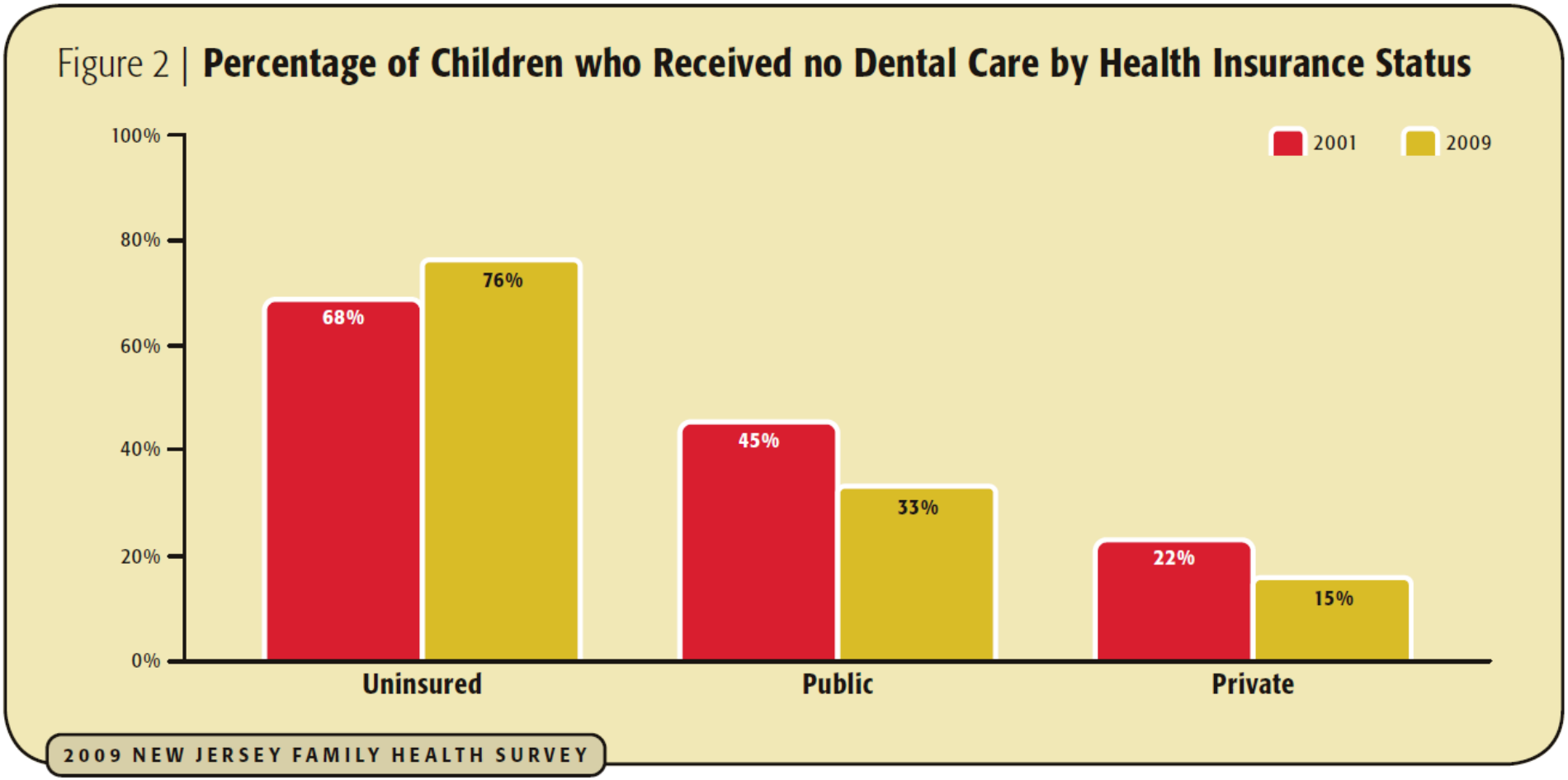
6. What should I do with the data?

- Survey firms can produce “top lines” and “cross-tabulations” based on pre-determined groupings
  - Demographics (age, sex, race/ethnicity, immigration status)
  - Health status
  - Health insurance coverage status
- Consider your audiences (hospital trustees, news media, planning and outreach staff, etc.)
  - Select key findings, keep the ‘data dump’ in an appendix
  - Simple graphics and tables work best

7. What else do I need to know?

- Institutional Review Board (IRB) approval may be required
  - Research is "a systematic investigation … designed to develop or contribute to generalizable knowledge.“
  - Research with children or other vulnerable populations has additional safeguards
  - In-house QI is does not meet this definition of “research”
  - Analysis of existing public use data does not require IRB review
  - **Interpretation of rules vary, so consult your local IRB administrator**
- Survey vendor costs and quality vary
  - A well crafted RFP can be very useful
  - CSHP can provide examples

For example…



Source: Nova J. & Gaboda D., New Jersey Children Without Dental Services in 2001 and 2009. New Brunswick: NJ Center for State Health Policy, Sept. 2011. http://www.cshp.rutgers.edu/Downloads/9040.pdf

Questions?

Selected Survey Resources for CHNA

Specific Surveys of Interest

ACS (American Community Survey), annual national survey supporting state and county estimates, conducted by the US Census Bureau). http://www.census.gov/acs/www/about_the_survey/american_community_survey/

BRFSS (Behavioral Risk Factor Surveillance Survey), annual survey of all states, established by CDC in 1984, conducted by each state. http://www.cdc.gov/brfss/questionnaires/pdf-ques/2011brfss.pdf

CHIS (California Health Interview Survey, 2009), Adult Questionnaire, conducted by UCLA Center for Health Policy Research. http://www.chis.ucla.edu/pdf/CHIS2009adultquestionnaire.pdf

NHIS (National Health Interview Survey), Sample Adult Questionnaire, national survey established by CDC in 1957 and administered by NCHS (National Center for Health Statistics), need several years of combined data for state estimates. ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Survey_Questionnaires/NHIS/2011/english/qadult.pdf

NJFHS (New Jersey Family Health Survey, 2009), conducted by Rutgers Center for State Health Policy. http://www.cshp.rutgers.edu/Downloads/8620.pdf

YRBSS (Youth Risk Behavior Surveillance Survey), national and state school-based survey conducted by CDC and states every two years, grades 9-12. http://www.cdc.gov/healthyyouth/yrbs/pdf/questionnaire/2011_hs_questionnaire.pdf

Selected Survey Resources for CHNA (continued)

Other Great Resources

SHADAC links to state health surveys. http://www.shadac.org/content/state-survey-research-activity

SHADAC report on 7 national health access and coverage surveys (ACS, CPS, NHIS, MEPS-HC, BRFSS, NSCH, SIPP), links to all public-use files on page 11. http://www.shadac.org/files/shadac/publications/SHADAC_Brief24.pdf

UCLA National Network of State and Local Health Surveys, see handout.