

Volume Calculation Options

Two approaches to determining low, medium, and high. We have recommended the relative approach.

1. Relative approach: looks at the minimum, mean and maximum counts. For a CPT code where the minimum count is 10, the mean is 100 and the maximum is 200, the low count would be facilities with counts of 10 to 55, the medium count would be facilities with counts of 56 to 149, and the high score would be facilities with counts of 150 to 200. This would change for each CPT code and is more sensitive to the relative values of the counts. The relative methodology creates more meaningful categories based on the actual distribution of the data, making them more sensitive to each procedure. This methodology makes the high and low categories more likely to represent the extremes. A con is that because of this sensitivity, there may only be a handful of facilities in the extreme categories and the majority of facilities may fall in the middle.

Website explanation: The number of times a procedure was performed at a facility compared to other facilities who offer the procedure rated as low, medium, or high. A low volume facility does fewer procedures compared to high volume facility. Volume data are from the same time period as the cost data.

2. Rank approach: facilities would be ranked from least to greatest by CPT code. The bottom 25% would be low, the middle 50% would be medium, and the top 25% would be high. This does not take into consideration the actual count value when determining volume, but rather the rank the facility holds in the data. This can be adjusted to make the low equal the bottom 20%, medium the next 60% and high the top 20%. The rank methodology is conceptually easier to understand, the bottom 25% of all procedure volume will be classified as low, the middle 50% will be classified as medium, and the top 25% will be classified as high. A con is that these cut points might force the data into artificial clusters that group similar facilities into different categories when they are only different by one percentile.