STEP 5.7: Review additional analytic tips

Statistical Analyses

When comparing performance or scoring among different groups, statistical analyses are required to test and see if the differences are meaningful and real. However, the statistical test that is used will depend on the type of data you are testing. It is beyond the scope of this manual to be a statistical primer. Therefore we suggest that when you compile your team you identify someone to be the lead person for these analyses. As an introduction to those analyses, the following table lists three of the most common statistical tests used in the analyses described in this section. Your vendor may also be able to provide these services.

Table 5.7: Typical Statistical Tests Run in Quality Health Care Reporting

Type of Comparison	Statistical Test	Example Research Question
1. Differences in mean scores between two groups	T-test	Do parents who are at risk for depression have a lower mean score on the *Helpfulness of Care* quality measure than parents who are not at risk for depression?
2. Differences in mean scores between three or more groups	Analysis of Variance (ANOVA)	Are there differences in the mean scores for the Assessment of Smoking, Substance Abuse and Safety Within the Family by racial, ethnic groups (e.g., white, African American, Hispanic, other)
3. Differences in binomial scores for two or more groups (e.g., cross-tabulations of threshold scores)	Chi-square (χ^2)	Are parents of children with special health care needs more likely to meet the threshold for having discussed the anticipatory guidance topics than parents of children without special health care needs?