How was the assessment of Wisconsin’s Health Trends performed?

- What measure is used to evaluate the trend over the past ten years?
  - We calculated the annual percent change (APC) for each of the 20 health indicators during the past 10 years. An increasing annual percent change indicates a worsening health trend, while a decreasing annual percent change indicates an improving health trend.
    - ↓ or ↓ indicates Wisconsin’s performance on the health indicator improved during the past 10 years with APC’s < -0.5% and < -1.0% for light and dark green arrow, respectively;
    - ↑ indicates Wisconsin’s performance on the health indicator has been stable during the past 10 years (-0.5%/years APC ≤+0.5%)/year); and
    - ↑ or ↑ indicates Wisconsin’s performance on the health indicator during the past 10 years with APC’s > +0.5% and > +1.0% for light and dark red arrow, respectively.
  - For more information about how the APC was calculated see “Estimating average annual percent change in trend analysis” by Clegg LX, Hankey BF, Tiwari R, Feuer EJ, Edwards BK.

- How is the current year of data assessed and evaluated?
  - Using the 10-year baseline trends, we determine what the “expected” current rate would be for each indicator if the past 10 year trend continued. We compare this expected rate to the current “observed” rate, to see if it is better or worse. Current progress is determined by comparing the observed rates to the 90% confidence intervals of the expected rates.
    - A ● indicates Wisconsin is performing better than expected for the health indicator;
    - A ○ indicates the current rate is about the same as the expected rate; and
    - A ▲ indicates Wisconsin is performing worse than expected for the health indicator.

<table>
<thead>
<tr>
<th>Current Progress:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● = Current rate is worse than expected rate</td>
</tr>
<tr>
<td>(p&lt;0.10)</td>
</tr>
<tr>
<td>○ = Current rate is no different than expected rate</td>
</tr>
<tr>
<td>▲ = Current rate is better than expected rate</td>
</tr>
<tr>
<td>(p&lt;0.10)</td>
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</tbody>
</table>

- How does Wisconsin compare with other states?
  - Data, where available, for the best and worst performing states for the “Current Observed Value” are presented in the online version of the 2015 Health Progress Assessment Table: here.

- What are some limits of this method?
  - This is only one way to assess health trends. Our method may be limited by the fact that we assume a linear trend for all measures. This may not be the case for all health factors, such as unemployment, which is cyclical in nature.
  - The regressions we constructed used only 10 years of data. Regression analyses perform better statistically with more data points. However, due to our interest in present trends we chose to only use the 10 most recent years of data to construct the regression trend lines.
  - We report all measures independently as if each one impacts health by itself. In reality the many factors that impact health are intertwined. For instance, a parent who is unemployed may also have children in poverty and be uninsured. Health factors relate and work together.