METHODOLOGY

What is the Health Policy Institute of Ohio?

Founded in 2003 by a group of health foundations, the Health Policy Institute of Ohio partners with state policymakers and other stakeholders engaged in the policymaking process to inform data-driven policy that improves health, health equity and the value of healthcare spending. HPIO provides leadership and expertise through policy research and analysis; assessment and planning; and program and policy evaluation.

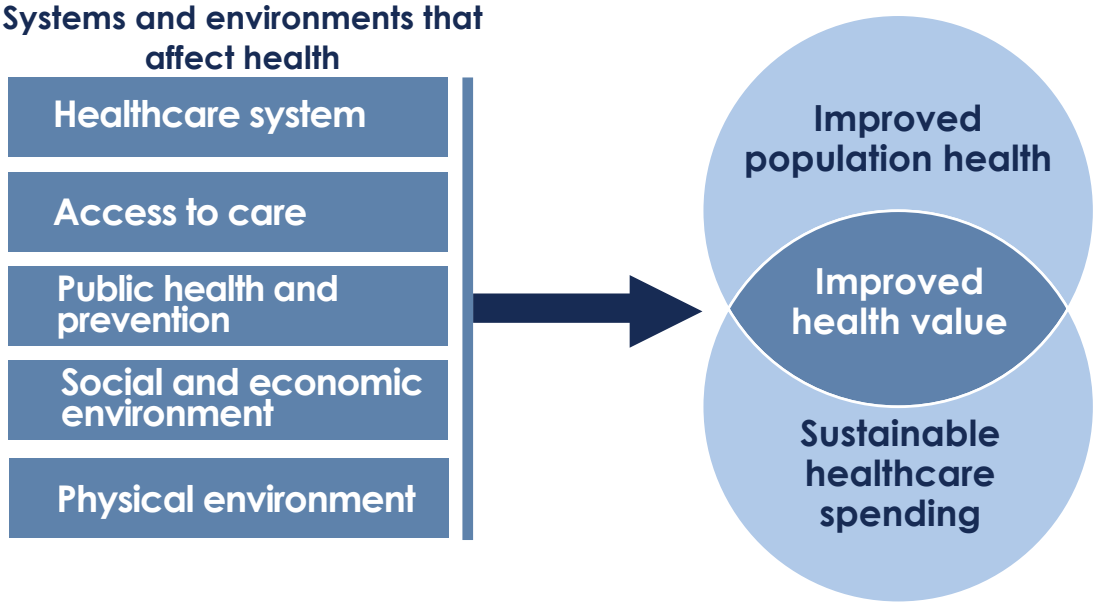
What is the Health Value Dashboard?

The Health Policy Institute of Ohio Health Value Dashboard™ is a collection of tools and resources that compare Ohio's performance to all other states on measures of population health, healthcare spending and the factors that influence health.

There are 122 ranked metrics in the 2026 Dashboard. The Dashboard examines Ohio's rank and trend performance relative to other states across seven categories of metrics, referred to as "domains:" population health, healthcare spending, access to care, healthcare system, public health and prevention, social and economic environment and physical environment. In addition, through a series of disaggregated metrics and spotlight pages, the Dashboard highlights gaps in factors and outcomes for some of Ohio's most disadvantaged populations.

The Dashboard is based on the Pathway to Improved Health Value conceptual framework. The framework defines health value as the combination of improved population health outcomes and sustainable healthcare spending and outlines the systems and environments that affect health. The framework highlights the need for equitable, effective and efficient systems and optimal environments to achieve improved health value.

Pathway to improved health value: A conceptual framework



World Health Organization definition of health: Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

What makes the HPIO Health Value Dashboard unique?

The Health Value Dashboard builds upon existing national scorecards and rankings by:

- Focusing on healthcare spending
- Including a comprehensive set of metrics examining the drivers of health
- Providing information at-a-glance along with detailed analysis

What is different in the 2026 Health Value Dashboard?

HPIO released the first edition of the Dashboard in December 2014 and has made improvements to each following edition, including the addition of equity profiles in the 2017 Dashboard. In some cases, metrics were modified, removed or replaced due to changes in data availability or to ensure that the most relevant and timely publicly available data is used. Most metrics in the ranked domains of the 2026 edition (67%) are the same or similar to the 2024 edition. Of 122 metrics in the 2026 Dashboard, 82 are the same or similar, 40 are new or replacements for existing metrics, and 34 were removed from the 2024 Dashboard.

The 2026 Health Value Dashboard is the seventh edition of this publication. HPIO released previous editions in 2014, 2017, 2019, 2021, 2023, and 2024. In 2024, HPIO decided to publish the Dashboard in even years to better align with the development of the biennial state operating budget.

The 2026 Dashboard:

- **Changes trend methodology** by increasing the number of trended years from up to three to up to 10.
- **Changes the methodology for calculating disparity ratios**, comparing each group to the rest of the state.
- **Adds 40 new metrics** across the seven existing domains.

Health Value Dashboard process

Stakeholder engagement

Since 2013, HPIO has convened the **Health Value Dashboard Advisory Group** (formerly called the Health Measurement Advisory Group) to advise on the development of and revisions to the Health Value Dashboard. The Advisory Group includes stakeholders from public and private organizations across a wide array of sectors throughout Ohio.

In 2017, HPIO formed a workgroup to advise on the development of equity profiles (now called population spotlight pages). This group evolved into the permanent **HPIO Equity Advisory Group**. In 2026, HPIO convened the Health Value Dashboard and Equity Advisory Groups to provide input on messaging of Dashboard key findings and to assist with dissemination of the Dashboard to state policymakers and other stakeholders.

HPIO contracted with researchers at the Voinovich School of Leadership and Public Affairs at Ohio University to provide technical assistance for some metrics and analysis.

Metric selection

To select metrics for the inaugural 2014 edition of the Dashboard, HPIO reviewed existing scorecards and data initiatives, such as America's Health Rankings, County Health Rankings and the Commonwealth Fund State Scorecard. Health Value Dashboard Advisory Group metric workgroup members then selected approximately 15 metrics per domain based upon a set of specific considerations. (See the 2014 Dashboard for a complete list.) These considerations, as well as relevance to the current policy environment, continued to guide decisions on metric changes that were made to later editions of the Dashboard.

In preparation for the 2026 Dashboard, HPIO reviewed the list of metrics from the 2024 edition to determine if any changes were needed. HPIO maintained consistency in metrics across editions of the Dashboard as much as possible, and identified any changes to be made if higher-quality data had emerged or a source became unavailable. For this iteration of the Dashboard, HPIO solicited

feedback from the Health Value Dashboard Advisory Group to identify additional metrics that could illustrate the overall health and well-being of Ohioans across the seven domains. Metric considerations include timeliness, availability and consistency, source integrity, face value, relevance and more. See below for the full list of metric selection considerations for the 2026 Dashboard.

Metric selection considerations

1. **State-level:** Statewide data are available for Ohio and other states. State data is consistent across states (allowing for state rankings, if appropriate).
2. **Sub-state geography:** Data are available at the regional, county, city, or other geographic level within Ohio.
3. **Ability to track disparities:** Data are available for sub-categories such as race/ethnicity, income level, age, or gender.
4. **Availability and consistency:** There is a high probability that data for this metric will continue to be gathered in the future and will be provided in a relatively consistent format across time periods.
5. **Timeliness:** Data for this metric is released on a regular basis (at least yearly or every other year).
6. **Source integrity:** The metric is nationally recognized as a valid and reliable indicator and the data are provided by a reputable national organization or state or federal agency.
7. **Data quality:** The data are complete and accurate. The data collection method is the best available for the construct being measured (e.g., biometric, self-report, administrative).
8. **Alignment:** Aligns with an existing requirement, performance measure, program evaluation indicator, or other measures currently being compiled by a state or federal agency (e.g., ODH, ODEW, CMS, HHS, AHRQ), national organization (e.g. Commonwealth Fund), or regional project (e.g., Health Collaborative, Health Impact Ohio, Better Health Partnership). Does not add data collection burden to stakeholders.
9. **Benchmarks:** Benchmark values have been established for the metric by a reputable state or national organization or agency (e.g., Healthy People 2030).
10. **Face value:** The metric is easily understood by the public and policymakers.
11. **Relevance:** The metric addresses an important health-related issue that is of significant concern to Ohioans.

A total of 122 metrics, grouped into seven domains and 31 subdomains, are included in the 2026 Dashboard ranked domains. Thirty six metrics were analyzed as part of the disaggregated data component of the Dashboard.

Metrics in 2026 Dashboard ranked domains

Domain	Total metrics	Metrics with 10 years of trend	New metrics since 2024 Dashboard
Population health	23	16	8
Healthcare spending	16	8	5
Access to care	16	6	5
Healthcare system	18	5	8
Public health and prevention	19	12	6
Social and economic environment	18	8	6
Physical environment	12	1	2
TOTALS	**122**	**56**	**40**

Metrics assessed for health disparities and inequities

Race and ethnicity	Education	Income	Disability status	LGBTQ+
36	19	24	22	8

Note: This table includes all disaggregated metrics in the data appendix posted on **2026 Health Value Dashboard web page**

Metrics changes since previous Dashboard

The 2026 Health Value Dashboard added 40 new metrics to the following domains:

Removed metrics from 2024 Dashboard	Added metrics to 2026 Dashboard
Population health	
• COVID-19 mortality • Heart disease mortality • Premature death • Youth e-cigarette use	• Cancer mortality • Frequent mental distress • Homicide and legal intervention firearm mortality • Hypertension • Severe maternal morbidity • Substance use disorder • Neonatal abstinence syndrome • Youth tobacco product use • Low birthweight* • Motor vehicle crash mortality* • Youth marijuana use*
Healthcare spending	
• Employer-sponsored health insurance out-of-pocket spending, per enrollee • Average total cost, per Medicare beneficiary with one chronic condition • Average total cost, per Medicare beneficiary with two chronic conditions	• Employee deductible for employer-sponsored health insurance plans • People with medical debt in collections • Primary care spending as share of total, ages 18–64 • Medicaid long-term services and supports spending • Average premium for employer-sponsored health insurance, family coverage
Access to care	
• Without a usual source of care • Received mental health treatment in past year, children • Unmet need for mental health treatment, adults • Medication for Opioid Use Disorder	• Medicaid reimbursement for dental care services • Maternity care deserts • Children with an unmet need for mental health treatment • Mental health treatment facility beds. • Home health care workers • Prenatal care*
Healthcare system	
• Prenatal care • Female breast cancer early stage diagnosis • Colon and rectal cancer early stage diagnosis • Substance use disorder treatment retention • Mortality amenable to healthcare • Hospitals with better-than-average patient experience ratings • Hospital beds, per capita • Private insurance reimbursement rates	• Age- and gender-appropriate cancer screenings • Pre-exposure prophylaxis (PrEP) • Nursing facility deficiencies • Nurse hours in certified nursing facilities • Care preparedness after hospital stay • Communication with doctors • Youth counseling effectiveness • Dental caries-related ED visits among children, Medicaid
Public health and prevention	
• Local public health workforce • Local public health department spending, per capita • Chlamydia • COVID-19 vaccinations • Motor vehicle crash deaths • Youth marijuana use • Low birthweight • Overdose reversals	• Community health workers • Human immunodeficiency virus (HIV) • Sexually Transmitted Infections (STIs) • Flu vaccination rate • Water fluoridation • Preterm birth
Social and economic environment	
• Some college • Adult poverty • Child poverty • Children in single-parent households • Violent crime	• Chronic absenteeism • College persistence rates • Poverty • Childcare cost burden • Older adult social isolation • Bullying
Physical environment	
• Lead poisoning • Healthy food access	• Affordable and available housing • Broadband internet access

*Metric was moved from a different 2024 domain to a new domain in 2026

Data sources and years

Most Dashboard data is compiled from publicly available sources, including national population health surveys, vital statistics and administrative data from state and federal agencies. The 2026 Dashboard includes data from 61 distinct sources across the ranked domains and disaggregated metrics. For this reason, the data years vary by metric. When available, researchers analyzed up to 10 of the most recent years of data. For metrics where 10 years of data was unavailable, researchers analyzed as many years as possible. Most baseline data was from 2015-2016, and most recent data was from 2023-2024. For complete metric information, see the Excel appendices.

Data gaps and limitations

The Dashboard includes data from a variety of publicly available sources. It is important to keep in mind that each of these sources has its own limitations, such as reliance upon self-reported conditions or behaviors and changes in methodology from year to year. Other data gaps and limitations are outlined below.

Data lag: Metrics in the Dashboard are primarily from publicly available sources, such as government surveys or birth and death records. There is typically a lag of one to three years between the time this information is collected and when it is released. At times, data may predate implementation of an important policy change that could impact performance on a metric.

Data on disparities and inequities: Data disaggregated by race and ethnicity, education level, income level, disability status, gender identity and sexual orientation are not consistently collected or reported across sources and metrics. For example, some metrics are available with data disaggregated by race and ethnicity, but not by income, education, disability status, gender identity or sexual orientation. As a result there are more metrics disaggregated by race and ethnicity in the Dashboard than by other factors.

Other limitations for assessing health disparities and inequities include:

- **Lack of data to identify other groups that experience disparities and inequities.** For example, questions regarding geography, immigration or veteran status are not consistently available from many national and state surveys, making it difficult to assess the health needs of some groups of Ohioans.
- **Data suppression.** Because of data reliability and disclosure concerns, data values for groups with small sample sizes in survey and administrative data are often suppressed and are not used in analyses.
- **Aggregation of data for groups with smaller populations.** Aggregated data can mask health disparities, particularly for subpopulations. Asian Americans, for example, tend to perform well as a whole on many health indicators. However, data on southeast Asians and immigrant or refugee populations from Asia, such as Bhutanese-Nepali refugees, suggest these subpopulations experience poorer health outcomes.
- **Differences in categorizing demographic data.** When displaying data on racial and ethnic disparities or other population characteristics, categorizations from the primary source are displayed in the data appendix. For example, one source may use the category African-American/Black (which would include non-Hispanic and Hispanic individuals), while another source may use the category Black, non- Hispanic. Similarly, there is variation across metrics in how education level, income level, disability status, gender identity and sexual orientation are defined. To the extent possible, comparable groupings across metrics were prioritized. A limitation that arises from this variation in reporting is that when Hispanic (all races) is compared to white (including Hispanic) in the disaggregated data, there is an unavoidable population of overlap.

Change over time: Meaningful changes from baseline to most recent year were identified by comparing a state's absolute change for a metric to the standard deviation of the metric's distribution among all states over the years of data being analyzed (trend methodology is provided on page 6). The statistical significance of change over time was not analyzed.

Variation in trend length: The 2026 Dashboard compiles up to ten years of data each metric, though some trended metrics have as few as two years of data. Because of this methodological change, caution must be taken when interpreting trend and comparing trends between metrics. Some metrics are trended only across more recent years (ex: 2021 to 2024, etc.), which reflects a different set of policy environments than a full decade of trend (ex: 2015 to 2024, etc.). The data appendix describes all year ranges for Dashboard metrics.

Health Value Dashboard methodology

Ranking methodology

The ranking methodology used in the 2026 Dashboard relies on the following descriptive statistics and analyses:

- **Mean** — The sum of all data values in a distribution divided by the number of data values in the distribution. The mean is also referred to as the average.
- **Standard deviation** — A measure that reflects how much variation there is between a distribution's mean and all data values in the distribution. A small standard deviation indicates that values are tightly grouped, and a large standard deviation indicates that values are widely dispersed.
- **z-score** — A measure of how many standard deviations above or below the mean a particular data value falls in the distribution. The z-score is calculated by taking the difference between each data value and the mean, and then dividing this difference by the standard deviation.
- **Percentile ranks** — The proportion of scores in a distribution that a specific score exceeds or to which it is equal (see chart).

Of the 50 states and D.C.

Metric ranking

To rank states for each metric, HPIO and researchers followed these steps:

1. Calculated the mean and standard deviation of all state values for the most recent year
2. Converted each state's data value for the most recent year into a z-score
3. Constructed a percentile rank for each state
4. Ordered percentile ranks in the desired direction for a metric (i.e., whether a higher or lower value was better) and assigned each state a metric rank

Subdomain ranking

To calculate subdomain ranks, researchers followed these steps:

1. Converted values for all metrics in the subdomain into z-scores using the procedure outlined above
2. Summed z-scores for all metrics for each state
3. Used the summed z-scores to construct a percentile rank for each state
4. Ordered percentile ranks and assigned each state a rank for the subdomain

Domain ranking

To calculate domain ranks, researchers followed these steps:

1. Converted values for all metrics in the domain into z-scores using the procedure outlined above
2. Summed z-scores for all metrics for each state
3. Used the summed z-scores to construct a percentile rank for each state
4. Ordered percentile ranks and assigned each state a rank for the domain

Health value ranking

To calculate health value rank, researchers followed these steps:

1. Summed z-scores for all metrics from the population health and healthcare spending domains
2. Used the weighted, summed z-scores to construct a percentile rank for each state
3. Ordered percentile ranks and assigned each state a rank for the measure

Missing states

Metrics missing data for more than 10 states were not ranked. States that were missing were not included in the rank of the domain or subdomain. In the 2026 Dashboard, 40% of measures were missing data for one or more states. This level of missingness is higher than the 2024 Dashboard, which had 25% of measures missing data for one or more states. The number of metrics with missing data increased in part due to the additional years of data pulled as part of the transition to up to ten years of trend. To increase transparency on which measures are missing states, HPIO includes an "out of XX states" indicator. For example, Tennessee was missing data for the routine checkups metric, so Ohio's rank is reported out of 50 instead of out of 51. Due to this constraint, some metrics, domains or subdomains may appear to rank higher or lower only because they were missing data from one or more states, and may have ranked differently had data been collected and reported. Please see below for quartile ranking cutoffs for metrics with missing states.

	51 states (0 missing)	50 states (1 missing)	49 states (2 missing)	48 states (3 missing)	47 states (4missing)	46 states (5missing)	45 states (6 missing)	44 states (7 missing)	43 states (8 missing)	42 states (9 missing)	41 states (10 missing)
1st quartile	1	1	1	1	1	1	1	1	1	1	1
2nd quartile begins	14	13	13	13	13	12	12	12	12	11	11
3rd quartile begins	26	26	25	25	24	24	23	23	22	22	21
4th quartile begins	39	38	37	36	36	35	34	33	33	32	31

Trend methodology

The method to identify meaningful change from baseline to most recent year is consistent with the approach used in the Commonwealth Fund's Scorecard on State Health System Performance.

To calculate trend for each metric, researchers followed these steps:

1. Calculated the standard deviation of the metric's distribution among all states from the baseline to the current year. When possible, up to 10 years of data were pulled and analyzed for each metric, but trend was also calculated when at least two years of data were available. When data used pooled years, HPIO did not use overlapping pooled years to assess trend.
2. Calculated the absolute change between Ohio's value for the most recent year and the baseline year by subtracting the baseline year value from the current year value.
3. To analyze the degree of change over time, HPIO compared Ohio's absolute change to the standard deviation using the following 5-point classification scheme:
   - No change: the change is within 0.5 standard deviations
   - Moderately improved: the change is between +0.5 and +1.0 standard deviations
   - Greatly improved: the change is more than +1.0 standard deviations
   - Moderately worsened: the change is between -0.5 and -1.0 standard deviations
   - Greatly worsened: the change is more than -1.0 standard deviations

In previous editions of the Dashboard, only up to 3 years of data were pulled for a metric. The approach of pulling up to 10 years of data (as available) in the 2026 Dashboard allows for examining longer-term changes in a metric over time. Importantly, this extended trend analysis also captures a wider range of policy environments. For example, some metrics will capture changes before versus after the implementation of Medicaid expansion in Ohio, or the health effects of the COVID-19 pandemic.

Given that 10 years of data was unavailable for all metrics, caution must be taken when interpreting trend and comparing trends between metrics. Some metrics are trended only across more recent years (ex: 2021 to 2024, etc.), which reflects a different set of policy environments than a full decade of trend (ex: 2015 to 2024, etc.). Additionally, due to changes in methodology and state missingness, directly comparing rankings across editions of the dashboard is not recommended. The data appendix describes all year ranges for Dashboard metrics.

Methodology for assessing health disparities and inequities

Disparities and inequities were assessed for a set of 36 metrics by race and ethnicity, education level, income level, disability status, gender identity and/or sexual orientation through disparity ratios. The 2026 Dashboard uses a new approach to calculating disparity ratios, comparing each group to the "rest of Ohio." Prior Dashboard iterations used disparity ratios that compared a disadvantaged group to the group that most consistently experiences the best outcomes and is systematically advantaged (e.g., white non-Hispanic, high income, etc.).

Disparity ratios for the 2026 Dashboard were calculated by dividing the rate of the group of interest (e.g., Hispanic Ohioans) to the rate for the rest of Ohio (all Ohioans who are not Hispanic). For example, 24.2% of Ohio adults who are Hispanic reported frequent mental distress in 2024. 16.7% of the rest of Ohio adults (i.e., non-Hispanic Ohioans) reported frequent mental distress in 2024.

The Hispanic/Rest of Ohio disparity ratio for frequent mental distress is 24.2%/16.7% = 1.4

This means that frequent mental distress rates for Hispanic Ohioans is 1.4 times higher than the rest of state in 2024.

Race and ethnicity	Hispanic	24.2%	**1.4**
	Black, non-Hispanic	16.9%	1.0
	White, non-Hispanic	16.4%	0.9
	Asian, non-Hispanic	14.1%	0.8

The rate or prevalence for the "Rest of Ohio" reference is different for each group. For example, the "Rest of Ohio" value for Black Ohioans is calculated as all eligible Ohioans who are not Black (i.e., any other race besides Black). These new "Rest of Ohio" reference groups are often not publicly available, requiring custom survey analysis with R software or calculations with underlying population estimates. To see these underlying values, see the disaggregated metrics in the data appendix.

Disparity ratio thresholds were assigned based on Healthy People 2020 criteria. Disparity ratios of less than 1.10 were considered to be little to no disparity. Disparity ratios greater than or equal to 1.10 and less than 2 were considered to be moderate. Disparity ratios greater than or equal to 2 were considered to be large. For data and disparity ratios for all measures assessed, see the disaggregated metrics in the data appendix.

Data was not always available for every population group (e.g. there were more metrics with data disaggregated by race and ethnicity than any other population group).

Classification of people into groups based on race, ethnicity, educational attainment, income, disability status, sexual orientation and gender identity is not consistent across sources. For example, some sources report data based on race and ethnicity (e.g., white, non-Hispanic; Black, non-Hispanic) and others report race only. Consequently, all groups were simplified to common levels outlined below (for more information, see the **data appendix**):

- Race: Non-Hispanic white/white, non-Hispanic Black/Black, Hispanic and Asian
- Income: Highest income group, lowest income group (thresholds established by data available for the metric)
- Educational attainment: Less than high school, Bachelor's degree or higher
- Disability status: With a disability, without a disability
- Sexual orientation: Heterosexual (straight), Gay, Lesbian, or Bisexual
- Gender identity: Cisgender, Transgender

Measuring estimated impact if disparities were eliminated

The Dashboard also includes calculations to answer the question: How many individuals of a group (e.g. Hispanic Ohioans) would have had a better outcome if the prevalence/exposure rate for that group were the same as the rest of Ohio (e.g., Ohioans who are not Hispanic)?

Population estimates for each group and rest of Ohio estimate were compiled from the metric sources themselves when possible. For example, metrics from the Behavioral Risk Factor Surveillance System use weighted survey estimates for each group as part of the custom survey analysis with R software.

See below for an example for the frequent mental distress metric amongst Hispanic Ohioans in 2024:

*number currently affected = rate of the outcome in the group of interest * total population of the group of interest*

*95,250 = 24.2% * 393,786*

The number of individuals in the group of interest who would be affected if the prevalence in that group were the same as the rest of Ohio was calculated as followed:

*number potentially affected = rate of the outcome for the rest of Ohio * total population of the group of interest*

*65,942 = 16.7% * 393,786*

The number of adult Ohioans impacted if the disparity were eliminated is then calculated:

Number of adult Ohioans impacted = number currently affected – number potentially affected

29,308 = 95,250 – 65,762

MORE DASHBOARD RESOURCES

Visit the **2026 Health Value Dashboard web page** to access the following:

- 4-page key findings overview
- **Findings from the Dashboard:** A publication with key findings and closer looks at Ohio populations that face the greatest challenges to achieving good health
- **Data from the Dashboard:** A publication with full ranked data tables and disaggregated data for many metrics
- Frequently Asked Questions (FAQ)
- Data appendix with descriptions, years, sources and Ohio data

► **Suggested citation:** Health Policy Institute of Ohio. 2026 Health Value Dashboard. April 2026.