Conduent Healthy Communities Institute
Data Scoring Tool - Methodology

HEALTHY NORTHEAST OHIO
Sharing Knowledge to Create Healthier Communities
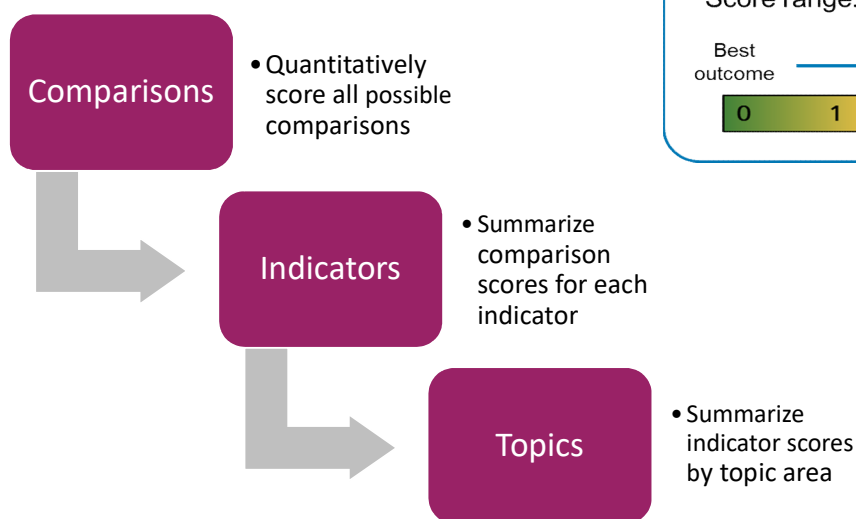
Data Scoring Tool Overview

The Data Scoring Tool provides a systematic ranking of your county's indicators to help set priorities for community health improvement. This tool allows you to see which areas your county is performing well in, and which areas have room for improvement. The findings from this tool should be used, along with other considerations, such as community input and the feasibility of impact, when prioritizing the health needs of your county.

The Data Scoring Tool summarizes comparisons for each of your county's indicators to available comparisons, including other communities, nationally or locally set targets, and historical time periods. All indicator scores are then averaged by topic area, to allow for a higher-level ranking of community needs. In addition, this tool allows for the identification of significant disparities that may exist between subgroups and the overall county value (e.g., by race/ethnicity, age, and gender).

Please note that the Data Scoring Tool results are dependent on the indicators and comparisons currently available for your county at the time the report is run.

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

Score range:

Best outcome → Worst outcome

0 1 2 3

For each indicator, your county 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 County Values: Within State and Nation

For ease of interpretation and analysis, indicator data is visually represented as a green-yellow-red gauge showing how a community is faring against a distribution of counties in the state or the United States. A distribution is created by taking all county values within the state or 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.

HCI Platform County Distribution Gauge

Comparison to Values: State, National, and Targets

Your county is compared to the state value, the national value, and target values. Targets values include the nation-wide Healthy People 2030 (HP2030) goals as well as locally set goals. Healthy People 2030 goals 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 county value is better or worse than the comparison value, as well as how close the county value is to the target value.

HCI Platform Compare to State or National Value

HCI Platform Compare to Healthy People 2030 Target

Trend Over Time

The Mann-Kendall statistical test for trend was used to assess whether the county 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 county, 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.

Significant Disparities

When a given indicator has data available for subgroups like race/ethnicity, age or gender–and values for these subgroups include confidence intervals – we are able determine if there is a significant difference between the subgroups value and the overall value. A significant difference is defined as two values with non-overlapping confidence intervals. Only significant differences in which a subgroup is worse than the overall value are identified.

How to Cite Conduent HCI's Data Scoring Tool

Conduent Healthy Communities Institute (Year). Data Scoring Tool. Title of web site. Retrieved date. URL of website.

Example: Conduent Healthy Communities Institute (2022). Data Scoring Tool. Healthy Northeast Ohio. Retrieved March 15, 2022. www.healthyneo.org.