2021 *Health Value Dashboard* Frequently Asked Questions (FAQ)

Health Policy Institute of Ohio
Updated April 6, 2021

General questions

1. **What is the *Health Value Dashboard*?** The Health Policy Institute of Ohio *Health Value Dashboard* is a tool to track Ohio's progress toward health value — a composite measure of Ohio's performance on population health outcomes and healthcare spending. In ranked profiles, the *Dashboard* examines Ohio's rank and trend performance relative to other states across seven domains (see domains in framework below). In addition, through a series of equity profiles, the *Dashboard* highlights gaps in outcomes between groups for some of Ohio's most systematically disadvantaged populations.

    The *Dashboard* is based on the Pathway to Improved Health Value conceptual framework (below). The framework defines health value and outlines the systems and environments that affect health. The *Dashboard* includes measures of these various systems and environments, including access to care, healthcare system performance, public health and prevention, social and economic environment and physical environment.

    The 2021 *Health Value Dashboard* is the fourth edition of this publication. HPIO released previous editions in 2014, 2017 and 2019. HPIO is committed to continuing to update the *Dashboard* on a biennial basis. The 2021 *Dashboard* provides a picture of Ohio's performance prior to the COVID-19 pandemic.
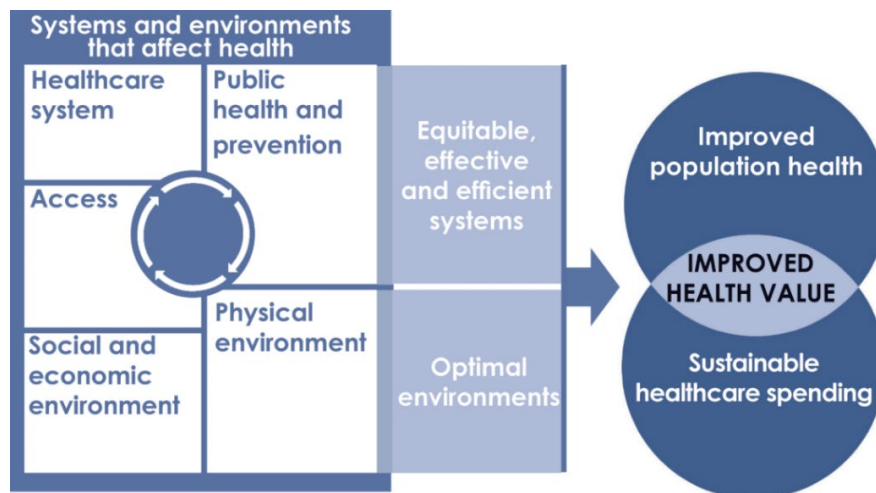
World Health Organization definition of health: Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

2. **Why does HPIO produce the *Dashboard?*** Improving health and addressing healthcare spending growth are concerns shared by state policymakers and others. We also know that many Ohioans face barriers to being healthy. We believe that collecting and sharing publicly available data on health, spending and the drivers of health provides an important starting place to understand Ohio's performance relative to other states. The *Dashboard* also highlights evidence-informed policies that can be implemented at the state and local-level to address Ohio's many health challenges and move the state toward achieving health equity.

3. **How was the *Dashboard* initially developed?** Since 2013, HPIO has convened the Health Measurement Advisory Group (HMAG) to advise development of and revisions to the *Health Value Dashboard*. HMAG includes stakeholders from a wide array of sectors and public and private organizations across Ohio.

   In 2013-2014, HMAG advised HPIO on the development of the Pathway to Improved Health Value conceptual framework upon which the *Dashboard* is based. For each edition of the *Dashboard*, members of HMAG have served on workgroups to inform selection and updating of metrics and advise on the layout, methodology and equity components. HPIO's Equity Advisory Group has provided feedback on the equity profiles and equity components in the *Dashboard*.

   Since 2017, HPIO has contracted with researchers at the Voinovich School of Leadership and Public Affairs at Ohio University to assist in data compilation, analysis and ranking.

4. **How does the 2021 *Dashboard* compare to the 2019 *Dashboard?***

   Most metrics in the ranked profiles of the 2021 edition (83%) are the same or similar to the 2019 edition. Of 104 metrics in the 2021 *Dashboard*, 86 are the same or similar, 5 are revised and 13 are new or replacements for metrics that were modified, discontinued or not updated by the source used for the 2019 *Dashboard*.

   The 2021 *Dashboard*:
   - **Maintains consistency** in methodology for ranking and trend
   - **Substantially increases** access to disaggregated data by increasing the number of measures in the equity profiles and appendix
   - **Emphasizes evidence-informed strategies for leveling the playing field** for systematically disadvantaged groups of Ohioans

5. **Why is there a focus on healthcare spending instead of "total health" spend?** Total health spend refers to all health-related spending that impacts health — including social service spending from sectors such as education, transportation and housing.

We focus on healthcare spending because we know that rising healthcare costs are a major concern for policymakers, employers and consumers. We also know that our current spending on health care is not sustainable. Consequently, the HPIO *Health Value Dashboard* addresses the specific value problem of unsustainable healthcare spending.

There has been a great deal of discussion at the national level on calculating "total health" spend. Some of the issues around the calculation of "total health" spend are outlined below:

- **No consensus on a methodology.** There is not currently consensus from national experts on how to calculate "total heath" spend (e.g., what portion of social service spending should be attributed to "total health" spend?).
- **Chicken and egg.** The actual impact of social services spending on population health outcomes is not clear. (e.g., does increasing social service spending improve population health outcomes or do states with higher social services spending relative to healthcare spending have healthier populations?).
- **Not always an inverse relationship.** Increasing social service spending does not necessarily mean that healthcare spending will go down. Healthcare spending is a product of many market dynamics that are independent of social services spending.

This article by Elizabeth Bradley and *The Health of the States Summary Report* can provide more context on this discussion.

6. **How is the *Dashboard* different from other scorecards and rankings that are out there?** Unlike other scorecards, the HPIO *Dashboard* places a heavy emphasis on the sustainability of healthcare spending, a critical component of any policy discussion on improving health, but one that often is not included on state rankings. In fact, as far as we know, the Health Policy Institute of Ohio was the first in the nation to develop a state ranking of "health value," placing equal emphasis on population health outcomes and healthcare spending. The *Dashboard* also provides a more comprehensive look at other factors that impact population health outcomes and healthcare spending. It addresses the wide range of factors, such as a state's social, economic and physical environment, that contribute to health value.

Ohio's rank on health outcomes is similar across scorecards:

	America's Health Rankings 2020 annual report	Commonwealth Scorecard on State Health System Performance, 2020 edition	Sharecare's Community Well-Being Index, 2019	HPIO Health Value Dashboard, 2021 edition
Overall	Ohio rank N/A	Ohio rank 28	Ohio rank 39	Ohio rank 47
Rank for health outcomes*	Ohio rank 39	Ohio rank 41	Ohio rank 39	Ohio rank 43

*Rank for specific domains: America's Health Rankings: Health Outcomes; Commonwealth: Healthy Lives; Sharecare: Physical; HPIO Health Value *Dashboard*: Population Health

The emphasis on health equity through the equity profiles and data appendix is another distinguishing element of the *Dashboard*. The 2021 *Dashboard* disaggregates data for 32 metrics by race/ethnicity, disability status, educational attainment and/or income and uses disparity ratios to assess the extent of disparities and inequities in Ohio for systematically disadvantaged groups. In addition, on some measures, the *Dashboard* provides estimates of the potential impact of eliminating disparities. These estimates are expressed as the number of people potentially impacted. For example, if the disparity in delaying health care due to cost that exists between Ohioans with disabilities and those without disabilities were eliminated, 181,488 Ohioans with disabilities would not have to delay health care due to cost.

Questions about correlations, metrics and methodology

7. **How are age, poverty and other factors correlated with a state's rank on health value, population health and healthcare spending?** HPIO ran a series of correlation analyses to determine the strength of relationship between specific factors and health value rank, population health rank and healthcare spending rank(see table). HPIO generally considers a correlation with a correlation coefficient (r) of 0.75 or higher to be strong, 0.5 - 0.75 to be moderate and below 0.5 to be weak. However, even strong correlation do not suggest a causal relationship.

Health factor	Correlation coefficient (r)		
	Health value rank	Population health rank	Healthcare spending
Population age 65 and older	0.26 (weak)	0.25 (weak)	0.14 (weak)
Adult poverty	0.6 (moderate)	0.79 (strong)	-0.21 (weak)
Child poverty	0.5 (moderate)	0.76 (strong)	-0.32 (weak)
Adult smoking	0.87 (strong)	0.91 (strong)	Not significant
Multiple Adverse Childhood experiences	0.55 (moderate)	0.66 (moderate)	Not significant

The correlation between percent of a state's population age 65 and older and health value rank is weak (r = 0.26). This means that states with a higher percentage of the population ages 65 and older tend to have worse health value ranks, but the relationship between those factors is not strong. The correlations between health value rank and children living in poverty or adults living in poverty are moderately strong (r = 0.5 and r = 0.6, respectively). This means that states with a higher percent of adults or children living in poverty are more likely to have worse health value ranks. Some states with populations that are older and poorer, like Montana, South Carolina and New Mexico, rank better than Ohio on health value.

There is a strong correlation between health value rank and adult smoking (r = 0.87). This suggests that smoking, an addictive health behavior that is treatable and preventable, is a leading driver of poor health value.
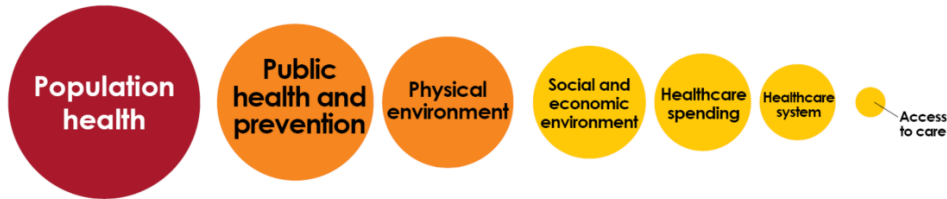
There is also a moderate correlation (r = 0.55) between exposure to adverse childhood experiences (ACEs) and health value. In 2020, HPIO began the Ohio ACEs Impact Project and has published policy briefs about the Health Impacts of ACEs in Ohio and the Economic Impact of ACEs in Ohio. In Summer 2021, HPIO will publish a third brief that will highlight evidence-informed and cost-effective strategies for preventing and mitigating the impacts of ACEs.

The correlation between poverty and population health rank (r = 0.79 for adult poverty and r = 0.76 for child poverty) is stronger than the correlation between poverty and health value rank. This finding aligns with research that points to poverty and economic security as a driver of health outcomes for individuals and populations.

8. **Which domains most strongly correlate with population health rank?** The public health and prevention (r = 0.84) and physical environment (r = 0.82) domain ranks are strongly correlated with the population health domain rank. The social and economic environment (r = 0.75) and healthcare system (r = 0.62) domain ranks are moderately correlated with the population health domain rank. The correlation between the access to care (r = 0.36) domain rank and population health domain

rank is weak. The correlation between the healthcare spending domain rank and population health domain rank is not statistically significant.

Which domains have the strongest relationship with **health value**?

Population health · **Public health and prevention** · **Physical environment** · **Social and economic environment** · **Healthcare spending** · **Healthcare system** · Access to care

Which domains have the strongest relationship with **population health**?

Public health and prevention · **Physical environment** · **Social and economic environment** · **Healthcare system** · Access to care

Key
Size of circle = Strength of correlation

- **Strong** (r=>0.75)
- **Moderate** (r= 0.5-0.75)
- **Weak** (r=>0.25-0.5)

9. **How many of the metrics were changed from the 2019 edition to the 2021 edition of the *Dashboard*?** Of the 104 metrics in the ranked profiles of the 2021 *Dashboard*, 86 are the same or similar, 5 are revised and 13 are new or replacements for metrics that were modified, discontinued or not updated by the source used for the 2019 *Dashboard*.

10. **How many metrics are in the *Dashboard* and where does the data come from?**
    - **There are 104 metrics in the ranked profiles of the 2021 *Dashboard*. Of these, 100 are ranked.** Metrics with more than 10 missing states were not ranked. Some metrics were also not ranked because the data could not be compared across states or desired direction could not be identified.
    - **There are 32 metrics in the equity profile and/or appendix.** HPIO disaggregated these metrics by race and ethnicity, education, income and/or disability status depending on data availability. Thirty-two metrics were disaggregated by race and ethnicity, 18 by education and/or income and 13 by disability status.
    - ***Dashboard* data is from public sources. Most of the data used in the *Dashboard* was obtained without a data request. Some data was obtained from state agencies.** The 2021 *Dashboard* includes data from 55 different sources. See data appendices for additional source information.

11. **Where can I find information about metrics (e.g., sources, years, descriptions)?** See the data appendices for information about individual metrics in the ranked and equity profiles.

12. **Where can I find more information about the methodologies/methods used in the Dashboard?** See the *Dashboard* process and methodology document for more information, including:
    - Information about the Health Policy Institute of Ohio and the history of the *Health Value Dashboard*
    - Metric selection process
    - Data gaps and limitations
    - Ranking and trend methodology
    - Methodology for assessing health disparities and inequities

13. **How do I interpret disparity ratios?** Disparity ratios displayed in the 2021 *Dashboard* equity profiles were calculated by dividing the outcome (e.g., rate or percent) of comparison groups (i.e., groups that consistently experience worse outcomes and are systematically disadvantaged) by the outcome of the reference group (i.e., the group that most consistently experiences the best outcomes and is systematically advantaged). For example, the unemployment rate for Black Ohioans (comparison group) is 11.5%. The unemployment rate for white Ohioans (reference group) is 4.3%. The Black-white disparity ratio for unemployment is 2.7. This means that the unemployment rate for Black Ohioans is 2.7 times higher than the unemployment rate for white Ohioans.

14. **How can Ohio rank 48th on two metrics, 2nd on one metric and 10th overall for the public health system and workforce subdomain?** As described in detail in the Dashboard methodology, subdomain, domain and health value ranks are not an average of ranks at the metric level. Instead, these ranks are calculated by summing z-scores for all metrics that go into the subdomain, domain or health value rank.

    The table below shows Ohio's rank and z-score for each metric in the public health system and workforce subdomain. Negative z-scores indicate better performance relative to other states on a metric.

Metric	Ohio rank	Ohio z-score
Accreditation of local health departments	2 (out of 49)	-2.31
State public health workforce	48	0.83
State public health funding, per capita	48	0.64

    Even though just 35% of Ohio's local health departments are accredited, this is a much higher proportion than in most other states. In contrast, even though Ohio ranks 48th, Ohio's performance is closer to the average of all states on state public health workforce and funding. Ohio's strong performance on the accreditation metric (relative to other states) brings Ohio's overall subdomain rank up to 10. The figure below shows the summed z-scores for Ohio and all other states for the public health system and workforce subdomain.

Summed z-scores for the public health system and workforce subdomain

(lower scores are better)
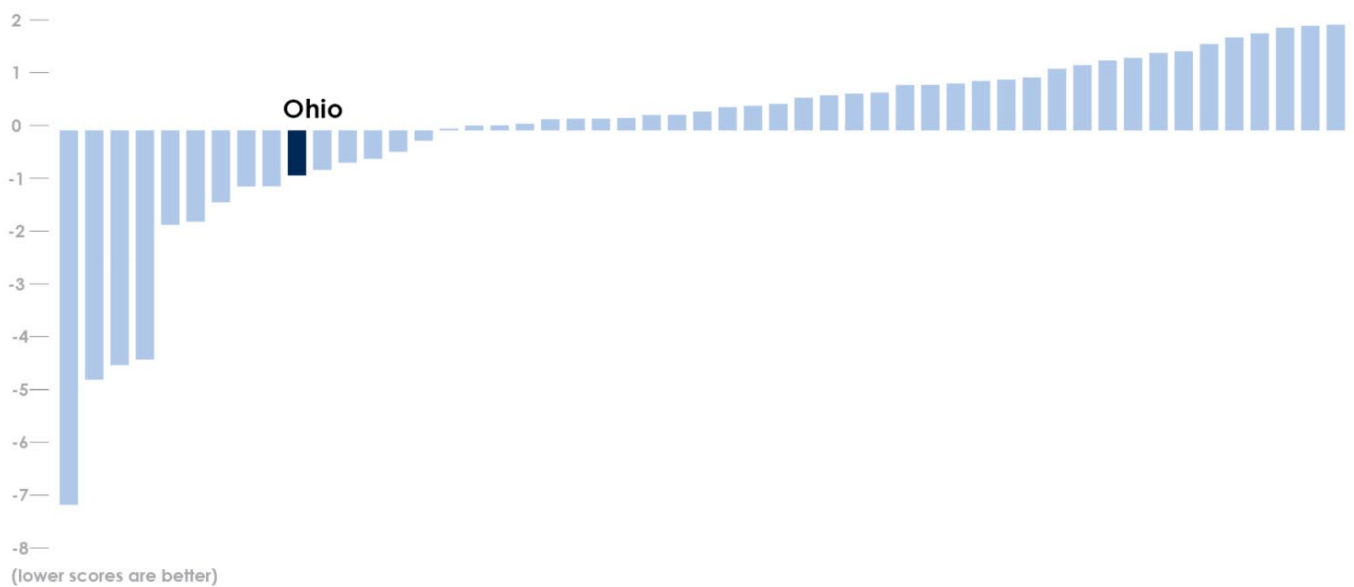
Questions about 2021 *Dashboard* findings

15. **Where does Ohio rank?**

- **Ohio ranks 47** out of 50 states and the District of Columbia (D.C.) on health value. This means that Ohioans are living less healthy lives and spending more on health care than people in most other states.
- **Ohio ranks in the bottom quartile on 29% of ranked metrics** and in the top quartile on only 12% of ranked metrics.

16. **Did Ohio improve?**

- Ohio's health value rank is 47 in the 2021 edition. Ohio's rank in the 2019 edition was 46. However, because the metrics that go into the health value rank have changed in each edition, Ohio's health value rank should not be compared across editions.
- Looking at trend over time relative to other states across all metrics in the *Dashboard*, Ohio saw more improvement than worsening. Ohio improved on 20% and worsened on 10% percent of metrics where trend was assessed. (This is similar to the pattern for the U.S. overall.)
- There was net improvement on metrics in the population health, access to care, public health and prevention, social and economic environment and physical environment domains.
- There was net worsening in the healthcare spending and healthcare system domains.

17. **Why does Ohio rank so poorly?** Analysis of *Dashboard* data in the ranked and equity profiles points to several potential reasons for Ohio's relatively poor performance:

- **Childhood adversity and trauma have long-term consequences.** Many of Ohio's children experience early adversity and trauma, including exposure to Adverse Childhood Experiences (ACEs) such as child abuse and neglect, living in poverty and experiencing racism. Ohio ranks in the bottom half of states on measures that put children at increased risk of exposure to adversity and trauma, including adult depression, drug overdose deaths, excessive drinking and incarceration.

- **Ohioans with the worst outcomes face systemic disadvantages.** Racism and other forms of discrimination are driving troubling differences in outcomes across Ohio. This includes racist and discriminatory beliefs and interactions among Ohioans and structural racism and discrimination embedded within systems and across sectors, rooted in ageism, ableism, xenophobia, homophobia and other "isms" or "phobias."

- **Sparse public health workforce leads to missed opportunities for prevention.** Only three other states spend less on public health than Ohio. Low spending limits Ohio's public health workforce and ability to proactively implement comprehensive approaches to our greatest health challenges. Ohio struggles on several outcomes that could be prevented, such as addiction and chronic disease. Stretched thin by the many demands of the COVID-19 pandemic, public health departments now have even fewer resources to devote to these issues.

18. **How do states rank on health value?**

State	2021 Health value rank
Hawaii	1
California	2
Utah	3
Maryland	4
Arizona	5
Colorado	6
Virginia	7
Iowa	8
New Jersey	9
Washington	10
Nevada	11
Oregon	12
Rhode Island	13
Nebraska	14
Massachusetts	15
Texas	16
Connecticut	17
Kansas	18
Florida	19
Georgia	20
New York	21
North Carolina	22
Minnesota	23
Illinois	24
Delaware	25
Idaho	26

State	2021 Health value rank
District of Columbia	27
Wyoming	28
Wisconsin	29
New Mexico	30
Pennsylvania	31
Alaska	32
North Dakota	33
Montana	34
Michigan	35
South Carolina	36
New Hampshire	37
South Dakota	38
Vermont	39
Alabama	40
Missouri	41
Oklahoma	42
Indiana	43
Arkansas	44
Tennessee	45
Maine	46
Ohio	**47**
Mississippi	48
Louisiana	49
Kentucky	50
West Virginia	51

19. **What are the regional differences across states?** There are some regional patterns in rankings, but they are not definitive. All states in the bottom quartile for spending (indicating higher spending) are in the northern half of the country, while states in the top quartile for spending (indicating lower spending) are clustered in the west and southeast.

States in the bottom quartile for population health are clustered in the southeast and Midwest, and states in the top quartile for population health are mostly in the northeast and west.

Most states in the top quartile for health value rank are in the west and states in the bottom quartile are concentrated in the geographic center of the country.

Health value

Population health

Healthcare spending

20. **Which states had the most improvement?** The four states that improved on the highest percent of metrics from baseline to most recent year were: District of Columbia (28.9%), Nevada (28.4%), Arizona (27.2%)and New Jersey (27.2%).

21. **How does HPIO calculate trend?** Trends are measured by looking at state performance over the three most-recent years of available data, not by comparing ranks from one edition of the *Dashboard* to the next. HPIO's trend methodology compares a state's absolute change on a metric from baseline to most recent year to the standard deviation of all state's values for the three most-recent years. This methodology is consistent with the approach used in the Commonwealth Fund's Scorecard on State Health System Performance. For more information, see the methodology.

Questions about strategies to improve health value

22. **How can we improve health value in Ohio?** The 2021 *Dashboard* highlights three key approaches to improve health value, including several specific strategies with strong evidence of effectiveness for state policymakers. Research evidence indicates that these policies and programs are likely to decrease disparities, improve outcomes and, in some cases, have demonstrated to be cost effective or cost saving. See page 4 of the 2021 *Dashboard* for a list of the strategies and see questions below for additional detail.

23. **How did HPIO prioritize the strategies highlighted in the 2021 *Dashboard*?** There are many effective strategies to improve health and control healthcare spending. The nine strategies in the 2021 *Dashboard* are not an exhaustive list. HPIO used the following criteria to prioritize an actionable and relevant set of strategies to elevate in the 2021 *Dashboard*:

    - **Equity.** There is evidence that the policy reduces disparities or inequities or creates structural change to advance equity, including strategies elevated in HPIO publications and state plans with a focus on eliminating disparities, such as the COVID-19 Minority Health Strike Force Blueprint
    - **Relevance.** Strategies relevant to the three reasons why Ohio performs poorly, as identified in the 2021 *Dashboard*
    - **Policy and structural change.** Policy, structural and systemic changes that can be acted on by state policymakers were prioritized over specific programs or services
    - **Momentum and alignment.** Strategies with momentum in Ohio's legislature, priorities of Gov. DeWine's administration and initiatives with strong advocacy efforts underway, as well as strategies in state plans, such as the State Health Improvement Plan and the Strategic Action Plan on Aging
    - **Strength of evidence**. The *Dashboard* elevates strategies with strong evidence of effectiveness as rated in evidence registries, such as What Works for Health and The Community Guide
    - **Clarity**. Strategies that are easily explained and defined