Scoring Method
Data Scoring is done in three stages:

- Comparisons
  - Quantitatively score all possible comparisons

- Indicators
  - Summarize comparison scores for each indicator

- Topics
  - Summarize indicator scores by topic area

For each indicator, your state is assigned a score based on its comparison to other communities, whether health targets have been met, and the trend of the indicator value over time. These comparison scores range from 0-3, where 0 indicates the best outcome and 3 the worst. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected for other communities, and changes in methodology over time.

Indicators are categorized into topic areas and each topic area receives a score. Indicators may be categorized in more than one topic area. Topic scores are determined by the comparisons of all indicators within the topic.

Comparison to a Distribution of State Values within the Nation
For ease of interpretation and analysis, indicator data on the Community Dashboard is visually represented as a green-yellow-red gauge showing how the state is faring against a distribution of states within the United States. A distribution is created by taking all state values within the nation, ordering them from low to high, and dividing them into three groups (green, yellow, red) based on their order. Indicators with the poorest comparisons (“in the red”) scored high, whereas indicators with good comparisons (“in the green”) scored low.
Comparison to Values: National and Targets
Your state is compared to the national value and target values. Targets values include the nation-wide Healthy People 2020 (HP2020) goals, which are national objectives for improving the health of the nation set by the Department of Health and Human Services’ (DHHS) Healthy People Initiative. For all value comparisons, the scoring depends on whether the state value is better or worse than the comparison value, as well as how close the state value is to the target value.

Trend Over Time
The Mann-Kendall statistical test for trend was used to assess whether the state value is increasing over time or decreasing over time, and whether the trend is statistically significant. The trend comparison uses the four most recent comparable values for the state, and statistical significance is determined at the 90% confidence level. For each indicator with values available for four time periods, scoring was determined by direction of the trend and statistical significance.

Missing Values
Indicator scores are calculated using the comparison scores, availability of which depends on the data source. If the comparison type is possible for an adequate proportion of indicators on the community dashboard, it will be included in the indicator score. After exclusion of comparison types with inadequate availability, all missing comparisons are substituted with a neutral score for the purposes of calculating the indicator’s weighted average. When information is unknown due to lack of comparable data, the neutral value assumes that the missing comparison score is neither good nor bad.

Indicator Scoring
Indicator scores are calculated as a weighted average of all included comparison scores. If none of the included comparison types are possible for an indicator, no score is calculated and the indicator is excluded from the data scoring results.

Topic Scoring
Indicator scores are averaged by topic area to calculate topic scores. Each indicator may be included in up to three topic areas if appropriate. Resulting scores range from 0-3, where a higher score indicates a greater level of need as evidenced by the data. A topic score is only calculated if it includes at least three indicators.

How to Cite HCI’s Data Scoring Results