# CHAPTER 4

## Sampling Design Methodology

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# Survey Methodology

This section provides a general overview of the survey methodology recommended for use by the Area Agencies on Aging (AAAs) involved in the Performance Outcomes Measures Project (POMP). A survey was recommended as the best method for evaluating the impact of various AAA services on senior citizens.

The process of conducting a survey and data collection involves several stages to clarify the survey design and implementation procedures. The stages of survey planning typically involve (1) defining the survey objectives, (2) designing a survey instrument, (3) defining the population of interest, (4) drawing a sample of clients, (5) administering the questionnaire, (6) data entry, and (7) data analysis.

For POMP, this planning process has to be conducted for each performance measure being evaluated.

## 4.1 Survey Objectives

The first step of any survey is to clearly define its purpose because this will greatly impact the study design. For POMP, the two objectives are: (a) to characterize the population of senior citizens served by AAAs, and (b) to evaluate the influence of a service(s) upon these clients.

A survey designed to meet the first objective of characterizing the population would only require evaluating the population one time. However, to meet the second objective of measuring the impact of a service on clients, implies evaluating the clients at two different times, such as, upon enrollment and six months later. Most often the highest priority objective will determine the survey design. Where possible, considerations would be made in the design to meet all the objectives. However, one of the biggest restrictions on design will be cost and time limitations.

## 4.2 Population of Interest

Agencies that conduct surveys should define the population that they are working with and upon which their conclusions will be based. As part of the survey design process, the client population has to be clearly defined. This involves identifying the geographic area of coverage, the services that clients are enrolled in, the clients' age, physical functioning, or other criteria.

Since the performance measures focus on the satisfaction of clients with a particular service or program type, the first factor for defining the population of interest is identifying the specific service(s) that the clients must be enrolled in. For example, a home care satisfaction survey may want to evaluate the satisfaction of clients enrolled in a personal care or home delivered meals program. Typically, it is best to focus on clients enrolled in one service/program when conducting a survey.

After identifying the service(s) that the clients have to be enrolled in, the researcher should consider any restrictions based on length of enrollment in the service. For example, the POMP transportation survey was only evaluating clients enrolled in a transportation service for a minimum of three months. Whereas, the nutritional risk survey was only evaluating newly enrolled clients and then following up with this group six months later.

Besides the service restrictions, the population of interest may have some age or other demographic restrictions placed on it. Depending on the objectives of the survey, other criteria such as physical functioning, ethnicity, or income may be factors for limiting the population of interest.

Although POMP involved agencies from state and local aging agencies, during the field demonstration all agencies were to conduct their survey at the area or local agency level (i.e., AAA). The clients of interest are usually enrolled in a particular service that was provided by a specific AAA. POMP is not a national or state level survey.

### 4.3 Master Client List

Once the population of interest is clearly defined, the next step in the data collection phase is to generate a list of all the clients in the defined population. This master client list is vital because a sample of clients to be administered the questionnaire will be randomly selected from this list.

If a AAA wants to evaluate the satisfaction of clients with several of their services, a master client list would have to be generated for each service. For example, they may have a transportation client list and a congregate meals client list. Some clients may receive both services and thus be on both lists. They should remain on both lists.

A basic master client list should contain, at a minimum, (a) at least one unique client identifying number; (b) client contact information; (c) client demographic information, and (d) date that the client enrolled in the service. For a caregiver survey, the list should include the primary caregiver contact information.

Once the master client list is generated, some checks should be made to insure that the clients meet all the criteria used to define the population of interest, such as age. This is also the time to clearly define any service-length restrictions to be placed on the population of interest. For example, the POMP transportation survey requires that a client be enrolled in the service for a minimum of three months, because clients should have some experience with the service before they could give a fair assessment of it.

It is a good practice to document the work involved in generating the master client list. It has been observed among the agencies involved in POMP that many agencies were using electronic databases to extract a list of clients. These databases often did not contain the entire population of clients. Instead, they would contain the names of clients who enrolled in the program after the electronic record system was installed, which typically occurred in the past year or two. The sole reliance on the databases could inadvertently exclude clients who have been with the program for a longer period of time. If any clients are excluded from the master client list, these exclusions need to be documented in the final report that describes who was eligible to receive the questionnaires in the study.

### 4.4 Data Collection Design

Before designing the survey questionnaire, several data collection issues have to be resolved. When deciding on a data collection plan several choices have to be made: (a) using an interviewer, (b) mode of contact, (e.g., face to face or telephone), (c) method of administration,(e.g., computer, paper/pencil), (d) type of data collection, (e.g., one-time, diary, longitudinal), and (e) type of respondent, (e.g. self or proxy).

For POMP, the data collection plan varied by service being evaluated. Each performance measure required a slightly different collection plan. Following is a brief description of the recommended method for conducting the various surveys:

- *Nutritional risk survey of congregate meals clients*
  - Paper and pencil questionnaire
  - Self-administered
  - Administered upon enrollment and 6-months later[1]
  - Clients must be 60 years of age or older
  - Clients must be newly enrolled in the congregate meals program

- *Nutritional risk survey of home delivered meals clients*
  - Paper and pencil questionnaire
  - Self-administered
  - Administered upon enrollment and 6-months later
  - Clients must be 60 years of age or older
  - Clients must be newly enrolled in the congregate meals program

- *Transportation satisfaction survey*
  - Paper and pencil questionnaire
  - Telephone interview
  - Clients must be 60 years of age or older
  - Clients must be enrolled in the transportation program for a minimum of three months

- *Information and assistance satisfaction survey*
  - Paper and pencil questionnaire
  - Telephone interview
  - Clients must be 60 years of age or older

[1] Currently in review

- Clients should have called the service in the last week
- Use interviewers who are not part of the I&A staff

- *Caregiver satisfaction survey*
  - Paper and pencil questionnaire
  - Telephone interview
  - Caregivers must be attending clients 60 years of age or older
  - Clients must be enrolled in caregiver services for a minimum of 3 months

### 4.5 Survey Instrument

Once the survey objectives and survey methodology are determined, a survey instrument can be developed that meet the stated objectives. For POMP, this involved developing several questionnaires (i.e., performance outcomes measures) to measure the satisfaction of clients with the various services provided by the area aging agencies.

For the field work, five pilot program questionnaires were developed to measure satisfaction with the following programs:

- Nutrition Programs
- Transportation Services
- Caregiver Services
- Home care Services
- Information and Assistance Services

Three-cross cutting performance measures, which are independent of service type, were also identified and questionnaires were developed to quantify these measures: Physical Functioning, Emotional Well-Being, and Social Functioning. For POMP, it was suggested that these cross-cutting measures be linked to a specific service, and administered at the same time that the service questionnaire was administered. Linking the cross-cutting measures to a specific service provides more meaningful results that can be related to a particular service's impact upon clients. If the cross-cutting questionnaires were administered to all clients served by an agency, regardless of the service that they are enrolled in, it would be more difficult to pinpoint the services that are having an impact on emotional well-being, social functioning, and/or physical functioning levels.

The questionnaires and the implementing instructions for each questionnaire are contained in Appendix A.