



STEP 4.5: Weight your data set to represent your target population

➡ What is the purpose of this step?

The purpose of this step is to ensure that your final PHDS data set is representative of the desired sample of children on which you would like to report at the end of your project. Weighting is a standard component of most survey projects, especially if you oversampled for certain population subgroups (e.g., racial groups) or if there are response biases (e.g., some population subgroups are systematically less likely to respond to your survey).

In this step you will:

- Clarify your desired population of children to ensure that your findings are representative and determine whether weighted data are required.
- Develop a weighting methodology and construct sampling weights to use during your data analysis.



Guidelines and Issues to Consider

- Determine whether weighting is required.

The goals of the sampling and survey administration strategy outlined in this manual are:

- 1) To obtain sufficient samples of completed surveys for the three age groups that correspond to the age-specific sections of the PHDS survey (3–9 months, 10–18 months, and 19–48 months).
- 2) To obtain specific units of analysis to focus your measurement effort.

You will need to weight your data if you want to be able to create reports that describe findings across your health system for all children.

Specifically, you will need to weight your data if one or more of the following is true about your PHDS project:

- ⇒ You over-sampled for specific groups.
- ⇒ You used age-stratifications that are not representative of your population.
- ⇒ The responding population is significantly different than your sampled population.

☑ Develop a weighting methodology.

Your survey department or vendor should be able to construct valid weights once you specify the population of children on which you want to report PHDS findings (e.g., all children enrolled in your health system who had at least one-well child visit).

Below are issues and tips to consider as your weighting method is developed.

1. Clarify the baseline population you will use to calculate the weights.

- ❖ Since the children eligible for the PHDS include ONLY those who met the eligibility criteria described in Step 2.2 (e.g., continuous enrollment and visit requirement; parents spoke the languages in which the survey was administered; and families had valid address information), you can only weight data to represent this group of children.
- ❖ A primary purpose of weighting is to ensure the PHDS findings accurately describe care for a group of children. It is important to clarify the group of children for which you want the report to provide generalizable findings.

For example:

- ⇒ Do you want the report to describe care provided across an entire health system? If so, then the baseline population is all eligible children enrolled in the health system.
- ⇒ Do you want the report to provide office-specific descriptive information? If so, office-specific weights will need to be created based on the eligible population of children in each of the pediatric offices.

2. Specify the factors you will use to calculate weights.

- ❖ At a minimum, you will need to weight your data according to age if your general population of children is not distributed in the way you stratified the sample in Step 2.2.
- ❖ To make your PHDS findings representative, you will need to determine the actual age distribution of the population of eligible children, according to the three groups specified in Step 2.2, and weight the data accordingly.
- ❖ Other variables you may need to include in your weighting methodology include:
 - 1) Variables you used for over-sampling such as race, geographic location, and type of health care provider or health plan.
 - 2) Variables for populations that are under- or over-represented in your completed sample due to a known response bias.