INTRODUCTION TO THE CAHPS ANALYSIS PROGRAM

Naomi Yount

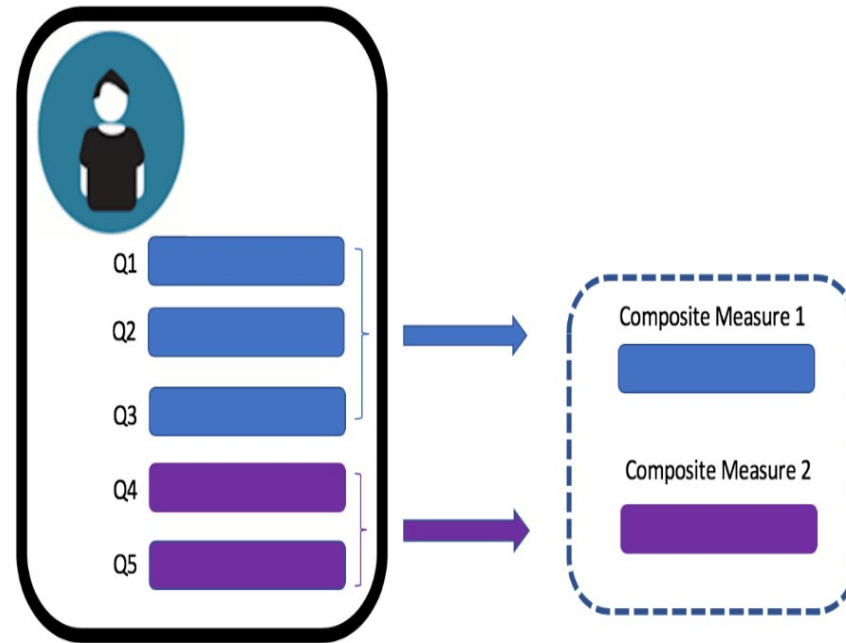Westat

User Network for CAHPS and SOPS

- Calculation of survey composite measures
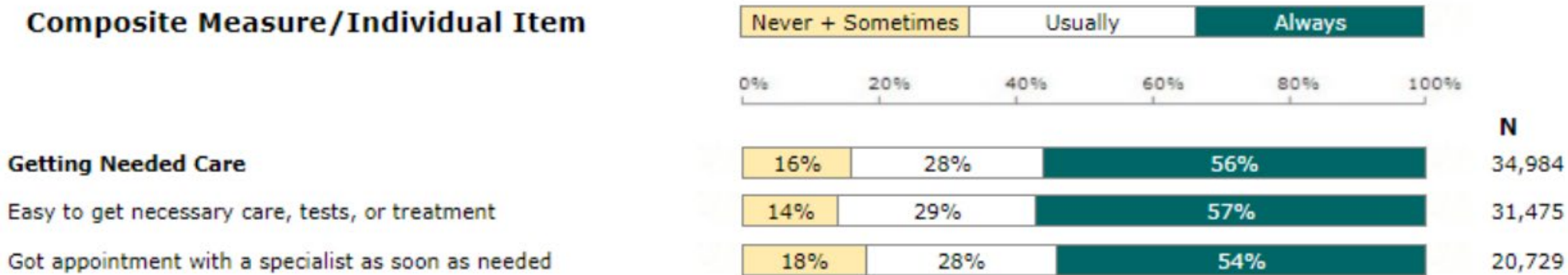
- Case mix adjustment

CAHPS Analysis Program

What is the CAHPS Analysis Program?

- Free code written for use with SAS® statistical software, also known as the "CAHPS macro"
  - Requires base SAS and SAS/STAT modules

- It enables CAHPS users to analyze data from <u>any</u> CAHPS survey:
  - Health Plan
  - Clinician & Group
  - Hospital
  - Home and Community Based Services
  - Hospice
  - Cancer Care
  - Emergency Department
  - Etc.

What does the macro do?

- The macro calculates the following results:
  - Top box scores (Most positive response percentages)
  - Mean scores
  - Full frequencies
  - Collapsed frequencies

What else does the macro do?

► Provides case-mix adjusted scores

► Indicates whether an entity's score is statistically different from the average

► Weights the data

► Weights the items in the composite measures

  − Equally weight the items

  − Weight based on the number of respondents to the items

► Plus other complex analyses (post-stratification weighting, imputation)

Before You Get Started – Think About

1. At what level(s) do you want to report the results?
   - Region, state, system/sponsor, plan

2. Do you want to case-mix adjust your results?

Note: Because the CAHPS Analysis Program was initially written for the CAHPS Health Plan Survey, the reporting unit variable name used in the Analysis Program must be "Plan."

3. Do you want to weight your results?
   - Weight item and composite measure results to the population
   - Weight items in composite measures based on the number of respondents
   - Other weighting options available

When to Use the Macro?

✅ If you want to validly compare entities to the average

✅ If you want to calculate scores using a standardized method to allow for comparisons

🔶 You don't need to use the macro if you are only calculating unadjusted unweighted top box scores

❌ You can't use the macro if you have less than 2 responses within entities
- The macro will alert you to any entities with fewer than 100 responses

What's Included in the CAHPS Analysis Program

The CAHPS Analysis Program Zip file contains 7 files:

- 1 SAS Macro program
- 4 sample SAS programs to provide examples of how to "call" the macro
- 2 test datasets for use with the sample SAS programs

Analysis Guidance Documents

1. Preparing Data from CAHPS Surveys for Analysis
   - For use no matter what statistical program you are using

2. Instructions for Analyzing Data from CAHPS Surveys in SAS®

► These documents and the CAHPS Analysis Program can be found on the CAHPS website

www.ahrq.gov/cahps/surveys-guidance/helpful-resources/analysis/

Preparing Data for Analysis

Preparing Data from CAHPS® Surveys for Analysis

Contents

- This document provides step-by-step instructions for:
  - Coding, entering, and checking CAHPS data
  - Identifying and excluding ineligible cases
  - Cleaning the data
  - Identifying and including complete and partial completed surveys
  - Recoding variables for analysis
- Provides instructions for calculating frequencies, top box and other percentages, and mean scores with or without SAS.

Instructions for Analyzing CAHPS Data in SAS

Instructions for Analyzing Data from CAHPS® Surveys in SAS®:

Using the CAHPS Analysis Program Version 5.0

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Managed and prepared by:

Westat, Rockville, MD

Naomi Yount, Ph.D.
Kayo Walsh, M.S. (Harvard Medical School)
Alan Zaslavsky, Ph.D. (Harvard Medical School)

Edited by Lise Rybowski, MBA

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- Provides detailed instructions for how to use the CAHPS Analysis Program and explains how the program works

- Table 6.1 and 6.2 provide all macro parameters grouped by what they do.

- Provides a listing of the output files produced and their contents