Table 2.2: Determining the Starting Sample Size Required for Each Unit of Analysis

	Comparison of individual providers [a]	Comparison of offices or provider groups	Health-system level reporting	Comparison of health plans [e]
Target number completed surveys	30 per health care provider [b]	30 per health care provider in each office	100[d]	250 per health plan
Estimated data error rate	1%	1%	1%	1%
Estimated response rate	40%	40%	40%	40%
Bad address rate	Depends on the setting	Depends on the setting	Depends on the setting	Depends on the setting
Minimum starting sample, assuming no bad addresses [c]	78 per health care provider	78 per health care provider in each office	253	632 per health plan

[a] Although a smaller sample could be drawn if you are not planning on using the results for comparison, we recommend that you assume comparisons will be made if you are reporting results at the provider or health plan levels. If 30 surveys are not feasible, the minimum number CAHMI recommends per provider is 15. See Table 2.1 for other issues to consider in provider-level sampling. Lastly, one of the PHDS measures (follow-up for children at risk) is only calculated for a portion of children (approximately 25% of the sample). Therefore, if this is a primary measure to be used in comparisons, then the sample size should be adjusted accordingly.

[b] Providers who are very consistent in the care they provide across patients will need fewer surveys, as compared to providers who target certain discussions to certain patients. Secondly, if the provider and nurse each provide components of the well-child visit, then more surveys may be needed as the provision of care by two individuals increases the level of variation in this communication-dependent measure.

[c] CAHMI recommends that each sample contain members enrolled in the same type of health insurance coverage. Therefore, different samples should be drawn if you wish to assess quality of care for Medicaid beneficiaries and commercial enrollees.

[d] As is described in Table 2.1, the more providers there are, the more variation there is. Therefore, CAHMI recommends that you base the sample size on the number of providers. An alternate approach is to base the sample size on the number of FTE in each office.

[e] This is the minimum number of surveys recommended. However, to date, all of the Medicaid agencies and recent health plans that have implemented the PHDS have set their

completed survey goal at N=2000. This sample size has allowed the state to do a number of analyses that met their strategic and political goals, and allowed stratified analysis for specific groups of children and program and policy areas.