

Results from Cognitive Interviews Exploring the Reliability of the ASTHO Profile Survey

Rivka Liss-Levinson, PhD; Richard C. Ingram, MEd, DrPH;
Katie Sellers, DrPH, CPH; Kyle Bogaert, MPH;
Paul Jarris, MD, MBA

2014 PHSSR Keeneland Conference
April 7-10, 2014 in Lexington, KY



Disclosure

- ▶ My spouse, significant other, or I have had no relevant financial relationships to disclose within the last 12 months.



Background

- ▶ Overview of ASTHO Profile Survey
 - 2012 survey is third in series – prior surveys fielded in 2007 and 2010
 - Collects information on SHA activities; structure, workforce; finance; planning and quality improvement; and health information management
 - Survey administered in October 2012 and held open until May 2013
 - 48 states and DC completed the 2012 Survey (96% overall response rate)

Background

- ▶ In addition to standard data cleaning, extensive follow-up conducted with states to verify data that appears in individual state profiles in report
- ▶ Asked states to confirm unusual numbers or particularly large discrepancies between 2010 and 2012 data
- ▶ Workforce and finance data particularly difficult to verify

Goal of Current Study

- ▶ Conduct cognitive interviews with personnel from state health agencies who responded to the survey to better assess the reliability of ASTHO's Profile Survey data, particularly the workforce and finance data
 - Understand what data may or may not be reliable and why
 - Gather feedback on how to better construct the survey to obtain reliable data

Methods

- ▶ Senior deputies from all 49 agencies that responded to the survey were sent an email from University of Kentucky inviting staff to participate in phone interviews
- ▶ Goal of conducting interviews with personnel from 20 state health agencies
- ▶ Current status: 5 interviews conducted

Methods

- ▶ Interview protocol developed by ASTHO and UKY
- ▶ Interviews conducted by phone by R.I. and are approximately 30 minutes in length
- ▶ Interviewees received copy of interview questions and individual state profile prior to call
- ▶ Interviews recorded and will be transcribed
- ▶ Protocol vetted by 2 current ASTHO staff who are former Senior Deputies to ensure clarity of questions

Interview Protocol

- ▶ What data provided by your SHA do you think is reliable and what data is not reliable?
- ▶ Difficulty reporting finance data
 - E.g., total expenditures, expenditures by category
- ▶ Issues with agency workforce data
 - E.g., number of FTEs, number of workers at different offices
- ▶ Challenges reporting services provided
 - E.g., state health agency vs. umbrella agency

Interview Protocol

- ▶ Understanding how Profile responses collected by state health agency
 - E.g., assignment of sections and review of responses
- ▶ Sources of unreliability
 - E.g., changing staff, different interpretation of questions over time
- ▶ Suggestions to improve reliability and other additional feedback

Sample Question

- ▶ What particular issues do you come across when reporting data related to agency finances?
 - We often observe large differences between Profile years in total expenditures and expenditures by category (e.g., administration, improving consumer health).
 - Is the way in which the question is asked creating problems in reporting total expenditures or expenditures by category?
 - How so?

Preliminary Findings

- ▶ Most of the data is reliable, particularly when source for data is same or question has not changed over time
- ▶ Vacancies and current number of employees are both moving targets; FTE is budget term while staff is HR term
- ▶ States may have unique structures that make common terminology difficult (e.g., office types)

Preliminary Findings

- ▶ Discrepancies often related to changes in who filled out survey and their interpretation of questions
- ▶ Sections of survey generally distributed to personnel with knowledge of that topic area and final responses reviewed by leadership
- ▶ Changes in administration and funding can lead to large changes in workforce and services provided – responses may truly change significantly from year to year

Preliminary Findings

- ▶ Suggestions for increasing reliability:
- ▶ Further refine and clarify definitions, and keep consistent from year to year
- ▶ Hold webinars specific to personnel filling out each section so that can answer related questions

Limitations

- ▶ Results potentially biased by which states agree to participate in interviews
- ▶ Accuracy of recall of information about process that occurred more than a year ago
- ▶ Social desirability in responses
- ▶ Changes in state health agency personnel

Next Steps

- ▶ Complete the remainder of the 20 cognitive interviews and analyze the data, using transcripts to identify common themes
- ▶ Use findings from cognitive interviews to further refine survey instrument and further improve data collection process
- ▶ Measure effectiveness of quality improvement efforts when collect and analyze data for next Profile Survey

Contact Information

Rivka Liss-Levinson, Ph.D.
Director, Survey Research
ASTHO

rlisslevinson@astho.org

ASTHO Profile Survey resources:
<http://www.astho.org/profile>

**ASTHO Profile of State Public Health, Volume Three –
to be released May 2014!**