# Supporting Statement – Part B Collections of Information Employing Statistical Methods

## Respondent Universe and Sampling Methods

This data collection includes a nursing home administrator survey and interviews and focus groups with nursing home administrators, Quality Innovation Network Quality Improvement Organizations (QIN-QIO) task leads, and nursing home peer coaches. The QIN-QIO program works with nursing homes to improve the quality of care provided to Medicare beneficiaries. We are examining the differences in the types of quality improvement activities and resources used between nursing homes participating in the QIN-QIO program and non-participating nursing homes.

### Nursing Home Administrator Survey

The cross-sectional survey will collect information from 400 nursing home administrators who are participating in the CMS QIN-QIO program (intervention group) and 400 nursing home administrators who are not participating in the QIN-QIO program (comparison group). The sample size of 400 cases within the treatment and the control group was selected to ensure a margin of error of 5% or less for estimates within those groups, as well as to ensure a small-to-medium effect size for comparisons between the two groups (see section 2c below).

The sample will be stratified by region and Star rating system, and nursing homes will be randomly selected within each strata. Stratification by region is designed to produce a sample with a mix of nursing facilities’ relevant QIN-QIOs that is consistent with the actual population, but is not intended to produce reliable estimates at the individual QIN-QIO region.[[1]](#footnote-2) For the treatment group, we will randomly select nursing facilities within strata with the goal of having the number of interviews allocated in proportion to the total number of facilities in those strata. For the comparison group, we will select a sample that mirrors the regional distribution of the treatment group, to increase the comparability of the two. By stratifying by geographic area within each star-rating stratum, we ensure that the impact a specific QIN-QIO has on the overall program’s effectiveness is commensurate with the volume of nursing homes for which it is responsible within its region.

Stratification by Star rating is employed to allow for over-recruitment of one-star nursing faculties by the QIN-QIOs (because these low performers are most in need of assistance) so that comparisons are made between treatment and control groups that have a similar share of one-star facilities. The distribution of interviews across the QIN-QIO regions in the control group sample will reflect the distribution of facilities (and interviews) in the treatment group for the same reason.

#### Sampling Method

The QIN-QIO program sets targets for recruiting nursing homes to participate in the QIN-QIO program, and these target numbers change over the course of the 11th SOW. During October 1, 2014 – March 31, 2015, QIN-QIOs were required to recruit about 25% of the nursing homes accepting Medicare or Medicaid into the program; additional facilities will be added to the QIN-QIO program during the second recruitment period from April 1, 2017 – September 30, 2018, with the total constituting 75% of eligible nursing homes.

CMS maintains a list of all nursing homes that receive CMS funding that will serve as the sampling frame for the survey. The list includes nursing homes participating in the QIN-QIO program and those not participating in the QIN-QIO program. We examined baseline characteristics of participating and non-participating nursing homes in the first wave of implementation in 2013-2014 to identify systematic differences that could potentially bias analytical results. We will conduct a similar analysis with the current cohort of nursing homes to identify any differences in resident or nursing home characteristics. If necessary, we will utilize propensity score matching to adjust for systematic differences between these groups during the analyses.

The intervention group will be randomly selected from those participating in the QIN-QIO program after stratification by star rating and QIN-QIO region. This list includes contact information for each nursing home, including the designated point-of-contact for the QIO program. We will use MDS 3.0 to identify nursing homes not participating in the QIN-QIO program and randomly select nursing homes within the comparison group strata.

For both intervention and comparison groups, 100 nursing homes will be sampled from 1-Star rated nursing homes and 300 will be sampled from 2-5 Star rated nursing homes. For both groups the 1-Star rated nursing homes will be proportionally allocated based on the number of treatment group 1-Star nursing homes located within each QIN-QIO region. The 2-5 Star rated nursing homes will be proportionally allocated based on the number of treatment group 2-5 Star nursing homes located within each QIN-QIO region.

Table 1 and Table 2 provides data on the expected universe/frame as a whole and for each strata in the proposed intervention and comparison sample groups.

#### Expected Response Rates

We expect the nursing home administrators to have a response rate of 60%, because of difficulties scheduling and conducting telephone interviews during normal working hours. This response rate is based on similar health care administrator surveys conducted previously by IEC team members.

Table 1: Expected Sample Universe and Strata for Nursing Home Survey Intervention Group

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| QIN-QIO Region | 1 Star Rating: Expected Universe/Frame/Frame: N | 1 Star Rating: Expected Universe/Frame/Frame: % | 1 Star Rating: Sample: N | 1 Star Rating: Sample: % | 2-5 Star Rating: Expected Universe/Frame/Frame: N | 2-5 Star Rating: Expected Universe/Frame/Frame: % | 2-5 Star Rating: Sample: N | 2-5 Star Rating: Sample: % |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Alliant Georgia Medical Care Foundation | 40 | 4.5% | 4 | 4.5% | 229 | 3.3% | 10 | 3.3% |
| Atlantic Quality Improvement Network | 60 | 6.7% | 7 | 6.7% | 533 | 7.7% | 23 | 7.7% |
| atom Alliance | 101 | 11.3% | 11 | 11.3% | 706 | 10.1% | 30 | 10.1% |
| Great Plains Quality Innovation Network | 31 | 3.5% | 3 | 3.5% | 371 | 5.3% | 16 | 5.3% |
| Health Services Advisory Group | 141 | 15.8% | 16 | 15.8% | 1311 | 18.8% | 56 | 18.8% |
| Healthcentric Advisors | 30 | 3.4% | 3 | 3.4% | 541 | 7.8% | 23 | 7.8% |
| HealthInsight | 18 | 2.0% | 2 | 2.0% | 205 | 2.9% | 9 | 2.9% |
| Lake Superior Quality Innovation Network | 35 | 3.9% | 4 | 3.9% | 647 | 9.3% | 28 | 9.3% |
| Mountain Pacific Quality Health Foundation | 10 | 1.1% | 1 | 1.1% | 149 | 2.1% | 6 | 2.1% |
| Qualis Health | 14 | 1.6% | 2 | 1.6% | 93 | 1.3% | 4 | 1.3% |
| Quality Insights Quality Innovation Network | 92 | 10.3% | 10 | 10.3% | 534 | 7.7% | 23 | 7.7% |
| Telligen | 91 | 10.2% | 10 | 10.2% | 598 | 8.6% | 26 | 8.6% |
| TMF | 206 | 23.1% | 23 | 23.1% | 900 | 12.9% | 39 | 12.9% |
| VHQC | 23 | 2.6% | 3 | 2.6% | 150 | 2.2% | 6 | 2.2% |
| **Total** | 892 | 100.0% | 100 | 100.0% | 6967 | 100.0% | 300 | 100.0% |

Table 2: Expected Sample Universe and Strata for Nursing Home Survey Comparison Group

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| QIN-QIO Region | 1 Star Rating: Expected Universe/Frame/Frame: N | 1 Star Rating: Expected Universe/Frame/Frame: % | 1 Star Rating: Sample: N | 1 Star Rating: Sample: % | 2-5 Star Rating: Expected Universe/Frame/Frame: N | 2-5 Star Rating: Expected Universe/Frame/Frame: % | 2-5 Star Rating: Sample: N | 2-5 Star Rating: Sample: % |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Alliant Georgia Medical Care Foundation | 65 | 11.2% | 5 | 4.5% | 435 | 6.1% | 10 | 3.3% |
| Atlantic Quality Improvement Network | 17 | 2.9% | 7 | 6.7% | 223 | 3.1% | 23 | 7.7% |
| atom Alliance | 57 | 9.8% | 11 | 11.3% | 675 | 9.5% | 30 | 10.1% |
| Great Plains Quality Innovation Network | 21 | 3.6% | 4 | 3.5% | 320 | 4.5% | 16 | 5.3% |
| Health Services Advisory Group | 85 | 14.7% | 16 | 15.8% | 1449 | 20.5% | 56 | 18.8% |
| Healthcentric Advisors | 8 | 1.4% | 3 | 3.4% | 375 | 5.3% | 23 | 7.8% |
| HealthInsight | 5 | 0.9% | 2 | 2.0% | 127 | 1.8% | 9 | 2.9% |
| Lake Superior Quality Innovation Network | 22 | 3.8% | 4 | 3.9% | 488 | 6.9% | 28 | 9.3% |
| Mountain Pacific Quality Health Foundation | 1 | 0.2% | 1 | 1.1% | 23 | 0.3% | 6 | 2.1% |
| Qualis Health | 5 | 0.9% | 2 | 1.6% | 188 | 2.7% | 4 | 1.3% |
| Quality Insights Quality Innovation Network | 90 | 15.5% | 10 | 10.3% | 797 | 11.3% | 23 | 7.7% |
| Telligen | 39 | 6.7% | 10 | 10.2% | 683 | 9.6% | 26 | 8.6% |
| TMF | 145 | 25.0% | 23 | 23.1% | 981 | 13.9% | 39 | 12.9% |
| VHQC | 19 | 3.3% | 3 | 2.6% | 316 | 4.5% | 7 | 2.2% |
| **Total** | 579 | 100.0% | 100 | 100.0% | 7080 | 100.0% | 300 | 100.0% |

### Interviews and Focus Groups

We will conduct interviews with nursing home administrators and peer coaches, and interviews and focus groups with QIN-QIO nursing home task leads. For the nursing home administrators, we will draw from the same respondent universe and sampling frame as the nursing home survey, but will purposively select nursing homes administrators across QIN-QIO regions. We expect a slightly lower response rate than the nursing home survey response rate of 60%, given the increased length of time required for a telephone interview compared to the survey.

For QIN-QIO nursing home task leads, we will interview task leads from all 14 QIN-QIOs either in focus groups, as facilitated by regional or national meetings, or individually. CMS or QIN-QIO administrators will provide task lead names and contact information. We expect a high response rate among task leads (90%) since evaluation activities are within the scope of the QIN-QIO contract activities, although we will emphasize that participation in the interviews and focus groups is voluntary and that all responses will remain anonymous.

For nursing home peer coaches, we will conduct purposive and respondent-based sampling based on recommendations from nursing home administrators and QIN-QIO task leads to identify peer coaches to participate in interviews. Peer coaches include nursing home staff, community members, residents/beneficiaries, and family members from high-performing nursing homes. We expect a lower response rate than for administrators given the difficulty in interviewing community members and beneficiaries.

## Procedures for the Collection of Information

### Statistical Methodology for Stratification and Sample Selection

#### Nursing Home Administrator Survey

We will conduct stratified random sampling within the two populations: administrators at nursing homes participating in the QIN-QIO program and administrators at nursing homes not participating in the QIN-QIO program (see Table 3 below).

Table 3: Sampling Plan and Sample Size for Surveys

| **Respondent Category** | **Sampling Plan** | **Sample Size** |
| --- | --- | --- |
| Nursing Home Administrators participating in the QIN-QIO program | Strata by QIN-QIO region with proportionate allocation to the number of Nursing Homes; Secondary strata by star rating | 400 |
| Nursing Home Administrators not participating in the QIN-QIO program | Strata by QIN-QIO region with proportionate allocation to the number of Nursing Homes; Secondary strata by star rating | 400 |

Within each group, stratification will be employed as detailed in section 1a above (see Table 1 and Table 2 for the projected sample). A systematic random selection will be employed within each stratum where the nursing homes are sorted randomly, a random starting record is selected, and the nursing homes are selected at a fixed interval after the starting record.

#### Interviews and Focus Groups

Due to the qualitative nature of the data collection, the interviews and focus groups will not use any statistical methods for stratification and sampling selection.

### Estimation Procedure

#### Nursing Home Administrator Survey

We will assess the QIN-QIO’s impact on disseminating quality assurance and performance improvement (QAPI) approaches, reducing Healthcare Associated Conditions (HACs) in nursing homes, and clarifying attribution of the QIN-QIO program to the observed outcomes. We will also document the pervasiveness of NNHQCC strategies and resources in facilities that did not actively participate in the QIN-QIO program. Our analysis for each evaluation question will begin with descriptive statistics including percentages and means in total and across subgroups. Appropriate statistical tests will be employed including t-tests, chi-square tests and analyses of variance (ANOVA) depending on the evaluation question. To identify potential drivers of high performance among QIN-QIOs, analyses will include bi-variate analyses such as cross-tabulations, correlations or attributable effects. The survey findings will also be used in multivariate modeling such as regression modeling, impact analysis, return on investment (ROI), and analysis of changed processes or outcomes that can be attributed to the QIN-QIO versus other quality improvement programs. Our evaluation analytics will combine survey data with qualitative and secondary data when possible, including information derived from CMS claims data.

#### Interviews and Focus Groups

Following the transcription of interviews and focus groups, we will develop a coding structure and code the information collected during the interviews and focus groups. Content and thematic analyses will be used to identify key findings and to make comparisons across interviewees’ responses. Our team will use NVivo, a [computer software](http://www.ask.com/wiki/Computer_software?qsrc=3044&lang=en) package, for [qualitative data management and analysis](http://www.ask.com/wiki/Qualitative_data_analysis?qsrc=3044&lang=en). NVivo qualitative software allows our researchers to examine all of the text that is presented in the transcripts, to identify excerpts that contain content meaningful to the research questions, and apply any number of appropriate code(s) to the excerpt. The themes uncovered via excerpting and coding become the framework that we use to understand how all themes and concepts are related to each other and to the overarching evaluation objectives.

### Degree of accuracy needed for the purpose described in the justification

#### Nursing Home Administrator Survey

The margins of error with 95% level of confidence for these survey responses are between 2 and 5%. The margin of error applies to a full sample response to a question with binary answer choices. For instance, this would be the proportion of nursing homes that have undertaken quality improvement initiatives to reduce the use of antipsychotics or achieve other assessed objectives.

Table 4 shows the planned margins of error for different levels of estimates under these sample plans for the total sample of 800 and for the subsample of participating and non-participating nursing home administrators. The Margins of Error for the recruited and not-recruited samples are corrected for their finite populations. The maximum value is at 50% with a maximum margin of error of ± 4.90%. The margins of error do not take into account any correction for the design effect if weights are needed to correct for differential unit non-response.

Table 4: Sample Size, Estimated Response Percentage, and Margin of Error

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| **Sample Size** | **Estimated Percentage** | **Margin of Error** | **Recruited Nursing Homes** | **Margin of Error** | **Non-Recruited Nursing Homes** | **Margin of Error** |
| --- | --- | --- | --- | --- | --- | --- |
| 800 | 10% | 2.02% | 400 | 2.86% | 400 | 2.86% |
| 800 | 20% | 2.77% | 400 | 3.82% | 400 | 3.82% |
| 800 | 30% | 3.18% | 400 | 4.38% | 400 | 4.37% |
| 800 | 40% | 3.39% | 400 | 4.68% | 400 | 4.67% |
| 800 | 50% | 3.46% | 400 | 4.77% | 400 | 4.77% |
| 800 | 60% | 3.39% | 400 | 4.68% | 400 | 4.67% |
| 800 | 70% | 3.18% | 400 | 4.38% | 400 | 4.37% |
| 800 | 80% | 2.77% | 400 | 3.82% | 400 | 3.82% |
| 800 | 90% | 2.08% | 400 | 2.86% | 400 | 2.86% |

This sample size also provides sufficient power for testing between groups within the sample. The following figure is a power chart that shows the sample size of 800 with power of 90%, Type I probability of 5% and accounting for the finite population achieves an effect size of under 0.159, a small to low medium effect size. Or, in other words, the sample size will differentiate between smaller size differences between groups.

Figure 1. Sample Size and Effect Size

Figure 1 is a power chart that shows that the sample size of 400 in each group achieves an effect size of under 0.25 with power of 90%, Type I probability of 5%, so this sample size will be able to differentiate small to medium differences between the control and intervention groups.

#### Interviews and Focus Groups

Due to the qualitative nature of data collection, the interviews and focus groups do not require a degree of accuracy for the purposes of this data collection.

### Unusual problems requiring specialized sampling procedures

We do not foresee any unusual problems that require specialized sampling procedures.

### Any use of periodic (less frequent than annual) data collection cycles to reduce burden

The nursing home administrator survey, interviews, and focus groups will be conducted twice. This is cross-sectional data collection, so will not request information from the same participants more than once.

## Methods to Maximize Response Rates and Deal with Issues of Non-Response

### Methods to Maximize Response Rates

To maximize response rates of the surveys, interviews, and focus groups, we will employ multiple contacts and pre-notification emails. Please see Appendix A for a sample of the pre-notification email that will be sent to individual nursing homes, chain-affiliated nursing homes, and other participants. To improve response rates for chain-affiliated nursing homes, we will identify their corporate office contact and notify them about the survey and its objectives. We will work with QIN-QIO contacts as necessary to determine the best means of contacting corporate office contact for chain-affiliated nursing homes.

In addition, the CMS nursing home subject matter lead will work through CMS channels such as the monthly nursing home “Open Door” forum to publicize and communicate about the data collection efforts and the importance of participating in the survey, interviews, and focus groups.

*Multiple contacts:* In this data collection, we plan to follow some of the principles of Dillman Total Design survey method[[2]](#footnote-3) which emphasizes multiple contacts with members of the sample as being one of the most successful techniques to increase response rates. This technique is now considered standard methodology for any survey. We will use pre-notification emails to schedule telephone surveys and interviews at a time most convenient to the contact person. When possible, we will work with QIN-QIOs to provide its members with information/notices about the data collection effort, purpose, and a time frame of when to expect a contact. Multiple contacts will be made to schedule/conduct the survey or interview. Any relevant staff (e.g. administrative assistants, receptionists, or office managers) working with the contact person will be informed to expect a call for the survey or interview administration.

*Pre-notification emails* that provide more information on the study increase respondent confidence in the validity and the importance of the study resulting in higher response rates.[[3]](#footnote-4) CMS’ contractors will use a pre-notification email in this data collection.

Since CMS is using widely accepted data collection techniques and is devoting substantial resources to efforts designed to minimize non-response, we expect the response rate to this survey to be comparable or better than that achieved for other health care administrator surveys conducted by IEC team members in the past. Furthermore, CMS’s contractor for this survey effort has conducted numerous surveys on a variety of topics that have achieved response rates comparable to, or exceeding, the response rate estimated for this survey.

### Methods to Deal with Issues of Non-Response

#### Nursing Home Administrator Survey

There are two types of non-response – unit non-response and item non-response. Unit non-response, the failure of a sampled entity to respond, is handled in two ways:

1. *Intensive contact and re-contact plan to receive a response from the sampled entity.* We will make follow up attempts with each sample entity. If the designated respondent is unavailable after several attempts, we identify a qualified alternative respondent.
2. *A weighting plan to compensate for nonresponse.* The sampling plan calls for a proportionate allocation of the sample. In theory, the sample would be self-weighting. Due to unit non-response, the sample distribution may not be proportionate. Initial weighting will be to bring the strata back into proportion. There may be key qualities of the sample entities that are related to their propensity to respond. The IEC team will review response rates across information available in the sampling frame to identify qualities and characteristics that differentiate between the propensities to respond. Measures that may be available or used include urban/non-urban, size of entity (number of beds, number of patients, etc.), and demographics of the community. If any of these measures indicate a differentiation in the yield rates, they will be included in the weighting plan where we will use methods such as raking ratio adjustment to balance the sample according to these variables, and hold the relative proportion across the QIOs.

Item non-response is the event of not providing a response to question either by No Answer, Refusal or responding “Don’t Know.” In this study, we consider item nonresponse to be substantial if the missing rate is 30% or more for any given survey item or the missing item rate is greater than 70% for any single questionnaire. Item nonresponse will be handled in two different ways:

1. *Re-contact of sample entity*. In the case of item nonresponse for a specific question, we will re-contact the sample entity (nursing home, community advocacy organization or provider) to ask for clarification and completion of the question. For a survey that is partially completed, we will re-contact the sample entity and try and get the respondent to complete more of the survey. If they are not available, then another person will be identified in the sample entity, and we will try to complete the survey with them.
2. *Imputation*. We propose to use imputation sparingly and only for interval scaled questions. We will impute the missing value using a general linear model capturing the relationship between nursing home characteristics like number of beds, number of employees urban/non-urban splits, etc. to create a prediction model. The predicted value for the missing cases could be included in the analysis.

#### Interviews and Focus Groups

We will monitor our response rates to the interviews and focus groups to identify any potential respondents that are underrepresented (e.g., certain QIN-QIO regions) and follow-up with additional participants as needed. Given the qualitative nature of the data collection, we do not need to adjust our results for non-response.

### Generalizing to the Universe Studied

#### Nursing Home Administrator Survey

Since we are conducting a stratified random sample, we expect that the information collected will yield reliable data that can be generalized to the universe studied (nursing home administrators of CMS-certified nursing homes).

#### Interviews and Focus Groups

Although the goal of qualitative interviews is not statistical generalizability, we expect the results will provide valuable insights to supplement the survey and secondary data analyses of Medicare claims data. We will continue interviews until we reach a point of saturation, which will indicate when the collection of new data does not shed any further light on the issues under investigation.

## Test of Procedures or Methods to be Undertaken

### Nursing Home Administrator Survey

As part of developing the survey instruments, the project team has conducted internal beta-testing to assess the hour burden per respondent and to ensure that the questions and responses are readily understandable and skip patterns are logical.

Additionally, we conducted pre-testing and cognitive interviews of the surveys with four nursing home administrators from three nursing homes participating in the QIN-QIO program and one nursing home not participating in the QIN-QIO program. Respondents who agreed to help CMS refine the survey completed a telephone survey and an in-person interview. During the cognitive interviews, we solicited nursing home administrator feedback about possible improvements to the survey and the survey administration process. This pre-testing enabled the team to assess and correct ambiguities in the survey questions and instructions as outlined in the Crosswalk Table. The revised survey did not result in substantive changes affecting survey content or length.

### Interviews and Focus Groups

Nursing home subject matter experts reviewed our interview and focus group guides for content validity. We plan to pilot-test the interview guides and focus group guides with less than nine participants for timing, clarity, and flow. We do not anticipate that this process will result in substantive changes affecting the interview or focus group discussion guides content or length.

## Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing the Data

Table 5 provides the names and affiliation for those consulted on the statistical aspects of the design and who will collect or analyze the information.

Table 5: Individuals Consulted on Statistical Aspects and Performing Data Collection & Analysis

| **Name** | **Affiliation** |
| --- | --- |
| Michael Samuhel, PhD | Booz Allen Hamilton |
| Ping Yu, PhD | Booz Allen Hamilton |
| Sandy Lesikar, PhD | Booz Allen Hamilton |
| Kathryn Schulke, BSN | Booz Allen Hamilton |
| Elizabeth Andreassi, MS | Booz Allen Hamilton |
| Vonna Drayton, DrPH | Booz Allen Hamilton |
| Anna Ettinger, PhD, MSW, MPH | Booz Allen Hamilton |
| Elyse Levine, PhD | Booz Allen Hamilton |
| Qiong Li, PhD | Booz Allen Hamilton |
| Peichang Shi, PhD | Booz Allen Hamilton |
| Tse Hua, Shih, PhD | Booz Allen Hamilton |
| Daniela Smith, MPH | Booz Allen Hamilton |
| Stephen Tregear, PhD | Booz Allen Hamilton |
| Wendy Watson | Booz Allen Hamilton |
| Xiaoying Xiong, PhD | Booz Allen Hamilton |
| Patricia Yurchick, RN | Booz Allen Hamilton |
| Jia Zhao, PhD | Booz Allen Hamilton |
| Allen Dobson, PhD | Dobson DaVanzo & Associates, LLC |
| Joan DaVanzo, PhD, MSW | Dobson DaVanzo & Associates, LLC |
| James Cassese | Dobson DaVanzo & Associates, LLC |
| Zachary Lewis, MA | Ipsos |
| Omar Pedraza, MPH | Ipsos |
| Alan Roshwalb, PhD | Ipsos |
| Mark Andrews, MA | Ipsos |

Table 6 shows the name of CMS staff who advised on survey design.

Table 6: CMS Staff Who Advised on Survey Design

| **Name** | **Affiliation** |
| --- | --- |
| Robert Kambic, MA | Center for Clinical Standards and Quality |
| Nancy Sonnenfeld, PhD | Center for Clinical Standards and Quality |
| Lawrence LaVoie, PhD | Center for Clinical Standards and Quality |
| Edward Mortimore, PhD | Center for Clinical Standards and Quality |

1. There are 13 QIN-QIO regions made up of one or more states (plus Washington, DC, Puerto Rico, and the U.S. Virgin Islands). Subsequent references to “geographic distribution” address these QIN-QIO regions. [↑](#footnote-ref-2)
2. Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method* (Vol. 2). New York: Wiley. [↑](#footnote-ref-3)
3. Pit, S. W., Vo, T., & Pyakurel, S. (2014). The effectiveness of recruitment strategies on general practitioner’s survey response rates–a systematic review. *BMC medical research methodology, 14*(1), 1. [↑](#footnote-ref-4)