



THE CAHPS CLINICIAN & GROUP DATABASE

How Results Are Calculated

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1. Levels of Results

Clinician & Group (CG-CAHPS) survey data is submitted and results are calculated at three levels; respondent, practice site, and group. For the 4-point and 6-point Adult surveys, the Primary and Specialty data were combined.

- **Respondent:** A *respondent* is defined as an individual patient who has completed a CG-CAHPS survey. Respondent level survey results are calculated across all respondents in the database, ignoring their association with a particular practice site or group.
- **Practice Site:** A *practice site* can be considered a medical office. A practice site is an outpatient facility in a specific location. Each practice site located in a building containing multiple medical offices is considered a separate practice site. Providers in a single practice site should share administrative and clinical support staff. Practice site level survey results are calculated across the respondents within a specific practice site. One limitation to practice site level calculations is that some data submissions included practice sites that actually included more than one location. Additionally, for the 4-point and 6-point Adult surveys, because the primary and specialty data were combined, there may be practice sites that are in the database twice, once for their Primary data and once for their Specialty data.
- **Group:** A *group* can be defined as a medical group, ACO, state organization or some other grouping of practice sites. A group is not a vendor organization. Group level survey results are calculated across the respondents within a specific group, ignoring practice site associations. Additionally, for the Adult 4pt and 6pt surveys, because the primary and specialty data were combined, there may be groups that are in the database twice, once for their Primary data and once for their Specialty data.

2. Data Adjustments

Under certain circumstances, CAHPS® survey results can be adjusted to account for factors that may affect scores for the practice site, clinician, or other entity that are beyond the control of the entity. Without an adjustment, differences between entities could be due to differences in these external factors rather than to true differences in performance. CAHPS data are most commonly adjusted for respondent characteristics (i.e., case-mix adjustments), but can also be adjusted for other factors such as the mode of survey administration.

- **Case-mix adjustments.** Case mix refers to the respondents' health status and other socio-demographic characteristics that have been shown to affect patient reports and ratings of practice sites, clinicians, or other entities. Characteristics used to case-mix adjust CG-CAHPS scores, where applicable and noted in the explanations below, are respondent age, education, and self-reported health status.
- **Survey mode adjustments.** CG-CAHPS surveys can be administered using different modes, including mail (the most common method), telephone, Interactive Voice Response (IVR), and Web/Internet. Just as CAHPS survey data can be adjusted by patient case-mix,

they can also be adjusted to account for potential differences in modes of survey administration. However, since we have not yet determined the influence of administration mode on CG-CAHPS scores, the current data are not adjusted by survey mode. Also, since the vast majority of surveys in the current database were collected using mail administration, there would likely be very little influence of other survey modes such as telephone, IVR, and Web/Internet on the results.

3. Top Box Scores

- **Item top box scores** are created by calculating the percentage of survey respondents who chose the most positive score for a given item response scale (e.g., “Always” on the “Always-Never” scale). For the public site, the top box score is calculated at the respondent level. For individual users using the submitter’s site, this percentage is calculated at the practice site or group level. For example, in a sample of 10 respondents, if 4 out of 10 respondents answered “Always” to a particular item, the top box score for that item would be 40 percent [i.e., $(4 \div 10) * 100 = 40\%$]. Because these calculations are made across all respondents, top box scores are not case-mix adjusted for patient characteristics. Since we have not yet determined the influence of mode of survey administration on CG-CAHPS scores and the vast majority of survey responses in the current database were collected using mail administration, these data are not adjusted by survey mode.

4. Percentiles

- **Percentile** scores are calculated at the practice-site level and represent the percentage of practice sites that scored at or below a particular item or composite top box score. For example, the 50th percentile, or the median, is the top box score at or below which 50 percent of all practice site top box scores fall. Percentiles range from 0 to 100. For ease of display, the 90th, 75th, 50th, and 25th percentiles are presented for composites and items. Given that top box scores are not adjusted by patient characteristics or mode of survey administration and that percentiles are not used to statistically test or directly compare practice sites, percentiles are similarly not adjusted.

5. Practice Site Performance Measures

- **Delta** represents the difference between each practice site’s item and composite top box score from the overall mean. The overall item/composite mean is obtained by calculating the average item/composite top box score across *all practice sites*. For example, if the “Access to Care” composite top box scores for three sites were Site 1 = 28 percent, Site 2 = 26 percent, and Site 3 = 34 percent, then the overall mean “Access to Care” composite would be calculated by summing the three sites’ composite scores and then dividing by the number of sites (i.e., $[28\% + 26\% + 34\%] \div 3 = 29.33\%$). Delta is then obtained by subtracting each site’s item/composite score from the overall mean. For example, for Site 1 used in the example

above, delta for the “Access to Care” composite is $28\% - 29.33\% = -1.33\%$, which means that this site’s composite score is 1.33 percent below the overall mean composite.

- **Significance tests (‘arrows’).** Statistical tests (t-tests) are used to determine whether a practice site’s mean item or composite score is significantly above or below the overall mean item or composite score. These statistical tests are based on a practice site’s case-mix adjusted mean item or composite score rather than the top box scores or proportional scores represented in the bar charts. If a practice site’s mean item/composite score is significantly higher or lower than the overall mean, an ‘up’ or ‘down’ arrow is assigned respectively. If there is no significant difference between the site and overall mean, no arrow is assigned. Because the statistical tests are based on practice site means, the results may not always appear to be completely in line with top box scores or proportional scores represented by bar charts.

6. Database Reporting Rules and Guidelines

In the CAHPS Database Online Reporting System, there are circumstances under which certain item/composite scores, practice site/group results, or reporting categories are suppressed (i.e., ‘NA’ is displayed). There are also times when certain practice sites are excluded from percentile calculations. These instances of data suppression and/or exclusion are due to one or more of the following factors: (1) too few respondents responding to an item, (2) a practice site (or group) having too few completed surveys, or (3) too few practices and/or respondents for a particular reporting category. The rules for data suppression and exclusion are described below.

1. If there are fewer than five valid responses available for any given item, the item’s results are suppressed.
2. For the two and three-way frequency tables if one of the items is a demographic or practice site characteristic and there are fewer than five valid responses for any of that item’s response categories, all frequency table results are suppressed.
3. If there are fewer than 10 completed surveys for a given practice site, the practice site is excluded from percentile calculations and the practice site’s results are suppressed on the submitter’s site.
4. If there are fewer than 10 completed surveys for a given group, the group results are suppressed on the submitter’s site.
5. If a practice site or group dropped one or more composite items from their survey administration, the data for that practice site/group are excluded from corresponding composite score calculations on the public site and are suppressed on the submitter’s site.
6. When displaying scores by practice site characteristics, a particular characteristic’s results are suppressed if there are fewer than five practice sites and/or fewer than 300 completed surveys available for that characteristic.

Survey data that were collected using an in-office handout method were excluded from all database calculations.