Suggested Random Sampling Methodology/Sample Size Guidelines

The key to the validity of a survey is randomness. However, very few health centers have the time and/or resources to procure a *truly random* sample. Following the step-by-step outline of the simple random sampling protocol below can help ensure that the Health Center meets the minimum federal reporting requirements for patient experience survey samples. These steps are *best practices* and are similar to many national standards, such as those included in the CAHPS survey process.

Step One: Define the population

- Age
  - Only adults, or minors with a 'proxy contact'
- Service requirements
  - Include *only patients who see an eligible provider* (e.g. physician, PA, or NP with an established patient roll).
- Identify *exclusions*
  - Patients with 'no contact' requests
  - Prisoners
  - Deceased
  - Etc.

Step Two: Define the measurement period.

- Every 6 months

Step Three: De-duplicate as needed,

- Include patient/child from single household ***only once*** **per measurement period**.

At the completion of Step Three, you should have your eligible population or 'sample frame.'

Step Four: Calculate Sample Size

A. **Calculate sample size for each site, according to the suggested Confidence Level of 95% (the industry standard), and Confidence Interval (AKA, Margin of Error) = 10. A tool to estimate sample size based on specific population size is located at: http://www.surveysystem.com/sscalc.htm**

   As an example, the following table provides estimated sample sizes for selected population sizes based on the recommended Confidence Level and Confidence Interval. This table was created using the Sample Size Calculator located at the webpage linked to the URL listed in the preceding paragraph.

Population	Confidence Level = 95% Confidence Interval = 10%
	Sample size:
100	49
500	81
1,000	88
10,000	95
100,000+	96

B. **Use the Sample size calculator to calculate the recommended sample size for each site, based on the size of the *eligible* population *per site* (as described in steps 1 – 3). Report both the *population size and the sample size* for each site in the appropriate sections of Addendum 2 (the Sampling Summary form).**

C. **Determine the distribution target based on expected response rate.**

   The sample size is the number of responses that must be received for statistical validity, but a response rate is rarely 100%. Taking the expected response rate into account will help determine a distribution target necessary to achieve the sample size(s) reported in Addendum 2:

   For example, if the recommended sample size is 278 and you estimate that only 40% of the surveys given to patients will be returned and/or complete, you may need to administer 695 surveys in order to achieve the appropriate sample of 278.

D. **Randomly sort the sample frame (eligible population identified in steps 1 – 3), and choose the appropriate number of respondents identified in part C of Step Four.***

   It may be helpful to use a random sort function or random number generator.

At the completion of this step, you should have your final sample population.

Step Five: Administer the survey using the sample population to identify desired respondents. ***Remember: if you anticipate a response rate of 50%, you will need to double the number of surveys distributed in order to reach the appropriate sampling size.***