



 TO:
 THE PEW CHARITABLE TRUSTS

 FROM:
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 RE:
 PEW HEALTH INFORMATION TECHNOLOGY SURVEY METHODOLOGY STATEMENT

Study Introduction

The Pew Charitable Trusts contracted with Public Opinion Strategies and Hart Research Associates to conduct a mixed mode survey using NORC's AmeriSpeak[®] Panel of adults age 18 and older living in the United States. This study was offered in English and Spanish and available by web and phone.

The main focus of the research was to assess public attitudes about the portability of health information across doctors, providers, and health centers. It explored public perceptions about:

- Patient access to and health care providers sharing of electronic health record (EHR) information
- Interoperability of electronic health records systems
- Patient ability to download their health data to health apps and privacy considerations related to patient access to the information
- Improving patient matching and the implementation of unique patient identifiers
- The removal of the federal government funding ban regarding unique patient identifiers

The survey was conducted starting June 1, 2020, through July 3, 2020.

Sample Design

A general population sample of U.S. adults age 18 and older was selected from NORC's AmeriSpeak[®] Panel for this study.

The sample for a specific study is selected from the AmeriSpeak® Panel using sampling strata based on age, race/Hispanic ethnicity, education, and gender (48 sampling strata in total). The size of the selected sample per sampling stratum is determined by the population distribution for each stratum. In addition, sample selection takes into account expected differential survey completion rates by demographic groups so that the set of panel members with a completed interview for a study is a representative sample of the target population. If panel household has more than one active adult panel member, only one adult in the household is eligible for selection (random within-household sampling). Panelists selected for an AmeriSpeak® study earlier in the business week are not eligible for sample selection until the following business week.

The primary sampling frame for AmeriSpeak[®] is the 2010 NORC National Frame, a multistage probability sample that fully represents the U.S. household population.

To encourage study cooperation, NORC sent email reminders to sampled web-mode panelists on the following dates:

- Monday, June 8, 2020
- Saturday, June 13, 2020
- Thursday, June 18, 2020
- Tuesday, June 23, 2020
- Sunday, June 28, 2020
- Friday, July 3, 2020

On Tuesday, June 30, 2020, an additional sample was invited to the survey to achieve the target goal.

To administer the phone survey, NORC dialed the sampled phone-mode panelists throughout the field period. In addition, starting on Tuesday, June 2, 2020, AmeriSpeak[®] web-mode panelists for whom AmeriSpeak[®] had a phone number were also called to encourage response. These web panelists were allowed to complete the survey via phone if convenient.

Panelists were offered the cash equivalent of \$3.

Interviewed respondents took 12 minutes (median) to complete the survey (11 minutes web, 25 minutes phone).

Fielding

A small sample of English-speaking AmeriSpeak[®] web-mode panelists were invited on April 2, 2020, for a pretest. In total, NORC collected 46 pretest interviews.

Wording changes were made to a number of survey items and an additional three survey items were included before fielding the main survey to collect the 1,213 interviews between June 1, 2020, and July 3, 2020.

In total, NORC collected 1,213 interviews, 1,108 by web mode and 105 by phone mode unweighted.

Data Processing

NORC applied cleaning rules to the survey data for quality control by removing survey responses with response patterns to the main survey that were indicative of speeding, skipping, or straight lining responses. Respondents who completed the survey in or under 33% of the overall median duration were removed for speeding. Respondents who skipped 50% or more of the survey were removed for skipping. Finally, respondents who selected the same response for all questions that were part of the question batteries were also removed.

Statistical Weighting

Statistical weights for the study-eligible respondents were calculated using panel base sampling weights to start.

Panel base sampling weights for all sampled housing units are computed as the inverse of probability of selection from the NORC National Frame (the sampling frame that is used to sample housing units for AmeriSpeak) or address-based sample. The sample design and recruitment protocol for the AmeriSpeak Panel involves subsampling of initial non-respondent housing units. These subsampled non-respondent

housing units are selected for an in-person follow-up. The subsample of housing units that are selected for the nonresponse follow-up (NRFU) have their panel base sampling weights inflated by the inverse of the subsampling rate. The base sampling weights are further adjusted to account for unknown eligibility and nonresponse among eligible housing units. The household-level nonresponse adjusted weights are then post-stratified to external counts for number of households obtained from the Current Population Survey. Then, these household-level post-stratified weights are assigned to each eligible adult in every recruited household. Furthermore, a person-level nonresponse adjustment accounts for nonresponding adults within a recruited household.

Finally, panel weights are raked to external population totals associated with age, sex, education, race/Hispanic ethnicity, housing tenure, telephone status, and Census Division. Education was also included in this raking procedure. However, for that measure, on direction of the client, we allowed for greater tolerance in the variation from education benchmark populations totals in order to limit the amount of weighting needed. The external population totals are obtained from the Current Population Survey. The weights adjusted to the external population totals are the final panel weights.

Study-specific base sampling weights are derived using a combination of the final panel weight and the probability of selection associated with the sampled panel member. Since not all sampled panel members respond to the survey interview, an adjustment is needed to account for and adjust for survey non-respondents. This adjustment decreases potential nonresponse bias associated with sampled panel members who did not complete the survey interview for the study. Thus, the nonresponse adjusted survey weights for the study are adjusted via a raking ratio method to U.S. adults age 18 and older population totals associated with the following socio-demographic characteristics: age, sex, education, race/Hispanic ethnicity, and Census Region. The weights adjusted to the external population totals (again, for education, they were only partly adjusted toward those total) are the final study weights.

Raking and re-raking is done during the weighting process such that the weighted demographic distribution of the survey completes resemble the demographic distribution in the target population. The assumption is that the key survey items are related to the demographics. Therefore, by aligning the survey respondent demographics with the target population, the key survey items should also be in closer alignment with the target population.

The sampling margin of error is defined as half the width of the 95% confidence interval for a proportion estimate of 50% adjusted for design effect. It is therefore the largest margin of error possible for all estimated percentages based on the study sample. The margin of error for the survey was \pm 3.49%.

The design effect is the variance under the complex design divided by the variance under an SRS (simple random sampling) design of the same sample size. Design effect is variable-specific and the reported value is the median design effect calculated for a set of key survey variables. The average design effect for the survey was 1.54.