**B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS**

**1. Respondent Universe and Sampling Methods**

**General Population**

The potential respondent universe for the proposed information collection includes all adults age 18 and older who reside in telephone households in the continental U.S.—from which, NORC will draw a nationally representative sample. This study will use a stratified, random digit dial (RDD) sample. To produce reliable estimates for racial and ethnic minorities, the project team will oversample geographic areas that have large concentrations of racial and ethnic minority populations. Such oversampling will be achieved by completing the following steps: (1) the racial and ethnic composition of each telephone exchange will be estimated by matching the exchange to block group level census data; (2) the RDD frame of telephone numbers will be stratified by telephone exchange based on the racial and ethnic composition of each exchange; (3) the racial and ethnic composition of each stratum will be estimated from exchange level information; (4) the stratum sample size/allocation will be determined based on the required number of interviews per racial/ethnic group and the tradeoff between cost and variance with the minority strata being sampled at a higher rate relative to their share in the sampling frame; and, (5) the sample will be selected systematically and independently from each stratum.

In order to meet the targeted number of completed surveys, the project team will use targeted list samples to supplement the RDD sample. For instance, should the RDD sample not produce a sufficient number of surveys completed by Asians or Hispanics, the team will use list frames to sample Asians and Hispanics more efficiently. Such list frames are compiled based on Asian and Hispanic surnames. Estimates from the RDD sample and the list sample can be combined to derive the composite estimate. NORC plans to work with GENESYS Sampling Systems (the same company which was used by KFF/PSRAI to draw the sample in 1999) to implement the proposed RDD sample design.

The project team will determine the optimal allocation of the sample based on our past experience, and on information provided by the sample vendor. Based on the previous sampling approach employed from the 2009 and 2010 data collections, we will again determine the sample size and the stratum allocation by considering a series of expected outcome rates, including resolution rate, working residential number rate, screener completion rate, eligibility rate, and interview completion rate. Some of these rates will differ by stratum and by race/ethnicity, increasing design effects, which reduces the effective sample size. The potential for increases in design effects is another important consideration in sample allocation. Within each stratum, telephone numbers will be selected systematically, with equal probabilities, from working phone banks that contain one or more residential listings. See the below exhibit of unweighted and weighted sample data (by region, gender, age, level of education, and race/ethnicity) and the unweighted and weighted response rates from the 2009 and 2010 data collections.

**Exhibit 4: 2010 Sampling Data & Response Rates**

Unweighted and Weighted Sample Data Raked by Region, Gender, Age, Level of Education, and Race/Ethnicity

| Raking Variables | Categories | Unweighted Data (%) | American Community  Survey Estimates (%)1 | Weighted Data (%) |
| --- | --- | --- | --- | --- |
| **Region** | North East | 15.00 | 18.59 | 18.59 |
| **Region** | Mid West | 22.69 | 22.06 | 22.06 |
| **Region** | South | 41.30 | 36.46 | 36.46 |
| **Region** | West | 21.01 | 22.89 | 22.89 |
| **Gender** | Male | 36.04 | 48.65 | 48.65 |
| **Region** | Female | 63.96 | 51.35 | 51.35 |
| **Age** | 18 to 29 years | 8.13 | 22.13 | 22.13 |
| **Age** | 30 to 44 years | 20.06 | 27.52 | 27.52 |
| **Age** | 45 to 64 years | 45.70 | 33.66 | 33.66 |
| **Age** | 65 years and older | 26.11 | 16.70 | 16.70 |
| **Educational Attainment** | Less than high school graduate | 11.90 | 15.69 | 15.69 |
| **Educational Attainment** | High school graduate | 26.68 | 29.96 | 29.96 |
| **Educational Attainment** | Some college or associate's degree | 23.51 | 29.35 | 29.35 |
| **Educational Attainment** | Bachelor's degree or higher | 37.91 | 25.01 | 25.01 |
| **Race/Ethnicity Groups** | Hispanics | 18.96 | 13.12 | 13.12 |
| **Race/Ethnicity Groups** | Other Non-Hispanic Groups2 | 48.07 | 70.74 | 70.74 |
| **Race/Ethnicity Groups** | Non-Hispanic Black | 27.18 | 11.64 | 11.64 |
| **Race/Ethnicity Groups** | Non-Hispanic Asian | 5.79 | 4.50 | 4.50 |

1Source: 2006-2008 American Community Survey 3-Year Estimates, Detailed Tables

2Includes: Whites, American Indian and Alaska Native, Native Hawaiian, Pacific Islanders and Other races.

Weighted and Unweighted Response Rates

| Rates | Unweighted | Weighted |
| --- | --- | --- |
| Resolution Rate | 72.0% | 74.7% |
| Screener Completion Rate | 97.1% | 97.0% |
| Interviewer Completion Rate | 44.8% | 48.4% |
| **CASRO** | **31.3%** | **35.1%** |

**Practicing Physicians**

In addition to the survey of U.S. households, the instrument will be fielded to a national probability sample of U.S. practicing physicians. Although the survey will provide estimates that are representative of all US physicians providing patient care and will give unbiased estimates, it will not allow subgroup analysis such as of Black or Hispanic physicians, or physicians practicing in localities with high minority populations. We believe that the focus on *all* practicing physicians will provide the most accurate picture of current perceptions of disparities and will allow the project team to best answer one of the core research questions regarding the comparability of attitudes about racial disparities in the overall physician population and the general population.

A random sample of approximately 700 physicians from the AMA Masterfile will be purchased from one of the vendors authorized by the AMA to develop and deliver these sampling frames. Based on the project team’s experience using this sampling frame, it is anticipated that approximately 100 cases will be ineligible (e.g., the doctor may have retired, died, or is no longer involved in direct patient care). In 2010, a response rate of 49 percent was achieved, which will yielded 340 completed cases. Given that a simple random sample will be used, sampling weights will not be required.

**2. Procedures for the Collection of Information**

**General Population**

As stated in B1, the instrument will be fielded to a random sample of U.S. households, oversampling for African American, Hispanic, and Asian American/ Pacific Islander groups. The mode of data collection will be a telephone survey. Interviews will be conducted by experienced NORC interviewers who will receive training specific for the planned data collection. In addition to the computerized interview and related procedures, interviewers will be given scripts for contacting, consenting and re-contacting respondents (Attachment H). In addition, interviewers will be provided a list of Frequently Asked Questions (Attachment K) to refer to during the telephone calls. NORC will utilize software providing enhanced call scheduling capabilities that support intelligent calling rules. Not only can these rules guarantee a minimum number of call attempts to reach a household within the required data collection period, but they can also reference both case-level call history and questionnaire embedded sample management data to distribute future call attempts to new days and times and finalize sample that has reached the maximum call attempts. NORC’s Computer Assisted Telephone Interviewing (CATI) system also features an exclusive state-of-the-art auto-dialer that has been specifically customized for social science surveys with the chief goal of maximizing response rates while containing costs.

Interviewers will make a minimum of 10 attempts to complete an interview at every sampled telephone number. The calls will be staggered over different times of the day and days of the week to maximize the chances of making a contact with a potential respondent. All interview break-offs and refusals will be re-contacted at least once in order to attempt to convert them to completed interviews.

**Practicing Physicians**

Below are brief descriptions of the various steps and methods that will be required to field the instrument to physicians. NORC will first mail a pre-notification letter to all sampled U.S. practicing physicians (Attachment J-1). Approximately 10 days following the pre-notification letter, the project team will mail the initial questionnaire to all sampled respondents. This mailing will utilize all updated address information resulting from returned pre-notification letters. Integrated into each questionnaire will be a cover letter (Attachment J-2) and instruction pages. The personalized cover letter will describe the purpose of the study and request participation. NORC proposes that the letter encourage cooperation by making sure respondents have the most convenient means available to respond. We will offer physicians multiple modes to respond to the survey. Included in the initial mailing will be a pre-paid incentive of $100. Follow-up mailings (Attachment J-3) will be sent to respondents whose questionnaires have not been received within one week of distribution. These second versions will be identical to the initial mailings, with the exception of the cover letter, which will be revised to acknowledge the earlier mailing and express gratitude to those who have already responded. If, after two weeks we have not received a completed survey; we will begin the telephone prompting effort (Attachment J-4). These calls will serve to boost the response rate achieved from the original mailing.

Telephone interviewers will prompt providers who have not yet returned their completed surveys despite receiving the initial and follow-up packages via U.S. mail. They will gain cooperation and offer options of re-mailing the questionnaire, faxing or conducting a telephone interview. An important task for the interviewer will be the management of resistance from gatekeepers, such as office managers, to achieve contact with sampled physicians.

## Sample size and power analyses were performed to determine the degree of accuracy and level of confidence in which inferences can be made from the proposed survey sample to the universe of respondents. See Attachment L.

**3. Methods to Maximize Response Rates and Deal with Nonresponse**

The project team will be adhering to various survey administration methodologies and procedures that are designed to achieve the highest possible response rate.

**General Population**

The sample will be released for interviewing in replicates, which are random subsamples of the overall sample, to facilitate sample management by the contractor. Releasing the sample by replicates ensures that only enough telephone numbers are screened to achieve the target sample size. To the extent possible, the contractor will follow the same calling protocol used in the 2009 and 2010 OMH/NORC studies to reduce bias due to design changes. For example, at least ten attempts will be made to complete an interview at every sampled telephone number. To maximize the chances of making a contact with a potential respondent, the calls will be spread over various times of the day and days of the week. All interview break-offs and refusals will be re-contacted at least once to attempt to convert them to completed interviews.

**Practicing Physicians**

**Pre-notification Letter.** The pre-notification letter (Attachment J-1) will be printed on OMH letterhead and personalized with respondent name, address and appropriate salutation. We propose to use business quality window envelopes showing OMH logo.

**Initial Questionnaire Mailing.** Approximately 10 days following the pre-notification letter (Attachment J-1), the project team will mail the initial questionnaire to all sampled respondents which will leverage best practices in questionnaire design to be user friendly (Attachment M). This mailing will utilize all updated address information resulting from returned pre-notification letters. Integrated into each questionnaire will be a cover letter and instruction pages. The personalized cover letter will describe the purpose of the study and request participation (Attachment J-2). Included in the initial mailing will be a pre-paid incentive of $100.

## Second Questionnaire Mailing. Follow-up mailings (Attachment J-3) will be sent to respondents whose questionnaires have not been received within one week of distribution. These second versions will be identical to the initial mailings, with the exception of the cover letter, which will be revised to acknowledge the earlier mailing and express gratitude to those who have already responded.

## Telephone Prompting. If, after two weeks we have not received a completed survey; we will begin the telephone prompting effort (Attachment J-4). These calls will serve to boost the response rate achieved from the original mailing. Telephone interviewers will be responsible for conducting the following activities:

* Telephone prompting of providers who have not yet returned their completed surveys despite receiving the initial and follow-up packages via U.S. mail.
* Gaining cooperation and offering options of re-mailing the questionnaire, faxing or conducting a telephone interview.
* Managing resistance from gatekeepers, such as office managers, to achieve contact with sampled physicians.

**4. Test of Procedures or Methods to be Undertaken**

A pilot test of the data collection instruments and study design was conducted during the initial OMB review period, using nine (9) adults over 18 years of age and nine (9) practicing physicians. An additional test of the new questionnaire items will be conducted during the OMB review period. A summary of revisions made to the instruments and study procedures is included in Attachment N.

**5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data**

The 2009 & 2010 studies were conducted under contract by NORC at the University of Chicago. Serving as statistical consultants under the contract were

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For the FY 2013 re-survey, either the same or similar contractor personnel will implement the sample design, conduct data collection, handle data receipt/editing/keying, produce the data file, conduct statistical analysis and develop a survey report. OMH will provide direction and review functions to the contractor.