

# CAHPS Hospital Survey Podcast Series—Transcript

## Improving the Representativeness of the HCAHPS Survey

Note: The information covered in this podcast was current at the time of posting. CMS will occasionally update guidelines and calculations.

### *Slide 1-Improving the Representativeness of the HCAHPS Survey*

Welcome to the HCAHPS Podcast on “Improving the Representativeness of the HCAHPS Survey.”

During this podcast, we will discuss tips and reminders for improving patient representativeness.

### *Slide 2-Overview*

In this podcast, we will review what good patient representativeness looks like, why patient representativeness matters and its importance in health equity, review national hospital distributions of key patient characteristics, cover choosing a survey mode for patient representativeness, and show how switching survey modes can affect patient representativeness.

### *Slide 3-Patient Representativeness*

A survey has good representativeness when the proportion of eligible patients who respond is reasonably high and does not vary substantially by key patient characteristics, like race, ethnicity, age, or language spoken at home. In contrast, if some groups of patients are substantially less likely to respond than others, then they will be underrepresented among respondents.

### *Slide 4-Why Patient Representativeness Matters*

It benefits all stakeholders to capture the care experiences of all hospital patients.

Patient representativeness is a key factor to consider when choosing or changing survey mode. The mode in which the HCAHPS survey is presented could substantially influence which patients respond. The survey mode that yields the highest response rate and representativeness for a given hospital may depend on the characteristics of that hospital's patients.

### *Slide 5-Patient Representativeness and Health Equity*

A primary consideration for CMS is to achieve health equity by social risk factors. This requires that HCAHPS respondents are broadly representative of characteristics such as by race, ethnicity, sex, and language spoken at home. Representativeness by age and service line is also important.

Achieving good patient representativeness in the HCAHPS survey supports Executive Order 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government.

### *Slide 6-Key Characteristics of HCAHPS Respondents*

Next, we examine the national hospital-level distributions of HCAHPS respondents by race, ethnicity, language spoken at home, service line and sex, and age. Using the percentile tables shown in the next few slides, combined with information about their own patients, hospitals can determine how they compare to all hospitals that participate in HCAHPS.

### *Slide 7-Race and Ethnicity of HCAHPS Respondents*

This table shows the hospital distributions for race and ethnicity using data based on about 4,400 hospitals in calendar year 2019. Notice that we have bolded some categories in this table and in the following few slides. The bolded categories are ones where HCAHPS and other survey response rates are typically lower.

In the average hospital, 82% of patients are White, 6% are Black, 8% are Hispanic, and 4% are in the remaining racial and ethnic categories of American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander, multi-racial, or “Other” race category.

The distribution of the proportion of White patients among the 4,400 hospitals ranges from 36% White at the 5<sup>th</sup> percentile up to 98% White at the 95<sup>th</sup> percentile. The distribution of the proportion of Black patients ranges from 0% Black at the 5<sup>th</sup> percentile up to 27% Black at the 95<sup>th</sup> percentile. The distribution of the proportion of Hispanic patients ranges from 0% Hispanic at the 5<sup>th</sup> percentile up to 38% Hispanic at the 95<sup>th</sup> percentile.

A hospital could calculate its own proportion of Hispanic respondents and compare that to the percentiles in the Hispanic column of this table to learn where they fall in the distribution of hospitals.

For example, if a hospital calculates their Hispanic patient proportion as 21%, then using this table, the hospital will see they are in the top 10% of all hospitals with respect to the percentage of respondents who are Hispanic.

Note that we only have information about patient race and ethnicity for respondents.

### *Slide 8-Language Spoken at Home of HCAHPS Respondents*

This table shows the hospital distributions for language spoken at home, specifically for Spanish- and English-preferring patients. In the average hospital, 4% of patients are Spanish-preferring, while 94% of patients are English-preferring.

The distribution of the proportion of Spanish-preferring patients among the 4,400 hospitals ranges from 0% at the 5<sup>th</sup> percentile up to 19% at the 95<sup>th</sup> percentile. The distribution of the proportion of English-preferring patients ranges from 62% at the 5<sup>th</sup> percentile up to 99% at the 95<sup>th</sup> percentile.

A hospital could calculate its own proportion of Spanish-preferring patients and compare that to the percentiles in the middle column of this table to learn where they fall in the distribution of hospitals.

Note that we only have information about preferred language for respondents.

#### *Slide 9-Service Line and Sex of HCAHPS Respondents*

Next is a similar table, but for the Service Line and Sex variable used in HCAHPS patient-mix adjustment. Unlike race, ethnicity, and language spoken at home, we have service line, sex, and age information for all sampled patients, not just for respondents. In the average hospital, 11% of patients are in the Maternity service line, 30% are female and in the medical service line, 18% are female and in the surgical service line, 26% are male and in the medical service line, and finally 16% are male and in the surgical service line.

You can see the distribution of patients among the 4,400 hospitals for each service line and sex column by looking at the 95<sup>th</sup> percentile row and the 5<sup>th</sup> percentile row. For maternity, the distribution ranges from 0% maternity at the 5<sup>th</sup> percentile to 31% maternity at the 95<sup>th</sup> percentile.

As an example, suppose a hospital calculates their maternity proportion as 25%. Then, using this table the hospital would see they are in the top 10% of all hospitals with respect to the percentage of respondents who were maternity.

#### *Slide 10-Age Range of HCAHPS Respondents*

This table shows hospital distributions for patient age. In the average hospital, 19% of patients are in the 18-34 age range, 19% are in the 35-54 age range, 38% are in the 55-74 age range, and 24% are 75 years or older.

You can see the distribution of patients among the 4,400 hospitals for each age range column by looking at the 95<sup>th</sup> percentile row and the 5<sup>th</sup> percentile row. For the 18-34 age range, the distribution ranges from 3% at the 5<sup>th</sup> percentile to 37% at the 95<sup>th</sup> percentile.

As an example, if a hospital calculates their proportion of patients 75 years and older and it is less than 10%, that hospital can use this table to learn they are in the bottom 5% of all hospitals for the proportion of patients 75 years or older.

#### *Slide 11-Response Rates by Survey Mode and Patient Characteristics*

Next, we compare HCAHPS response rates in the Mail Only and Telephone Only modes by patients' service line and age. Note that 99% of all HCAHPS hospitals use the Mail Only or Telephone Only mode of administration.

You will see there are pronounced differences in mode-specific response rates for certain patient characteristics, while for others, mode-specific response rates are quite similar.

#### *Slide 12-Mail and Telephone Response Rates by Service Line and Sex*

This table could be useful when a hospital is choosing, or being assigned to, a survey mode. Again, we have bolded the categories in this table, and on the next slide, where HCAHPS and other survey response rates are typically lower.

Notice response rates for maternity patients differ by survey mode, with Phone achieving a higher response rate than Mail mode. So, if a hospital has a high percentage of maternity patients, it may get a higher response rate using the Phone mode.

#### *Slide 13-Mail and Telephone Response Rates by Age*

This slide shows the response rates for age groups by Mail Only and Telephone Only modes from 2019 HCAHPS discharges.

Notice younger patients are more likely to respond in the Phone mode, whereas older patients are more likely to respond by Mail. So, if a hospital has a high percentage of patients older than 75, it may get a higher response rate using Mail mode.

#### *Slide 14- Patient Representativeness and Survey Mode*

So far, we have learned that hospital distributions for patient characteristics can be used to learn about a given hospital's relative ranking among all hospitals. Those calculations can be utilized by hospitals and survey vendors to choose a survey mode that will maximize response rates.

We saw that patients in the 18-54 age range, including Maternity patients, demonstrate a preference for responding by Phone. Patients 75 and older demonstrate a preference for responding by Mail, while patients in the 55-74 age range respond at similar rates by Mail and Telephone.

#### *Slide 15- Patient Representativeness and Survey Mode, continued*

Be mindful that survey mode may affect which patients respond to the HCAHPS survey, and thus, which patients the survey represents. Hospitals should consider their patient population when choosing or changing survey mode.

#### *Slide 16-When Hospitals Switch Survey Mode*

The HCAHPS Project Team also examined survey response rate and patient representativeness before and after hospitals switched their survey mode. Though more limited, this analysis illustrates the relationship between survey mode and which patients are likely to respond, or not.

#### *Slide 17-Assessing Representativeness by Race, Ethnicity, and Language*

Because race, ethnicity, and language are available to CMS for respondents, but not non-respondents, unlike service line, sex, and age, CMS lacks the denominator to calculate response rates by race, ethnicity, and language. However, when a hospital switches its survey mode, a natural experiment is created with each hospital acting as its own control. Assuming that the patients in each hospital are

similar the quarter before and after a mode switch, then differential changes in response rate by race, ethnicity, and language will be reflected in changes in the race, ethnicity, and language of respondents.

*Slide 18-Changes in Respondent Characteristics Following a Change in Survey Mode*

CMS observed over 300 hospital survey mode switches from Telephone Only to Mail Only involving discharges from 2017 through 2019. On average, responses from Black, Hispanic, and Spanish-preferring patients declined after switching from Phone to Mail mode.

This table shows that on average when a hospital switched from Phone Only to Mail Only mode, it lost about half the representation from Black and Spanish-preferring respondents. Similarly, representativeness among Hispanic respondents was reduced by about a third after switching from Phone to Mail mode.

*Slide 19-Consider Patient Characteristics when Choosing or Changing Mode*

The best mode for representativeness for a given hospital depends on its unique patient population. The mode that provides the best patient representation may also increase response rate.

The survey literature finds that people who are younger, Black, and Hispanic are underrepresented in most surveys. Therefore, increasing the proportion of respondents with these characteristics is likely to improve overall representativeness.

Hospitals should monitor their own data to assess whether a change in survey mode substantially reduces response rate or representation of some patient groups.

*Slide 20-Mixed Mode Results in Highest Response Rate and Representativeness*

Recent preliminary results from the 2021 Mode Experiment show that Mixed mode survey administration still performs the best. The preliminary response rate achieved by Mail and Phone Only was 23% each, while Mixed Mode achieved a response rate of 32%.

Previous experiments find that Mixed mode, which includes a mail survey with phone follow-up, has better representativeness than Mail only and Phone only. Because the Mixed mode allows patients to select mail or phone, it shares the advantage of the higher performing mode with respect to age, service line, race, and ethnicity.

*Slide 21-Conclusions: Patient Representativeness and Survey Mode*

In summary, high response rates for all patient groups promote CMS' health equity goals.

Black, Hispanic, Spanish-preferring, younger, and maternity patients are more likely to respond to a phone survey, which includes phone in a Mixed survey mode. Older patients are more likely to respond to a Mail survey, which includes Mail in a Mixed survey mode.

Choosing a mode that resonates with a hospital's patient population provides better representation of patients' care experiences.

*Slide 22-Resources*

Please contact HCAHPS Technical Support for any questions you might have using the email address or telephone number displayed on this slide.

Additional HCAHPS Podcasts can be found on the HCAHPS Online website using the URL shown.

We hope you have found this podcast helpful. Thank you for listening to “Improving the Representativeness of the HCAHPS Survey.”