



CheckPoint Star Rating Method

CheckPoint uses one, two or three-star ratings to help consumers easily interpret hospital quality measure results. These ratings are based on a statistical test to show whether a hospital performs worse than (one star), the same as (two stars), or better than (three stars) the state average. Star ratings are not assigned when hospitals have too few cases to reliably assess performance, or when no cases met the measure criteria during the report period. Hovering over a star rating or other symbol on a CheckPoint report will explain its meaning. It is important to keep in mind that a two-star rating should be interpreted as a good result in a state where most hospitals deliver consistently high-quality care.

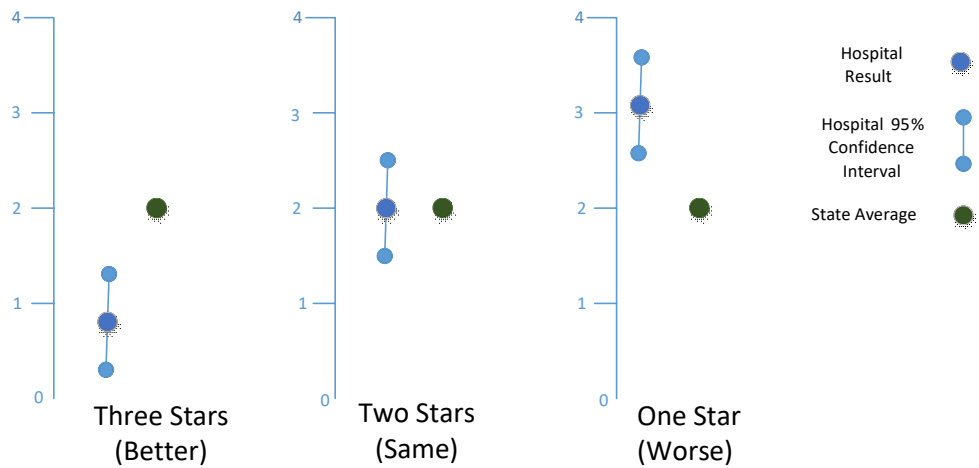
Users can see hospitals' actual result by pressing the <Show Rates> button at the top of a report. A hospital may have a numeric measure result (e.g. 7%) that is different from the state average (e.g. 8.5%) but may be considered statistically the same as the state average. This is because any hospital result is only an estimate of the true performance, based on the patients receiving services during the measurement period. Each hospital result will have a confidence interval (CI) within which we are 95% sure the true value lies, e.g. 7% plus or minus 1.75%, for a confidence interval ranging from 5.25% to 8.75%.

Some data sources, such as the National Healthcare Safety Network, provide a CI and it is used to calculate star ratings. When a CI does not already exist for a result, one is calculated by CheckPoint using the Wilson Score Interval method. This is more reliable than the Normal Approximation Interval method when sample sizes are small and/or the performance level is near 100 or zero, which is common among quality measures.

The following logic is used for measures where *lower* results are better, such as mortality, infections and readmissions, and is illustrated in the figure below.

- **Three Stars:** a hospital's upper confidence limit is below the state average. Statistically the hospital result is better than the state average.
- **Two Stars:** a hospital's confidence interval overlaps the state average. Statistically the hospital result is the same as the state average.
- **One Star:** a hospital's lower confidence interval is above the state average. Statistically the hospital result is worse than the state average.

Comparing Hospital Results to the State Average for Measures Where Lower Results are Better



The converse logic is used for measures where *higher* results are better, such as patient satisfaction surveys and staff immunizations:

- **One Star:** a hospital's upper confidence interval is below the state average. Statistically the hospital result is worse than the state average.
- **Two Stars:** a hospital's confidence interval overlaps the state average. Statistically the hospital result is the same as the state average.
- **Three Stars:** a hospital's lower confidence limit is above the state average. Statistically the hospital result is better than the state average.