Sample Design for Senior Center Participant Surveys
Instructions and Worksheet
June 30, 2004

Introduction

The senior center workgroup developed two survey instruments. The first is for senior center participants and the second is a "Descriptors Survey" for directors of the sampled senior centers. These instructions were prepared at the request of the senior center workgroup members to assist them in sample design for the surveys of senior center participants. Workgroup members are encouraged to think of this document as a worksheet for determining the best approach based on the level of estimation desired and the existence of a master client list.

1. Do you want a state level estimate or a senior center estimate?

The first step in developing your sampling plan is to determine whether you want one estimate for all your senior centers (combined) or for each individual senior center. Usually, a state estimate is sufficient unless you want to compare the results of one senior center to another. Your resources (e.g., dollars, staff hours) will influence the decision to either obtain state estimates or estimates for individual senior centers. For state level estimates, smaller numbers of participants from each senior center are required. By contrast, for estimates at the individual senior center level, a larger number of participants from each senior center is required. This decision drives the sampling plan as well as the weighting of the data.

Q1. What type of estimate is desired? (check appropriate box)

State level estimates.. □
Individual senior center estimates .... □

2. Do you have a master client list?

A current master client list is important in obtaining a random sample of senior center participants. Since most of the grantees are conducting the survey of more than one senior center, it is important to have a master client list that includes the clients' names, and **an identifier for the senior center on each client record**. By **current**, we mean that the clients have participated in a senior center activity since January 2004.

Q2. Does a <u>current</u> master client list exist?

Yes .... □ [Go to 2a]
No .... □ [Skip to 3]

Q2a. Yes, I have a current master client list. How do I choose my sample?

If you have a current master client list or you can make it current, please follow the next steps.

Determine Sample Size: To determine the appropriate sample size, install the sample size calculator onto your hard drive. The calculator and instructions for installing it are on the POMP 5 website (www.pomp5.net). If a state level estimate is desired, determine one sample size for the whole state. In this case, the population size is the total number of clients across all sites. However, if estimates are desired for each individual senior center then determine the sample size for each senior center separately. In this case, the total population size is the total number of participants in the senior center.

We recommend that you use a 50% response rate when calculating your sample size. This will ensure that you have a large enough sample in cases where the response rate is lower than anticipated.

Choose your Sample of Participants: Once the sample size has been determined, use a simple sampling rate method to select the clients to be included in your drawn sample (e.g., the initial list of clients in your sample before interviewing them). Calculate the sampling rate by dividing the total population by the sample size to select every *n*th participant on the sample list. For example, if the entire population is 1000 and the sample size is 351, the sampling rate is 1000/351 or every 3^{rd} client. It is best to avoid choosing the 1^{st} person on the list, so choose a random number between 1 and the sampling rate (in this example 3) to begin sampling.

If estimates are desired for state level only, first sort your master list of clients by senior center. In other words, all the clients from one senior center will be in the same location of the list as follows:

Participant 1	Senior Center A
Participant 2	Senior Center A
Participant 3	Senior Center A
Participant 1	Senior Center B
Participant 2	Senior Center B

Then select the sample from the sorted list by using the sampling skip computed for the entire state as described above by using the total number of clients in the entire state and the sample determined for the whole state.

However, if the estimates are desired for individual senior centers then compute a separate sampling skip for each senior center by using the total clients in the center and the sample size determined for the center. Then use different sampling skips for different senior centers, and select the sample from the master list of each center separately.

Information needed to Weight the Data

Since you are conducting sample surveys, it is important to weight the data so that the results can be generalized to the total population. It is necessary to send Westat the total population for each site that is included in your sample. That will help us weight the sample appropriately.

Information Needed for Adjusting for Nonresponse Bias

Sometimes a completed sample may be biased by the type of people who participated in the survey. For instance, in some samples, a particular subgroup may participate in the survey to a greater extent than another subgroup. This introduces a nonresponse bias in survey results. Whenever practicable, we will adjust for nonresponse bias. To adjust for nonresponse bias, we need the result code (e.g., whether a respondent participated in the survey, refused, or was not locatable) for every senior center participant in the drawn sample.

Record Keeping and Reporting

Since most of you will use a two stage sampling procedure (e.g., first senior centers and then participants), two sets of forms need to be competed, which are on the POMP 5 wesite. Please use the Participant Sample Tracking Form to record the result code for all clients in the drawn sample. In addition, you need to complete the Center Sample Tracking Form, and the Senior Center Sampling Procedures Report.

3. What happens when there is no master client list?

We offer several alternative methods of sampling clients when no master client list is available. When senior centers don't have a master client list, it is still beneficial to know the number of participants in the senior center, and/or the number of participants in specific activities, if you wish to draw a sample from that activity.

Q3. Do you know the population size of the senior center or the specific activity you wish to sample from?

Yes .... □ [Go to 3a]
No .... □ [Skip to 3b]

If you are able to obtain the size of the population for the estimate you want (e.g., state, AAA, or senior center level), it is then possible to use the sample size calculator to determine the desired sample size. (The instructions for downloading the sample size calculator from the POMP 5 website are in Section 2 of this document.)

Q3a. After obtaining the sample size, what is the next step in developing the sampling plan?

The next step is to obtain a copy of the senior center's weekly schedule to determine when specific activities are held. This will help you to either sample participants in a specific activity or sample across activities. Table 1 shows you how to think about the schedule when you sample participants across activities. In this example, the best time slot to sample senior center participants in the senior center in Table 1 is Wednesday morning. The length of the data collection time period depends on the sample size needed. For instance, you may achieve your required sample size in one hour of data collection or three. For larger completed samples, data collection may take more than a week. If you were interested in obtaining data from only participants in bingo, then collect data from those participants on Mondays or Wednesdays. Again, the number of hours and days of data collection depends on the size of the required sample.

Table 1
Example of Senior Center Morning Schedule

Hours	Sunday	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
9: -10 a.m.				Exercise		Exercise	
10-11 a.m.		Bingo		Bingo			

Q3b. I don't know the population size or anything about the schedule of activities. How do I sample participants?

If you don't know the size of the group to be sampled, divide the week into time slots, and randomly choose a day and a time slot to sample senior center participants. For the seven days shown in Table 2, two days and time slots were randomly chosen for data collection. In the case of this senior center, six hours of data collection is necessary on both days since the required sample size is large. It is important to note that the example in Table 2 assumes that the senior center is open seven days a week. If the center is open only five days or a specific activity is organized only three days a week then the time slots should be randomly chosen from those days only. The total time slots from which the sample of time slots was selected should be recorded as this information will be needed for weighting the data.

Table 2
Example of Senior Center Sampling Frame
(Hours and Days*)

Hours	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
9: a.m.-noon.							
Noon to 3:00 p.m.							

*This senior center is open seven days a week.

Data Collection Methods

Several data collection methods are listed below.

- Station a data collector at the front of the senior center on an appointed day and give the questionnaire to every *n*th person who enters the door. Keep a record of the number of refusals and ineligibles (staff, visitors, delivery persons, etc).

- If you want to survey participants in specific activities choose a day and time during which the activity is scheduled and distribute the questionnaires to the participants.

Weighting the Data

Westat would like to weight the data even in cases when no master client list exists. It is necessary to obtain the total number of participants in the senior centers in your survey. In addition, it is necessary to provide the number of days of the week the time slot was sampled from. For instance, if the senior center is open five days a week and the sample time slot included two mornings, you need to report both pieces of information for accurately weighting of the data. The Sampling Procedures Report has a section for recording this information.

Record Keeping and Reporting

Please complete the Center Sample List and the Sampling Procedures Report. If at all possible, please complete a Participant Sample List. You may do this by keeping a record of the number of questionnaires distributed, and the number of persons who refused to complete the survey instrument and those that were ineligible to participate in the survey.

Technical Support

If you do not have a master client list, and would like to discuss your options further, please contact Beth Rabinovich at 301-315-5965.