

Health

Value

Costs

hpio

health policy institute  
of ohio

2014

Health

Value

Dashboard

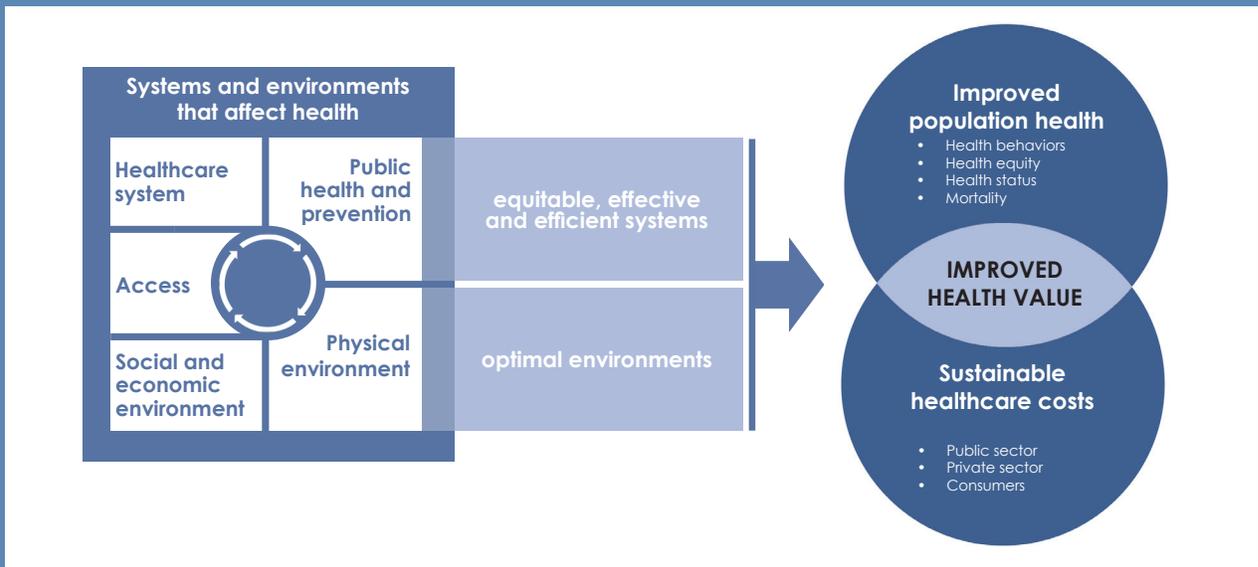
## Contents

|  |    |
|--|----|
| <b>Overview</b>  | 3  |
| <b>Snapshot of Ohio's greatest health challenges and strengths</b>   | 5  |
| <b>Snapshot of disparities for Ohio's greatest health challenges</b> | 6  |
| <b>Domain profiles</b>   |    |
| Population health  | 7  |
| Healthcare costs   | 8  |
| Access   | 9  |
| Healthcare system  | 10 |
| Public health and prevention   | 11 |
| Social and economic environment                                      | 12 |
| Physical environment   | 13 |
| <b>Appendix</b>  |    |
| Background and methodology   | 14 |
| Metric selection criteria  | 17 |
| Health Measurement Advisory Group members                            | 18 |
| Detailed metric description  | 19 |

## Health value framework

This dashboard is based upon the *Pathway to Health Value* conceptual framework developed by HPIO's Health Measurement Advisory Group. This framework includes seven domains—two domains that represent health value (population health and healthcare costs) and five domains that represent the systems and environments that impact health value.

Each domain includes several categories, called "subdomains." Each subdomain is made up of specific metrics. In total, this dashboard includes 27 subdomains and 106 metrics.



### 40 Population health

**Ohioans are less healthy than people in most other states.**

Ohio ranks 40th on a composite measure of population health. Thirty nine states are healthier. This overall rank is based on Ohio's rank in the following areas\*:

- 38 Overall health and wellbeing** Length and quality of life
- 49 Health behaviors** Tobacco, alcohol, physical activity
- 41 Conditions and diseases** Physical, mental and oral health

Health



### 40 Healthcare costs

**Ohio spends more than most other states on health care.**

Ohio ranks 40th on a composite measure of healthcare costs. Thirty nine states spend less. This overall rank is based on Ohio's rank in the following areas\*:

- 35 Total spending** Overall healthcare spending per capita and spending growth
- 32 Employer costs** Average premiums for single adults and families
- 23 Consumer costs** Commercial health spending per enrollee and out of pocket spending
- 49 Medicare spending** Spending per enrollee and spending growth

Cost

### 47 Health value in Ohio

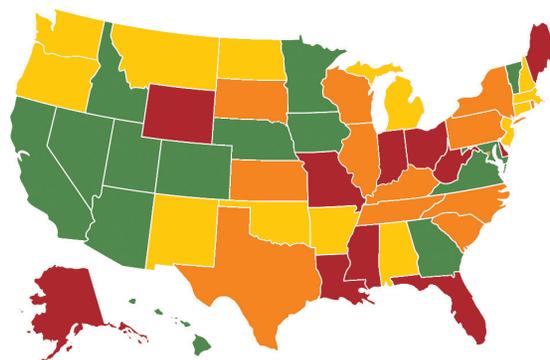
**We are not getting good value for our healthcare dollar.**

Ohio ranks 47th on a composite measure of health value—the combination of healthcare costs and population health, weighted equally.

Value

**Health + Cost = Value**

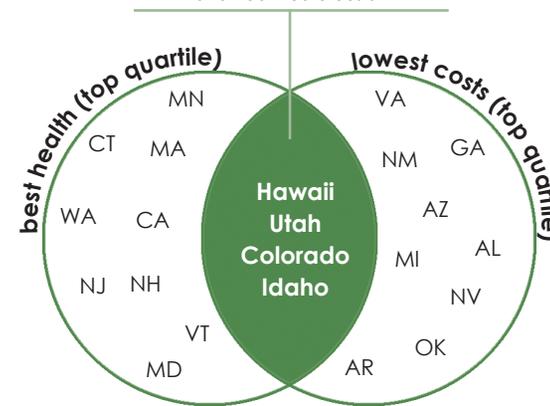
Where states rank in health value...



- Top quartile** of the 50 states and the District of Columbia.
- Second quartile** of the 50 states and the District of Columbia.
- Third quartile** of the 50 states and the District of Columbia.
- Bottom quartile** of the 50 states and the District of Columbia.

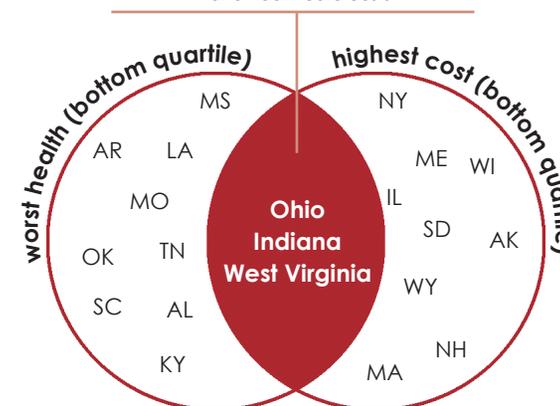
#### Highest value states

States in the top quartile for both population health and healthcare costs



#### Lowest value states

States in the bottom quartile for both population health and healthcare costs



**Note:** Rankings for the above domains are based on most-recently available data from 2008 to 2013. A ranking of 1 is the best and 51 is the worst.

\*The overall domain rank (e.g. healthcare costs) is the composite of the sub-domain ranks (e.g. total and employer). The subdomain ranks are the composite of the ranks for the individual metrics (e.g. healthcare spending per capita).

# Why does Ohio rank so poorly on health value?

In order to improve health value, Ohio must address the many factors that impact population health outcomes and healthcare costs. Public health and prevention and the healthcare system in Ohio face significant challenges. Ohio also struggles when it comes to the physical, social and economic environments that impact health.

**25** **Access**

- 15 Affordability and coverage** uninsured, employer-sponsored health insurance coverage, affordability of care
- 20 Primary care access** usual source of care, routine checkup, medical homes
- 42 Behavioral health** unmet mental health and illicit drug use treatment need
- 21 Oral Health** dental care, dental emergency department visits

**34** **Physical environment**

- 36 Air, water and toxic substances** pollution, secondhand smoke, drinking water, fluoridation, lead poisoning
- 32 Food access and food insecurity** access to grocery stores, limited or uncertain access to adequate food
- 22 Housing, built environment and access to physical activity** housing problems, access to exercise opportunities, biking/walking to work, safe routes to school programs, complete streets policies, neighborhood safety

**39** **Healthcare system**

- 35 Preventive services** breastfeeding support, flu immunization, diabetes management
- 42 Hospital utilization** heart failure readmissions, emergency department visits
- 31 Timeliness, effectiveness and quality of care** healthcare-associated infections, stroke care, nursing home care, patient experience, mortality amenable to health care

**29** **Social and economic environment**

- 27 Education** preschool enrollment, fourth-grade reading, high school graduation, educational attainment
- 35 Employment and poverty** unemployment, child and adult poverty
- 29 Family and social support** single-parent households, teen births, social-emotional support, social cohesion
- 33 Trauma, toxic stress and violence** child abuse and neglect, adverse childhood experiences, violent crime
- 28 Income inequality**

Our social, economic and physical environments —where we live, work, learn and play — have a significant impact on our overall health.<sup>1</sup>

Clinical care received within the healthcare system accounts for the majority of our healthcare costs. Fewer of our healthcare dollars are spent on public health and prevention.<sup>2</sup>

**51** **Public health and prevention**

- 41 Workforce and accreditation** state and local public health workforce, accreditation of local health departments
- 48 Communicable disease control and environmental health** chlamydia, foodborne illness monitoring, child immunizations
- 44 Emergency preparedness** emergency preparedness funding
- 40 Health promotion and prevention** prevention of chronic disease, infant mortality and injuries

**KEY**

- Top quartile of the 50 states and the District of Columbia.
- Second quartile of the 50 states and the District of Columbia.
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For methodology and sources, see appendix or view the Health Value Dashboard online at: [www.healthpolicyohio.org/2014-health-value-dashboard](http://www.healthpolicyohio.org/2014-health-value-dashboard)

**Note:** Rankings for the above domains are based on most-recently available data from 2006 to 2014.

1. McGovern, et al. "The relative contribution of multiple determinants to health outcomes," Health Affairs, 2014.  
 2. McGinnis, et al. "The case for more active policy attention to health promotion," Health Affairs, 2002.

## Ohio's greatest health challenges

Ohio ranks in the bottom quartile among U.S. states and Washington D.C. for the following metrics...

| Domain                       | Indicator   | Ohio's rank | Most recent data | Best state |
|------------------------------|---|-------------|------------------|------------|
| Population health            | <b>Adult smoking</b> Percent of adults who are current smokers  | 44          | 23.4%            | 10.3% UT   |
|                              | <b>Adult diabetes</b> Percent of adults diagnosed with diabetes   | 46          | 11.7%            | 7% AK      |
|                              | <b>Infant mortality</b> Infant deaths per 100,000 population  | 47          | 7.69             | 3.8 AK     |
| Healthcare system            | <b>Avoidable emergency department visits for Medicare beneficiaries</b> Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries | 44          | 215              | 129 HI     |
| Public health and prevention | <b>State public health workforce</b> Number of state public health agency staff FTEs per 100,000 population   | 44          | 9.9              | 250.7 WY   |
|                              | <b>Emergency preparedness funding</b> Median per capita funding for emergency preparedness  | 44          | \$1.50           | \$9.93 DC  |
|                              | <b>Tobacco prevention spending</b> Tobacco prevention and control spending, as percent of the CDC-recommended level   | 46          | 4.4%             | 114.8% ND  |
|                              | <b>Child immunization</b> Percentage of children ages 19 to 35 months who have received vaccinations  | 48          | 61.7%            | 82.1% RI   |
| Healthcare costs             | <b>Medicare spending growth per enrollee</b> Average annual percent growth in Medicare spending per enrollee  | 45          | 5.2%             | 1.4% ND    |
| Access                       | <b>Unmet need for illicit drug use treatment</b> Percent of individuals ages 12 and older needing but not receiving treatment for illicit drug use in the past year             | 43          | 2.6%             | 1.9% HI    |
| Physical environment         | <b>Food insecurity</b> Percent of households with uncertain access to adequate food   | 40          | 16.1%            | 8.7% ND    |
|                              | <b>Outdoor air quality</b> Average exposure of the general public to particulate matter of 2.5 microns or less in size  | 47          | 11.6             | 5.3 WY     |
|                              | <b>Secondhand smoke</b> Percent of children who live in home where someone uses tobacco or smokes inside home   | 49          | 10.3%            | 0.4% CA    |

## Ohio's greatest health strengths

Ohio ranks in the top quartile among U.S. states and Washington D.C. for the following metrics...

| Domain                       | Indicator  | Ohio's rank | Most recent data | Best state |
|------------------------------|--|-------------|------------------|------------|
| Public health and prevention | <b>Accreditation of local health departments</b> Percent of LHDs that have received accreditation (March 2013 to Sept. 2014)                   | 11          | 3.2%             | 10% LA     |
| Access                       | <b>Employer-sponsored health insurance coverage</b> Percent of all workers who work at a company that offers health insurance to its employees | 11          | 86.8%            | 96.7% HI   |
| Physical environment         | <b>Safe drinking water</b> Percent of population exposed to water exceeding a violation limit during the past year                             | 10          | 3%               | 0% DC      |
|                              | <b>Fluoridated water</b> Percent of the population served by a community water system with optimally fluoridated water                         | 12          | 92.2%            | 100% DC    |
|                              | <b>Severe housing problem</b> Percent of households with problems such as severe overcrowding or costs that exceed 50% of monthly income       | 13          | 15%              | 11% ND     |

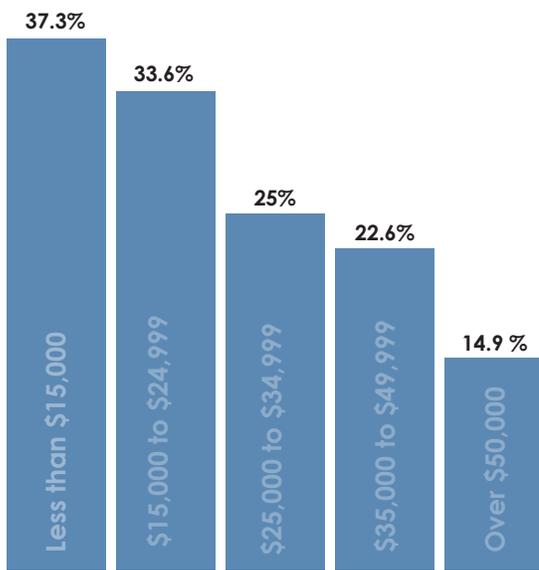


| Domain                          | Ohio ranks in the <b>second quartile</b> for the following subdomains | Ohio ranks in the <b>third quartile</b> for the following subdomains   | Ohio ranks in the <b>fourth quartile</b> for the following subdomains   |
|---------------------------------|---|--|---|
| Population health               | None  | Overall health and wellbeing   | Health behaviors<br>Conditions and diseases   |
| Healthcare costs                | Consumer costs  | Total spending<br>Employer costs   | Medicare spending   |
| Healthcare system               | None  | Preventive services<br>Timeliness, effectiveness and quality of care   | Hospital utilization  |
| Access                          | Affordability and coverage<br>Primary care access<br>Oral health      | None   | Behavioral health   |
| Public health and prevention    | None  | None   | Public health workforce and accreditation<br>Communicable disease control and environmental health<br>Emergency preparedness<br>Health promotion and prevention |
| Social and economic environment | None  | Education<br>Employment and poverty<br>Family and social support<br>Trauma, toxic stress and violence<br>Inequality              | None  |
| Physical environment            | None  | Air, water and toxic substances<br>Food access and food insecurity<br>Housing, built environment and access to physical activity | None  |

\* Ohio does not rank in the top quartile for any subdomains.

In order to improve health value for all Ohioans, it is important to identify and address disparities, or gaps, in outcomes between different groups. The following graphics display Ohio's three lowest-ranked population health outcomes broken out by race/ethnicity, income level, and county.

### Adult Ohioans who are current smokers, by income level, 2013



Source: CDC, BRFSS

### A closer look

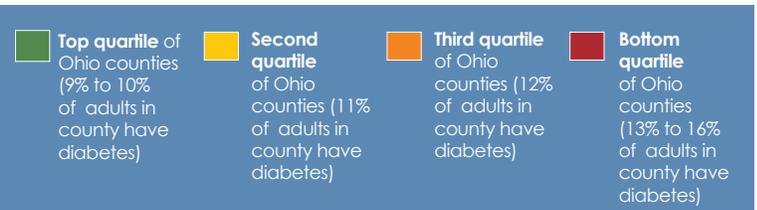
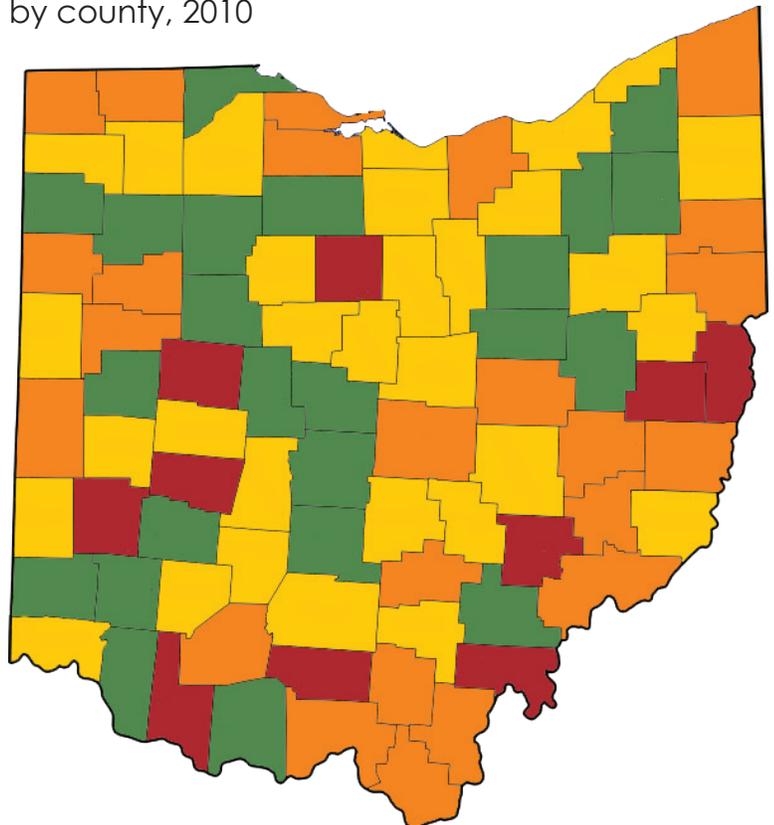
Additional data for many of the metrics included in this dashboard by race/ethnicity, income and education levels, age and local geography is available from the following websites: **Commonwealth Scorecard on Health System Performance (state and local versions)**, **Network of Care**, **RWJF DataHub** and **County Health Rankings and Roadmaps**. [Click here](#) for a crosswalk that indicates which dashboard metrics are available from these sources.

### Infant mortality in Ohio, by race/ethnicity, 2012



Source: Ohio Department of Health

### Adult Ohioans diagnosed with diabetes, by county, 2010



Source: CDC, BRFSS, as compiled by County Health Rankings and Roadmaps

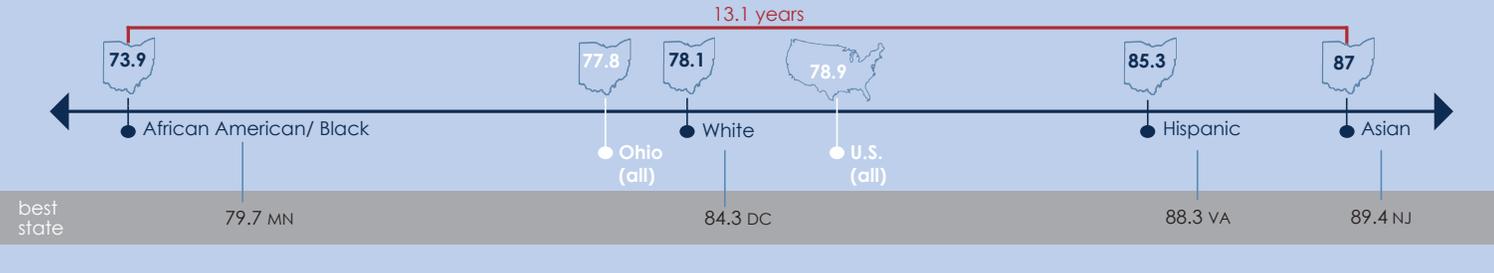
# 40 Population health in Ohio

Ohio ranks 40th in the nation on the population health domain

| Indicator  | Ohio's rank | Data value |             | Trend | Best state |
|--|-------------|------------|-------------|-------|------------|
|  |             | baseline   | most recent |       |            |
| <b>Overall health and wellbeing</b>  |             | <b>38</b>  |             |       |            |
| <b>Overall health status</b> Percent of adults who report fair or poor health                          | 33          | 18.3%      | 18.1%       | +     | 12.1% VT   |
| <b>Limited activity due to health problems</b> Average number of days in last 30 with limited activity | 34          | 1.5        | 1.6         | -     | 0.9 ND     |
| <b>Life expectancy</b> Life expectancy at birth, in years  | 37          | 77.5       | 77.8        | +     | 81.3 HI    |
| <b>Premature death</b> Years of potential life lost before age 75                                      | 38          | 7,158      | 7,294       | -     | 4,869 MN   |
| <b>Health behaviors</b>  |             | <b>49</b>  |             |       |            |
| <b>Adult insufficient physical activity</b> Percent of adults not meeting physical activity guidelines | 33          | 78.6%      | 81%         | -     | 73.3% CO   |
| <b>Adult binge drinking</b> Percent of adults report binge drinking in past month                      | 36          | 20.1%      | 18%         | +     | 10.2% WV   |
| <b>Adult smoking</b> Percent of adults who are current smokers   | 44          | 23.3%      | 23.4%       | -     | 10.3% UT   |
| <b>Youth all-tobacco use</b> Percent of high school students who used tobacco in past 30 days          | NR*         | 27.9%      | 21.7%       | +     | 5.6% UT    |
| <b>Conditions and diseases</b>   |             | <b>41</b>  |             |       |            |
| <b>Suicide deaths</b> Suicide deaths per 100,000 population  | 18          | 11.5       | 12.2        | -     | 6.9 DC     |
| <b>Youth obesity</b> Percent of high school students who are obese                                     | 27          | 14.7%      | 13%         | +     | 6.4% UT    |
| <b>Drug overdose deaths</b> Drug overdose deaths per 100,000 population                                | 35          | 14.9       | 14          | +     | 5 ND       |
| <b>Poor mental health</b> Average number of days in past 30 where mental health was poor               | 36          | 4.1        | 4.1         | =     | 2.8 ND     |
| <b>Cardiovascular disease mortality</b> Heart-related deaths per 100,000 population                    | 37          | 287.6      | 276.7       | +     | 186.9 MN   |
| <b>Poor oral health</b> Percent of adults who have lost teeth due to decay, infection or disease       | 38          | 11%        | 13%         | -     | 5% UT      |
| <b>Infant mortality</b> Infant deaths per 1,000 live births  | 47          | 7.7        | 7.9         | -     | 3.75 AK    |
| <b>Adult diabetes</b> Percent of adults diagnosed with diabetes  | 46          | 10%        | 11.7%       | -     | 7% AK      |

### Gaps in life expectancy

There are significant gaps in life expectancy for different groups of Ohioans. An African American child born in Ohio today can expect to live to age 73.9, more than a decade less than children in other racial/ethnic groups. African Americans in other states have much longer life expectancies. For example, African American life expectancy is 6.3 years longer in Minnesota (best state) than in Ohio.



|            |             |   |   |  |  |   |              |  |
|------------|-------------|---|---|--|--|---|--------------|--|
| <b>KEY</b> | <b>Rank</b> | <span style="color: green;">■</span> Ohio ranks in the <b>top quartile</b> of the 50 states and the District of Columbia. | <span style="color: yellow;">■</span> Ohio ranks in the <b>second quartile</b> of the 50 states and the District of Columbia. | <span style="color: orange;">■</span> Ohio ranks in the <b>third quartile</b> of the 50 states and the District of Columbia. | <span style="color: red;">■</span> Ohio ranks in the <b>bottom quartile</b> of the 50 states and the District of Columbia. | <span style="border: 1px solid gray; padding: 2px;">NR</span> <b>No ranking</b> , no assigned desired direction | <b>Trend</b> | <span style="color: green;">+</span> <b>Getting better</b> |
|            |             | <span style="border: 1px solid gray; padding: 2px;">NR*</span> <b>No ranking</b> , metric has 10 or more missing states   | <span style="color: gray;">=</span> <b>No change</b>  | <span style="color: red;">-</span> <b>Getting Worse</b>  |  |   |              |  |

**NOTE:** Rankings are based on the most-recent data column. A ranking of 1 is the best and 51st is the worst. This dashboard uses data that is the most recently available for all states and DC. The year that is most-recently available varies by metric, from 2008 to 2013. See appendix for specific years for each metric.

# 40 Healthcare costs in Ohio

Ohio ranks 40th in the nation on the healthcare costs domain

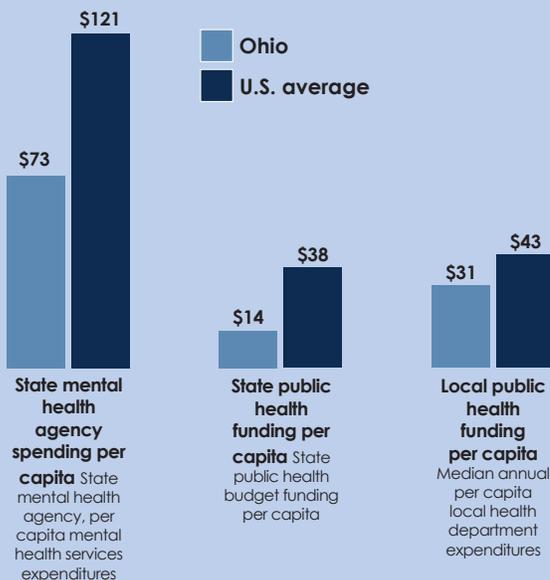
| Indicator  | Ohio's rank | Data value |             | Trend | Best state  |
|--|-------------|------------|-------------|-------|-------------|
|  |             | baseline   | most recent |       |             |
| <b>Total spending</b>  | <b>35</b>   |            |             |       |             |
| <b>Health care spending per capita</b> Aggregate spending per capita   | 33          | \$6,776    | \$7,076     | -     | \$5,031 UT  |
| <b>Health spending growth per capita</b> Average annual percent growth in health spending per capita   | 34          | 3.3%       | 4.4%        | -     | 2% AZ       |
| <b>Employer costs</b>  | <b>32</b>   |            |             |       |             |
| <b>Average single premium per enrolled employee (total amount)</b> Average single premium for private-sector employees enrolled in employer-based health insurance | 32          | \$5,081    | \$5,679     | -     | \$4,536 AR  |
| <b>Percent of employee contribution</b>  | NR          | 24.2%      | 18.5%       | NA    | 21% US      |
| <b>Percent of employer contribution</b>  | NR          | 75.8%      | 81.5%       | NA    | 79% US      |
| <b>Average family premium per enrolled employee (total amount)</b> Average family premium for private-sector employees enrolled in employer-based health insurance | 31          | \$15,455   | \$15,955    | -     | \$13,477 AL |
| <b>Percent of employee contribution</b>  | NR          | 25.1%      | 22.8%       | NA    | 27.6% US    |
| <b>Percent of employer contribution</b>  | NR          | 74.9%      | 77.2%       | NA    | 72.4% US    |
| <b>Consumer costs</b>  | <b>23</b>   |            |             |       |             |
| <b>Total commercial health spending per enrollee</b> Total spending per commercially insured enrollee ages 18-64   | 24          | NA         | \$3,349     | NA    | \$1,993 HI  |
| <b>Out-of-pocket costs</b> Percent of individuals with high out-of-pocket healthcare spending, relative to annual income   | 27          | NA         | 20.1%       | NA    | 11.4% DC    |
| <b>Medicare spending</b>   | <b>49</b>   |            |             |       |             |
| <b>Medicare spending per enrollee</b> Medicare spending on personal healthcare services and products per enrollee  | 36          | \$9,788    | \$10,300    | -     | \$7,576 MT  |
| <b>Medicare spending growth per enrollee</b> Average annual percent growth in Medicare spending per enrollee   | 45          | 6%         | 5.2%        | +     | 1.4% ND     |

**KEY**

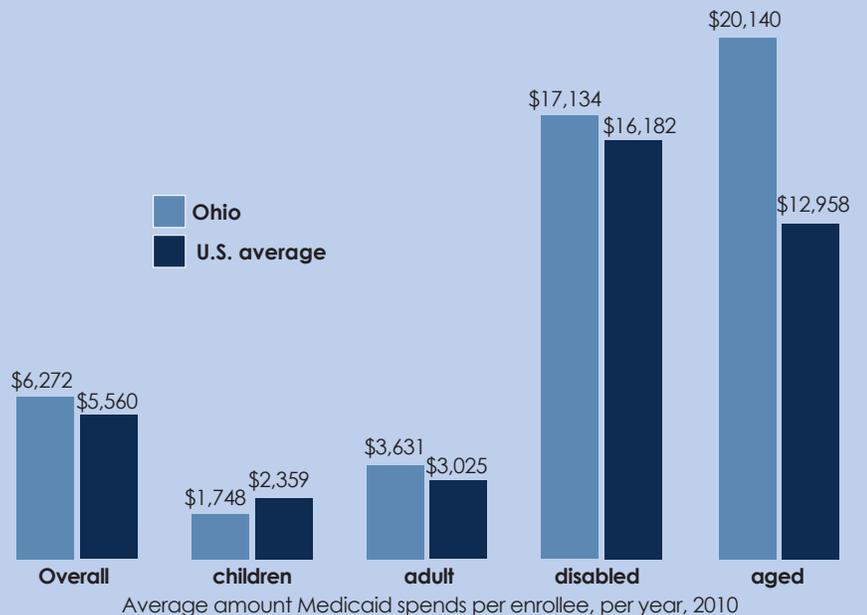
|             |   |   |  |  |  |              |               |                |
|-------------|---|---|--|--|--|--------------|---------------|----------------|
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|             |   |   |  |  | NR* <b>No ranking</b> , metric has 10 or more missing states |              | =             | No change      |
|             |   |   |  |  |  | -            | Getting Worse |                |

**NOTE:** Rankings are based on the most-recent data column. A ranking of 1 is the best and 51st is the worst. This dashboard uses data that is the most recently available for all states and DC. The year that is most-recently available varies by metric, from 2009 to 2013. See appendix for specific years for each metric.

### Public health and mental health agency spending



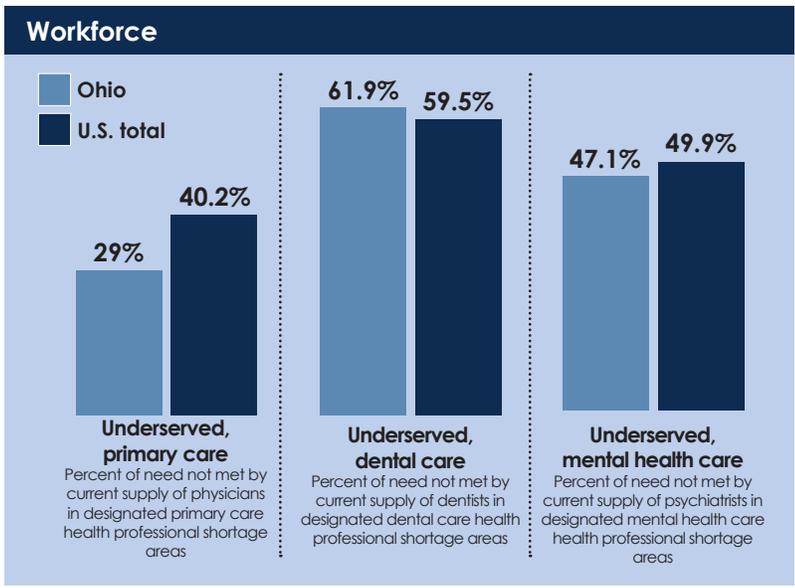
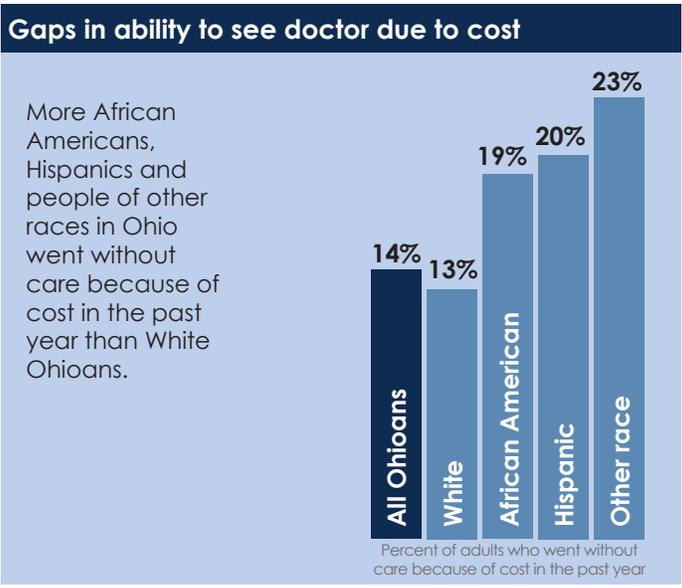
### Medicaid spending



# 25 Access in Ohio

Ohio ranks 25th in the nation on the access domain

| Indicator   | Ohio's rank | Data value |             | Trend | Best state    |
|---|-------------|------------|-------------|-------|---------------|
|   |             | baseline   | most recent |       |               |
| <b>Affordability and coverage</b>   |             |            |             |       |               |
| <b>Uninsured adults</b> Percent of 18-64 year olds who are uninsured  | 15          | 16.3%      | 15.7%       | +     | 5.2% MA       |
| <b>Uninsured children</b> Percent of 0-17 year olds who are uninsured   | 15          | 5.3%       | 5.3%        | =     | 1.5% MA       |
| <b>Employer-sponsored health insurance coverage</b> Percent of all workers who work at a company that offers health insurance to its employees                              | 11          | 88.6%      | 86.8%       | -     | 96.7% HI      |
| <b>Unable to see doctor due to cost</b> Percent of adults who went without care because of cost in the past year  | 18          | 12%        | 14%         | -     | 9% ND, HI, MA |
| <b>Primary care access</b>  |             |            |             |       |               |
| <b>Without a usual source of care</b> Percent of adults who report they do not have at least one person they think of as their personal doctor or health care provider      | 19          | 15%        | 19%         | -     | 11% MA        |
| <b>Routine checkup</b> Percent of at-risk adults who have not visited a doctor for routine checkup in the past two years  | 20          | 14%        | 13%         | +     | 6% MA         |
| <b>Medical home, children</b> Percent of children have a usual source for sick and well care and receive effective care coordination when needed                            | 24          | 66.2%      | 57%         | -     | 69% VT        |
| <b>Behavioral health</b>  |             |            |             |       |               |
| <b>Unmet need for mental health</b> Percent of adults ages 18 and older with past year mental illness who reported perceived need for treatment/counseling was not received | 32          | NA         | 21.7%       | NA    | 11.1% HI      |
| <b>Unmet need for illicit drug use</b> Percent of individuals ages 12 and older needing but not receiving treatment for illicit drug use in the past year                   | 43          | NA         | 2.6%        | NA    | 1.9% HI       |
| <b>Oral health</b>  |             |            |             |       |               |
| <b>Received dental care in past year, adults</b> Percent of adults ages 18 and older who reported having visited the dentist or dental clinic within the past year          | 19          | NA         | 67.6%       | NA    | 76.2% MA      |
| <b>Received dental care in past year, children</b> Children under age 18 who have seen a dentist at least once for preventive dental care in the past year                  | 23          | 79%        | 78%         | -     | 88% VT        |



**KEY**

|             |   |   |  |  |   |   |  |
|-------------|---|---|--|--|---|---|--|
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|             |   |   |  |  |   | <span style="color: red;">-</span> <b>Getting Worse</b> |  |

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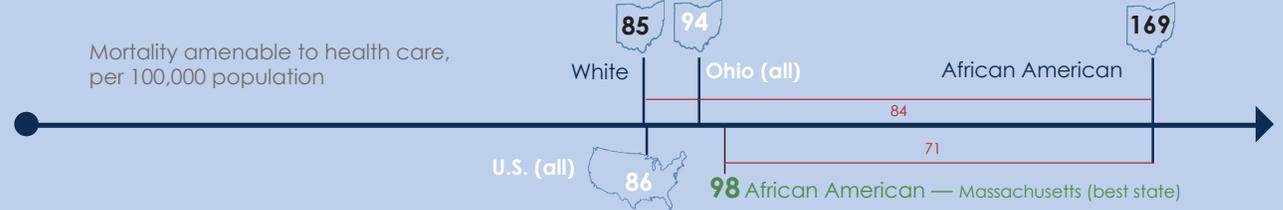
# 39 Healthcare system in Ohio

Ohio ranks 39th in the nation on the healthcare system domain

| Indicator   | Ohio's rank | Data value |             | Trend | Best state |
|---|-------------|------------|-------------|-------|------------|
|   |             | baseline   | most recent |       |            |
| <b>Preventive services</b>  |             |            |             |       |            |
| <b>35</b>   |             |            |             |       |            |
| <b>Breastfeeding support in hospitals</b> Composite quality practice score for infant nutrition and care provided at hospitals and birth centers to support breastfeeding   | 21          | 69         | 71          | +     | 88 NH      |
| <b>Flu vaccination</b> Monthly cumulative influenza vaccination percent coverage estimates for persons ≥ 6 months of age  | 32          | 43.7%      | 44.8%       | +     | 57.5% MA   |
| <b>Diabetes A1c measurements</b> Percent of adults ages 18 and older with diagnosed diabetes who received 2 or more hemoglobin A1c measurements in the last year  | 36          | 67%        | 68.9%       | +     | 80.5% ME   |
| <b>Prenatal care</b> Percent of women who completed a pregnancy in the last 12 months and who received prenatal care in the first trimester   | NR*         | 69.2%      | 68.5%       | -     | 83.5% VT   |
| <b>Cancer early stage diagnosis, all</b> Percent of all cancer cases diagnosed at an early stage  | NR*         | 48.6%      | 49.8%       | +     | NA         |
| <b>Female breast cancer early stage diagnosis</b> Percent of female breast cancer cases diagnosed at an early stage   | NR*         | 66.8%      | 69.2%       | +     | NA         |
| <b>Colon and rectal cancer early stage diagnosis</b> Percent of colon and rectal cancer cases diagnosed at an early stage   | NR*         | 38.5%      | 38.5%       | =     | NA         |
| <b>Hospital utilization</b>   |             |            |             |       |            |
| <b>42</b>   |             |            |             |       |            |
| <b>Heart failure readmissions for Medicare beneficiaries</b> Percent of Medicare beneficiaries discharged from the hospital with a principal diagnosis of heart failure who were readmitted for any cause within 30 days after the index admission date | 35          | 24.9%      | 25%         | -     | 21.1% MT   |
| <b>Avoidable emergency department visits for Medicare beneficiaries</b> Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries   | 44          | NA         | 215         | NA    | 129 HI     |
| <b>All payer same hospital readmissions</b> All payer 30-day same hospital readmissions as a percent of admissions or unplanned readmissions  | NR*         | 9.5%       | 8.8%        | +     | NA         |
| <b>Timeliness, effectiveness and quality of care</b>  |             |            |             |       |            |
| <b>31</b>   |             |            |             |       |            |
| <b>Healthcare-associated infections</b> Composite of standardized infection ratios across six healthcare-associated infections  | 14          | NA         | 0.79        | NA    | 0.59 AK    |
| <b>Nursing home pressure ulcers</b> Percent of long-stay high-risk nursing home residents impaired in bed mobility or transfer, comatose, or malnourished with pressure ulcers  | 19          | NA         | 6%          | NA    | 3% HI      |
| <b>Stroke care</b> Percent of ischemic stroke patients who got medicine to break up a blood clot within 3 hours after symptoms started  | 28          | NA         | 65%         | NA    | 96% ND     |
| <b>Patient experience</b> Percent of Medicare fee-for-service beneficiaries who had a doctor's office or clinic visit in the last 12 months whose doctor sometimes or never explained things in a way they could understand                             | 31          | 4.2%       | 4.4%        | -     | 1.7% VT    |
| <b>Mortality amenable to healthcare, all</b> Number of deaths before age 75 per 100,000 population that resulted from causes considered at least partially treatable or preventable with timely and appropriate medical care                            | 35          | 106        | 94          | +     | 57 MN      |
| <b>Behavioral health</b>  |             |            |             |       |            |
| <b>Mental illness hospitalization follow-up</b> Percent of Medicaid enrollees ages 6 and older who received follow-up after hospitalization for mental illness within 30 days of discharge  | NR*         | 64.8%      | 64.9%       | +     | NA         |
| <b>Substance use disorder treatment retention</b> Percent of individuals ages 12 and older with an intake assessment who received one outpatient index services within a week and two additional outpatient index services within 30 days of intake     | NR*         | 36.4%      | 37.4%       | +     | NA         |

### Gaps in healthcare preventable death

There are significant gaps among different groups in Ohio in the number of deaths considered at least partially treatable or preventable with timely and appropriate medical care. There are 84 more deaths per 100,000 population among African Americans than White Ohioans, and there are 71 more deaths per 100,000 population among Ohio African Americans compared to African Americans in Massachusetts.



|            |             |  |   |  |   |  |              |           |                |
|------------|-------------|--|---|--|---|--|--------------|-----------|----------------|
| <b>KEY</b> | <b>Rank</b> | <span style="display: inline-block; width: 15px; height: 15px; background-color: #4CAF50; border: 1px solid black;"></span> Ohio ranks in the <b>top quartile</b> of the 50 states and the District of Columbia. | <span style="display: inline-block; width: 15px; height: 15px; background-color: #FFEB3B; border: 1px solid black;"></span> Ohio ranks in the <b>second quartile</b> of the 50 states and the District of Columbia. | <span style="display: inline-block; width: 15px; height: 15px; background-color: #FF9800; border: 1px solid black;"></span> Ohio ranks in the <b>third quartile</b> of the 50 states and the District of Columbia. | <span style="display: inline-block; width: 15px; height: 15px; background-color: #F44336; border: 1px solid black;"></span> Ohio ranks in the <b>bottom quartile</b> of the 50 states and the District of Columbia. | NR <b>No ranking</b> , no assigned desired direction | <b>Trend</b> | +         | Getting better |
|            |             |  |   |  | NR* <b>No ranking</b> , metric has 10 or more missing states  | =  |              | No change | -              |

**NOTE:** Rankings are based on the most-recent data column. A ranking of 1 is the best and 51st is the worst. This dashboard uses data that is the most recently available for all states and DC. The year that is most-recently available varies by metric, from 2010 to 2014. See appendix for specific years for each metric.



# Public health and prevention in Ohio

Ohio ranks 51st in the nation on the public health and prevention domain

| Indicator  | Ohio's rank | Data value |             | Trend | Best state |
|--|-------------|------------|-------------|-------|------------|
|  |             | baseline   | most recent |       |            |
| <b>Public health workforce and accreditation</b>   |             | <b>41</b>  |             |       |            |
| <b>Accreditation of local health departments</b> Percent of LHDs that have received accreditation (March 2013 through September 2014)        | 11          | NA         | 3.2%        | NA    | 10% LA     |
| <b>Local public health workforce</b> Median number of local health department FTEs per 100,000 population                                    | 30          | 39.5       | 36.6        | -     | 136 MD     |
| <b>State public health workforce</b> Number of state public health agency staff FTEs per 100,000 population                                  | 44          | 10.4       | 9.9         | -     | 250.7 WY   |
| <b>Communicable disease control and environmental health</b>   |             | <b>48</b>  |             |       |            |
| <b>Chlamydia</b> Chlamydia rate per 100,000 population   | 33          | 443.4      | 456.4       | -     | 140.6 NH   |
| <b>Foodborne illness monitoring</b> Proportion of foodborne illness outbreaks for which an etiologic agent is confirmed                      | 36          | 27.8%      | 47.3%       | +     | 100% ♦     |
| <b>Child immunization</b> Percent of children ages 19 to 35 months who have received vaccinations  | 48          | 66.8%      | 61.7%       | -     | 82.1% RI   |
| <b>Emergency preparedness</b>  |             | <b>44</b>  |             |       |            |
| <b>Emergency preparedness funding</b> Total per capita funding for emergency preparedness  | 44          | \$1.61     | \$1.50      | -     | \$9.93 DC  |
| <b>Health promotion and prevention</b>   |             | <b>40</b>  |             |       |            |
| <b>Falls among older adults</b> Percent of adults age 65 and older who report having had a fall within the last 3 months                     | 17          | NA         | 26.7%       | NA    | 14.5% WI   |
| <b>Cigarette tax</b> State cigarette excise tax rate   | 27          | \$1.25     | \$1.25      | =     | \$4.35 NY  |
| <b>Sales of opioid pain relievers</b> Kilograms of opioid pain relievers sold per 10,000 population  | 31          | NA         | 7.9         | NA    | 3.7 IL     |
| <b>Seat belt use</b> Percent of front seat occupants using a seat belt   | 34          | 84.1%      | 82%         | -     | 96.9% WA   |
| <b>Tobacco prevention spending</b> Tobacco prevention and control spending, as percent of the CDC-recommended level                          | 46          | NA         | 4.4%        | NA    | 114.8% ND  |
| <b>WIC at farmers markets</b> Percent of farmers markets that accept WIC coupons   | NR*         | NA         | 22.6%       | NA    | 76.8% NM   |
| <b>Safe sleep</b> Percent of infants most often laid on his or her back to sleep   | NR*         | 73%        | 76.8%       | +     | 85.6% CO   |
| <b>Youth distracted driving</b> Percent of youth who report that they texted or e-mailed while driving at least once during the past 30 days | NR*         | NA         | 45.6%       | NA    | 32.3% MA   |

### Gaps in safe sleep practices

The American Academy of Pediatrics recommends that babies should be laid on their backs to sleep. This practice is recognized as an important component of infant mortality prevention. According to data from 2010, lower-income Ohioans were less likely than higher-income Ohioans to report that their baby was most often laid on his or her back to sleep.



| KEY | Rank | Ranking Legend   |   |  |   | Trend | Trend Legend |                |
|-----|------|--|---|--|---|-------|--------------|----------------|
|     |      | Green  | Yellow  | Orange   | Red   |       |              |                |
|     |      | Ohio ranks in the <b>top quartile</b> of the 50 states and the District of Columbia. | Ohio ranks in the <b>second quartile</b> of the 50 states and the District of Columbia. | Ohio ranks in the <b>third quartile</b> of the 50 states and the District of Columbia. | Ohio ranks in the <b>bottom quartile</b> of the 50 states and the District of Columbia. | NR    | +            | Getting better |
|     |      |  |   |  |   | NR*   | =            | No change      |
|     |      |  |   |  |   |       | -            | Getting Worse  |

**NOTE:** Rankings are based on the most-recent data column. A ranking of 1 is the best and 51st is the worst. This dashboard uses data that is the most recently available for all states and DC. The year that is most-recently available varies by metric, from 2010 to 2014. See appendix for specific years for each metric.

♦ 14 states tied for best state

# 29 Social and economic environment in Ohio

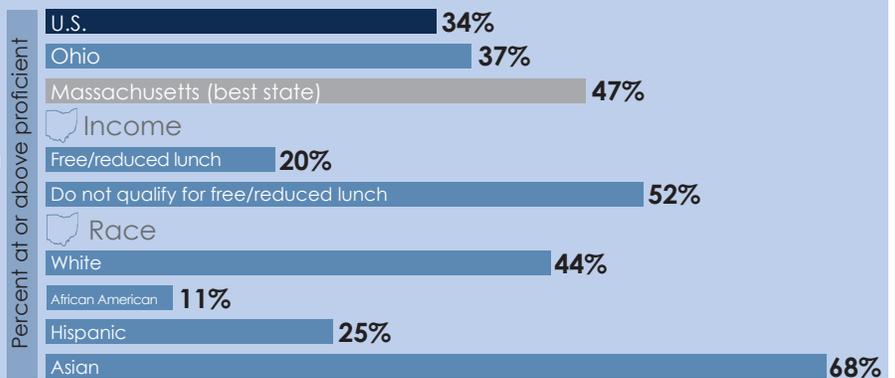
Ohio ranks 29th in the nation on the social and economic environment domain

| Indicator  | Ohio's rank | Data value |             | Trend | Best state         |
|--|-------------|------------|-------------|-------|--------------------|
|  |             | baseline   | most recent |       |                    |
| <b>Education</b>   | <b>27</b>   |            |             |       |                    |
| <b>Fourth-grade reading</b> Percent of 4th graders identified as proficient in reading by a national assessment (NAEP)                                   | 18          | 34%        | 37%         | +     | 47% MA             |
| <b>High school graduation</b> Percent of incoming 9th graders who graduate in 4 years from a high school with a regular degree                           | 19          | 79.6%      | 81.4%       | +     | 91.4% VT           |
| <b>Preschool enrollment</b> Percent of 3 and 4 year-olds enrolled in preschool   | 27          | 45%        | 44%         | -     | 73% DC             |
| <b>Educational attainment</b> Percent of adults over age 25 with a bachelor's degree or higher   | 39          | 24.1%      | 24.1%       | =     | 48.5% DC           |
| <b>Employment and poverty</b>  | <b>35</b>   |            |             |       |                    |
| <b>Child poverty</b> Percent of persons under age 18 who live in households at or below the poverty threshold  | 29          | 21.7%      | 21.4%       | +     | 11.1% WY           |
| <b>Unemployment</b> Annual average unemployment rate, ages 16 and older  | 31          | 7.4%       | 7.4%        | =     | 2.9% ND            |
| <b>Adult poverty</b> Percent of persons age 18+ who live in households at or below the poverty threshold   | 35          | 13.1%      | 13.5%       | -     | 7.2% NH            |
| <b>Family and social support</b>   | <b>29</b>   |            |             |       |                    |
| <b>Social-emotional support</b> Percent of adults without social-emotional support   | 27          | NA         | 19.5%       | NA    | 14.1% MN           |
| <b>Social capital and cohesion</b> Composite measure that includes connections with neighbors, supportive neighborhoods, voter turnout, and volunteerism | 29          | NA         | 8.2         | NA    | 9.6 ID, IA, MN, UT |
| <b>Teen birth rate</b> Rate of births per 1,000 females 15-19 years of age   | 29          | 31.5       | 29.8        | +     | 13.8% NH           |
| <b>Single-parent households</b> Percent of children living in single-parent households   | 35          | 37%        | 37%         | =     | 20% UT             |
| <b>Trauma, toxic stress and violence</b>   | <b>33</b>   |            |             |       |                    |
| <b>Violent crime</b> Violent crime rate per 100,000 residents  | 20          | NA         | 286.2       | NA    | 121.1 VT           |
| <b>Child abuse and neglect</b> Rate of child maltreatment victims per 1,000 children in population   | 34          | 11.4       | 11          | +     | 1.25 PA            |
| <b>Adverse childhood experiences</b> Percent of children who have experienced two or more adverse experiences  | 34          | NA         | 25.8%       | NA    | 16.3% NJ           |
| <b>Inequality</b>  | <b>28</b>   |            |             |       |                    |
| <b>Income inequality</b> Gini coefficient (extent of inequality in the distribution of income)   | 28          | 0.46       | 0.47        | -     | 0.41 AK            |

## Gaps in fourth-grade reading proficiency

According to data from the 2013 National Assessment of Educational Progress (NAEP), 37% of Ohio fourth-grade public-school students scored at or above the proficient level on a reading achievement test, compared to 34% for the US overall. Proficiency is described as "solid academic performance" and indicates that a student has demonstrated competence over challenging subject matter. Begun in 1969, the NAEP provides a consistent way to compare student performance across states.

**There are significant gaps in reading proficiency for different racial/ethnic and income groups.** Only 20% of fourth graders who qualified for the free or reduced school lunch program, an indicator of economic disadvantage, were proficient in reading. Four times as many White students (44%) in Ohio than African American students (11%) scored at or above proficient on the test.



KEY

| Rank   | Indicator   | Trend |
|--------|---|-------|
| Green  | Ohio ranks in the <b>top quartile</b> of the 50 states and the District of Columbia.    | +     |
| Yellow | Ohio ranks in the <b>second quartile</b> of the 50 states and the District of Columbia. | =     |
| Orange | Ohio ranks in the <b>third quartile</b> of the 50 states and the District of Columbia.  | -     |
| Red    | Ohio ranks in the <b>bottom quartile</b> of the 50 states and the District of Columbia. |       |
| NR     | <b>No ranking</b> , no assigned desired direction                                       |       |
| NR*    | <b>No ranking</b> , metric has 10 or more missing states                                |       |

**NOTE:** Rankings are based on the most recent data column. A ranking of 1 is the best and 51st is the worst. This dashboard uses data that is the most recently available for all states and DC. The year that is most-recently available varies by metric, from 2006 to 2013. See appendix for specific years for each metric.

# 34 Physical environment in Ohio

Ohio ranks 34th in the nation on the physical environment domain

| Indicator  | Ohio's rank | Data value |             | Trend | Best state  |
|--|-------------|------------|-------------|-------|-------------|
|  |             | baseline   | most recent |       |             |
| <b>Air, water and toxic substances</b> <span style="float: right;"><b>36</b></span>  |             |            |             |       |             |
| <b>Safe drinking water</b> Percent of population exposed to water exceeding a violation limit during the past year   | 10          | NA         | 3%          | NA    | 0% DC, WA   |
| <b>Fluoridated water</b> Percent of the population served by a community water system with optimally fluoridated water   | 12          | 87.7%      | 92.2%       | +     | 100% DC     |
| <b>Toxic pollutants</b> Total pounds of toxic chemicals released into the environment per capita, including air, water, land on-site and deepwell injection  | 29          | 9.7        | 7.7         | +     | 0.04 DC     |
| <b>Outdoor air quality</b> Average exposure of the general public to particulate matter of 2.5 microns or less in size (PM2.2)   | 47          | 12         | 11.6        | +     | 5.3 WY      |
| <b>Children exposed to secondhand smoke</b> Percent of children who live in a home where someone uses tobacco or smokes inside the home  | 49          | 16.3%      | 10.3%       | +     | 0.4% CA     |
| <b>Lead poisoning</b> Percent of young children with elevated blood lead levels (BLL >10 ug/dL)  | NR*         | 1.1%       | 1.1%        | =     | 0.2% AZ, FL |
| <b>Food access and food insecurity</b> <span style="float: right;"><b>32</b></span>  |             |            |             |       |             |
| <b>Healthy food access</b> Percent of low-income individuals living more than 10 miles from a grocery store in rural areas and more than 1 mile in non-rural areas   | 23          | NA         | 12.2%       | NA    | 0.9% DC     |
| <b>Food insecurity</b> Percent of households with limited or uncertain access to adequate food   | 40          | NA         | 16%         | NA    | 8.7% ND     |
| <b>Housing, built environment and access to physical activity</b> <span style="float: right;"><b>22</b></span>   |             |            |             |       |             |
| <b>Severe housing problems</b> Percent of households that have one or more of the following problems: 1) housing unit lacks complete kitchen facilities, 2) housing unit lacks complete plumbing facilities, 3) household is severely overcrowded, 4) monthly housing costs, including utilities, exceed 50% of monthly income | 13          | NA         | 15%         | NA    | 11% ND, WV  |
| <b>Access to exercise opportunities</b> Percent of individuals in a county who live reasonably close to a location for physical activity   | 19          | NA         | 78%         | NA    | 100% DC     |
| <b>Neighborhood safety</b> Percent of parents who report their children are living in a safe neighborhood  | 29          | 87.1%      | 88.3%       | +     | 94.7% ID    |
| <b>Alternative commute modes</b> Percent of trips to work via bicycle, walking, or mass transit (combined)   | 32          | 4.4%       | 4.3%        | -     | 54.6% DC    |
| <b>Safe Routes to School programs</b> Percent of schools that have a completed school travel plan  | NR*         | NA         | 33.1%       | NA    | NA          |
| <b>Complete Street policies</b> Number of communities that have adopted complete streets policies  | NR*         | NA         | 12          | NA    | NA          |

## Residential segregation

Brown University has developed a **dissimilarity index** to measure whether one particular group is distributed across census tracts in the metropolitan area in the same way as another group. A high value on the index's 100-point scale indicates that the two groups tend to live in different tracts. A value of 60 (or above) is considered very high. It means that 60% (or more) of the members of one group would need to move to a different tract in order for the two groups to be equally distributed. Values of 40 or 50 are usually considered a moderate level of segregation, and values of 30 or below are considered to be fairly low. Below are the African American/White dissimilarity indexes for five major metropolitan areas in Ohio.



|            |             |   |   |  |  |  |              |           |                |
|------------|-------------|---|---|--|--|--|--------------|-----------|----------------|
| <b>KEY</b> | <b>Rank</b> | <span style="color: green;">■</span> Ohio ranks in the <b>top quartile</b> of the 50 states and the District of Columbia. | <span style="color: yellow;">■</span> Ohio ranks in the <b>second quartile</b> of the 50 states and the District of Columbia. | <span style="color: orange;">■</span> Ohio ranks in the <b>third quartile</b> of the 50 states and the District of Columbia. | <span style="color: red;">■</span> Ohio ranks in the <b>bottom quartile</b> of the 50 states and the District of Columbia. | NR <b>No ranking</b> , no assigned desired direction | <b>Trend</b> | +         | Getting better |
|            |             |   |   |  | NR* <b>No ranking</b> , metric has 10 or more missing states   | =  |              | No change | -              |

**NOTE:** Rankings are based on the most recent data column. A ranking of 1 is the best and 51st is the worst. This dashboard uses data that is the most recently available for all states and DC. The year that is most-recently available varies by metric, from 2006 to 2014. See appendix for specific years for each metric.

### The Health Policy Institute of Ohio

Since 2003, HPIO has served as the only state-wide, nonpartisan organization in Ohio dedicated to providing evidence-based information and analysis on health policy issues to state policymakers and others interested in improving the health of Ohioans. HPIO's mission is to provide the independent, unbiased, and nonpartisan information and analysis needed to create sound health policy. The long-term outcome of HPIO's work is that state policymakers make informed policy decisions that lead to improved health value. While the primary audience for HPIO's work is state public policymakers, HPIO also engages a wide array of stakeholders in order to achieve its mission.

### HPIO's Health Value Dashboard

The HPIO Health Value Dashboard is a tool to track Ohio's progress towards health value – which looks at the relationship between population health outcomes and healthcare costs. Population health outcomes and healthcare costs were weighted equally, reflective of feedback from our stakeholders that both goals, improved population health and sustainable healthcare costs, are important for Ohioans. The dashboard compares Ohio's performance to other states, tracks change over time and includes information on best state performance and disparities or "gaps" in performance across

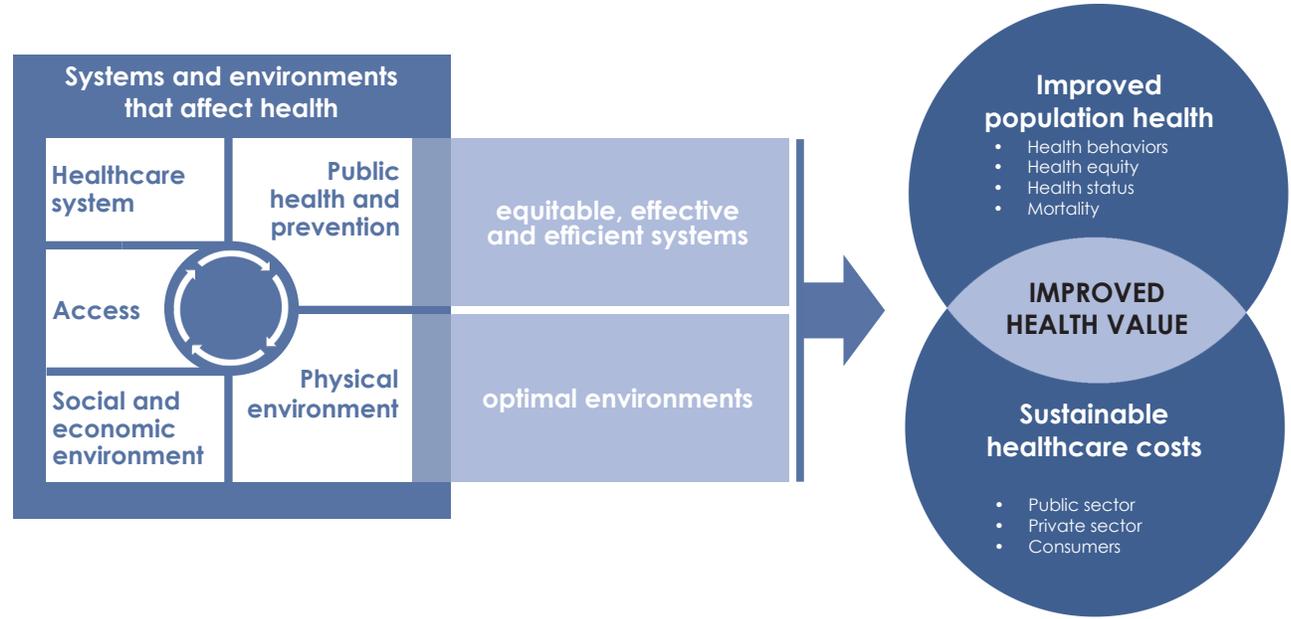
Ohio's subpopulations. The dashboard also reflects the many factors impacting population health outcomes and healthcare costs, including healthcare system performance, public health and prevention, access to health care, and the social, economic and physical environments.

### Making data meaningful

In order to put Ohio data in context in a way that is meaningful for state policymakers and other stakeholders, this dashboard presents the following information:

- **State rank for metrics:** Performance for all states and the District of Columbia is ranked for each metric, with 1 being the best and 51 the worst. These ranks are then divided into quartiles with green indicating the top (best) quartile and red indicating the bottom (worst) quartile.
- **State rank for subdomains and domains:** In order to provide a summary look at the data, the metric ranks are "rolled up" into subdomain and domain ranks. Subdomain ranks are the composite rank of the metrics in each subdomain, weighted equally. Domain ranks are the composite rank of the sub-domain ranks, weighted equally.
- **Change over time:** When available, the dashboard includes data values for the most-recent time period and for a baseline time period, which is the next most recently-available time period.

### HPIO Pathway to Health Value



# What makes the HPIO health value dashboard different?

|                                 | America's Health Rankings | Commonwealth Scorecard    | County Health Rankings | Kaiser State Health Facts | Gallup-Healthways Wellbeing Index | RWJF DataHub       | Network of Care    | HPIO                  |
|---------------------------------|---------------------------|---------------------------|------------------------|---------------------------|-----------------------------------|--------------------|--------------------|-----------------------|
| Primary format                  | Interactive & At-a-glance | Interactive & At-a-glance | Interactive            | Interactive               | At-a-glance                       | Interactive        | Interactive        | At-a-glance (Phase 1) |
| Population health               | adequately covered        | adequately covered        | adequately covered     | adequately covered        | adequately covered                | adequately covered | adequately covered | adequately covered    |
| Healthcare costs                | not covered               | adequately covered        | adequately covered     | adequately covered        | not covered                       | adequately covered | adequately covered | adequately covered    |
| Healthcare system               | adequately covered        | adequately covered        | adequately covered     | adequately covered        | adequately covered                | adequately covered | adequately covered | adequately covered    |
| Access                          | adequately covered        | adequately covered        | adequately covered     | adequately covered        | adequately covered                | adequately covered | adequately covered | adequately covered    |
| Social and economic environment | adequately covered        | not covered               | adequately covered     | adequately covered        | adequately covered                | adequately covered | adequately covered | adequately covered    |
| Physical environment            | adequately covered        | not covered               | adequately covered     | not covered               | adequately covered                | not covered        | adequately covered | adequately covered    |
| Public health and prevention    | minimally covered         | not covered               | not covered            | not covered               | not covered                       | minimally covered  | minimally covered  | adequately covered    |
| Health value                    | not covered               | not covered               | not covered            | not covered               | not covered                       | not covered        | not covered        | adequately covered    |

= adequately covered
  = minimally covered
  = not covered

Any change in the desired direction from the baseline to the most recent time period is labeled as “getting better” [+], while any change in the opposite direction is labeled as “getting worse” [-]. No change is labeled as [=]

- **Best state:** The data value for the top-ranked state is listed for each metric. This provides a benchmark that indicates the magnitude of improvement needed for Ohio to be ranked more highly in the future.
- **Gaps:** Domain profiles include “break outs” by race/ethnicity or income level for a featured metric or set of metrics. These graphics highlight health disparities and point to opportunities to improve health for all groups in Ohio.

## HPIO’s Health Value Dashboard process

Beginning in the spring of 2013, HPIO convened a Health Measurement Advisory Group (HMAG) (see page 18 for full list of HMAG members) to develop consensus on how to define and track Ohio’s progress in improving health value for Ohioans. HMAG guided the creation of HPIO’s conceptual framework for the HPIO Health Value Dashboard, *A Pathway to Health Value* and the selection of metrics for the dashboard.

The conceptual framework defines health value as the relationship between population health outcomes and healthcare costs. The framework also outlines the multiple factors that impact population health and healthcare costs, including access to care, the healthcare system, public

health and prevention, and the social, economic and physical environments.

HPIO’s dashboard is unique in that it tracks Ohio’s performance across all of these seven domains. Existing scorecards and dashboards are more narrow in scope and do not track health value by factoring in health costs or determinants outside of the healthcare system.

## Metric selection

From September 2013 to May 2014, HMAG was charged with reviewing, prioritizing and selecting a streamlined and standardized set of metrics for the dashboard. HMAG members were placed into seven workgroups reflecting the seven domains of the conceptual framework (population health, healthcare costs, access, healthcare system, public health and prevention, social and economic and physical environment). Each workgroup was then tasked with selecting approximately fifteen metrics that were most powerful for tracking progress in each of the respective domains to include in this dashboard.

A set of criteria developed by HPIO and HMAG was used to guide the metric selection discussions (see pg. 17 for metric selection criteria). Each domain was required to include at least one “equity” metric. Equity metrics were selected to track a state’s variation in performance across racial and ethnic groups or income level.

In order to leverage existing scorecards and align with national initiatives, HPIO’s dashboard builds

upon metrics currently reported in America's Health Rankings, County Health Rankings, Commonwealth Fund Scorecards, Kaiser State Health Facts and the RWJF DataHub.

In total, HMAG identified 106 metrics with state-level data to include in the Dashboard (For a full list of metrics and detailed metric descriptions, see pg. 19 or access the metrics online at [www.hpio.net/groups/health-measurement](http://www.hpio.net/groups/health-measurement)). There are 14 to 17 metrics in each domain of the Dashboard.

## Data sources and years

HPIO commissioned the University of Cincinnati Economics Center to assist in data compilation, analysis, and state rankings of the 106 metrics.

The 106 metrics are categorized into seven domains and 27 subdomains across the seven domains.

The most recently-available two years of data were compiled for 77 of the 106 metrics. Twenty nine metrics only had one year of data available. The year that is most-recently available varies by metric, from 2006 to 2014. The baseline year varies by metric, from 2004 to 2013.

When possible, data were collected for all states and Washington, D.C. Nineteen of the 106 metrics are missing data from ten or more states for the most recent year.

Data were compiled from publicly available sources, including federal and state government databases, national surveys, vital statistics, and national registries.

## Methodology

### Ranking methodology overview

The University of Cincinnati Economics Center calculated rankings for each individual metric, subdomain, domain, and a composite measure of Health Value. The Health Value rank is a composite rank of two domains, population health and healthcare costs, equally weighted.

In order to calculate these rankings, the Economics Center assigned a rank of 1 to the state which performed best on a particular

metric. Assuming that no states were missing, a state that performed the poorest was assigned a value of 51. However, given that some metrics had missing state data, each state was also given a percentile ranking. In statistics, the percentile rank of an observation's value indicates the percentage of values that are lower than the current observation. For example, if a state's percentile rank is the 30th percentile, then 30% of states have a value which is lower performing.

When calculating the ranking for a domain across all metrics, the Economics Center summed the percentile rankings across every metric in that domain. As a result, each metric was weighted equally in its contribution to the final domain ranking. The summed percentile value for each state was then ranked to determine each state's particular sub-domain and domain ranking. The maximum score for the summed percentile value is the number of metrics in that particular domain. For example, if a domain contained 15 metrics and a state was the best performing state for each metric, then the summed percentile value would be 15 (i.e. the percentile ranking for each metric was 1), indicating that 100% of the other states were lower performing.

In calculating the rankings, the Economics Center determined whether a higher value or lower value on a particular metric translates into better health. For example, if a state is at the 90th percentile for flu vaccinations, then 90% of states have a **lower** percentage of residents which are vaccinated. If a state is ranked at the 90th percentile for air pollution levels, then 90% of states have **higher** levels of pollutants in the air.

To determine the composite health value rank, the Economics Center calculated the average ranking of a state's population health and healthcare costs ranking, with each domain equally weighted. Based on this averaged value, the Economics Center determined a state's health value ranking based on its order. For example, consider one state with a ranking of 40 and 46, and another state with a ranking of 38 and 50. The first state's average ranking is 43 and the second state's average ranking is 44. The first state would then be ranked ahead of the second state.

Final criteria approved by Advisory Committee on July 11, 2013

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, OHT, ODE, CMS, HHS, AHRQ), national organization (e.g. Catalyst for Payment Reform), or regional project (e.g., Health Collaborative, AccessHealth Columbus, Better Health Greater Cleveland). 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 2020).
10. **Face value:** The metric is easily understood by the public and policymakers.
11. **Relevance:** The metric addresses an important health-related issue that affects a significant number of Ohioans.

Workgroups rated metrics on a scale of 1-3 for each criteria:

- 1=Low
- 2=Medium
- 3=High

Workgroups used the rating scores to guide prioritization of a maximum of 15 metrics, along with the guiding principles.

### Guiding principles for developing a balanced set of metrics within each domain

The goal was to develop a stream-lined set of measures that addresses an appropriate variety of constructs and balances the following characteristics:

1. Process and outcome indicators
2. New/innovative measures and traditional measures with extensive trend data over time
3. Metrics that can likely be improved in the short-term (1-3 years) and those that will take much longer to impact (4+ years)
4. Overall population and specific populations (e.g., Medicaid, Medicare, adult/child)

### Additional criteria to be assessed by HPIO

Accessibility, efficiency and feasibility: Data must be publicly available or can be provided by initiative partners at low or no cost. Data require minimal analysis to be presented in a dashboard format.

### Population health

**Chair:** Andrew Wapner, Ohio Department of Health  
Jon Barley, Ohio Department of Medicaid  
Amy Bashforth, Ohio Department of Health  
Christy Beeghly, Ohio Department of Health  
Jennifer Chubinski, Interact for Health  
Elizabeth Conrey, Ohio Department of Health  
Lori Criss, The Ohio Council of Behavioral Health & Family Services Providers  
Brad DeCamp, Ohio Department of Mental Health and Addiction Services  
Mbabazi Kariisa, Ohio Department of Health  
Jackie Matthews, Cleveland Clinic  
Jason Orcena, Union County Health Department  
Debra Seltzer, Ohio Department of Health  
Holly Sobotka, Ohio Department of Health

### Healthcare costs

**Chair:** Lynnette Cook, Community Research Partners  
Amy Andres, Ohio Hospital Association  
Robyn Colby, Ohio Department of Medicaid  
Kelly DiNardo, Employers Health Coalition  
Cathy Levine, UHCAN Ohio  
Dan Paoletti, Ohio Health Information Partnership  
Ronald Savrin, Ohio KEPRO  
Patty Starr, Health Action Council  
Steve Wermuth, Strategic Health Care

### Healthcare system

**Chair:** Andrew Wapner, Ohio Department of Health  
Susan Ackerman, Joint Medicaid Oversight Committee  
Jon Barley, Ohio Department of Medicaid  
Amy Bashforth, Ohio Department of Health  
Elizabeth Conrey, Ohio Department of Health  
Aly DeAngelo, Ohio Hospital Association  
Brian Fowler, Ohio Department of Health  
Afet Kilinc, formerly of the Ohio Department of Mental Health and Addiction Services  
Cathy Levine, UHCAN Ohio  
Brian Pack, Ohio Public Employees Retirement System  
Dan Paoletti, Ohio Health Information Partnership  
Erin Pettegrew, Ohio Department of Aging  
Richard Shonk, The Greater Cincinnati Health Collaborative  
Richard Snow, OhioHealth  
Jennifer Spalding, Abbott Laboratories  
Patty Starr, Health Action Council  
Nancy Terwood, Premier Health  
Craig Thiele, CareSource  
Steve Wermuth, Strategic Health Care

### Public health and prevention

**Chair:** Tom Quade, Marion County Public Health  
Micah Berman, The Ohio State University  
Beth Bickford, Association of Ohio Health Commissioners  
Joe Mazzola, Ohio Department of Health  
Jason Orcena, Union County Health Department  
Scott Frank, Ohio Research Association for Public Health Improvement, Case Western Reserve University  
Will McHugh, formerly of Ohio Department of Health

Lindsey Brigano, formerly of the Ohio Senate, Senator Burke's Office  
DJ McFadden, Holmes County Health Department  
Amy Sheon, Case Western Reserve University  
Katrina Dubovikova, Case Western Reserve University

### Access

**Co-Chairs:** Angela Dawson, Ohio Commission on Minority Health; Thometta Brooks, formerly of the Ohio Commission on Minority Health  
Carrie Farquhar, Ohio Department of Health  
Afet Kilinc, formerly of the Ohio Department of Mental Health and Addiction Services  
David Maywhoor, UHCAN Ohio

### Social, economic and physical environment

**Chair:** Jennifer Chubinski, Interact for Health  
Christopher Auffrey, University of Cincinnati  
Suellen Bennett, Columbus Public Health  
Emily Campbell, Center for Community Solutions  
Judith Harmony, Cincinnati Children's Hospital Medical Center  
Jason Orcena, Union County Health Department  
Jason Reece, The Ohio State University Kirwan Institute for the Study of Race and Ethnicity  
Mysheika Roberts, Columbus Public Health  
Aaron Schill, Community Research Partners  
Barbara Terry, The Children's Home of Cincinnati  
Geoff Zimmerman, Strive Partnership

### Layout and messaging

Jennifer Chubinski, Interact for Health  
Lynnette Cook, Community Research Partners  
Jodi Mitchell, Mt. Sinai Health Care Foundation  
Christine Mulvin, HealthPath Foundation of Ohio  
Jason Orcena, Union County Health Department  
Brian Pack, Ohio Public Employees Retirement System  
Jason Reece, The Ohio State University Kirwan Institute for the Study of Race and Ethnicity  
Andrew Wapner, Ohio Department of Health

### HMAG MEMBERS AT-LARGE

Chip Allen, Ohio Department of Health  
Carrie Baker, Ohio Children's Hospital Association  
Jeffrey Biehl, Healthcare Collaborative of Greater Columbus  
Sarah Durfee, Ohio Public Employees Retirement System  
Mark Hurst, Ohio Department of Mental Health and Addiction Services  
Monica Juenger, Governor's Office of Health Transformation  
Kraig Knudsen, Ohio Department of Mental Health and Addiction Services  
Greg Moody, Office of Health Transformation  
Miranda Motter, Ohio Association of Health Plans  
Ted Wymyslo, formerly of the Ohio Department of Health

| Domain            | Subdomain               | Metric                               | Metric Description   | Base Year | Most recent year | # of missing states most recent year | Data source   | Metric included in composite rankings? | Desired direction* |
|-------------------|-------------------------|--------------------------------------|--|-----------|------------------|--------------------------------------|---|--|--------------------|
| Population health | Health behaviors        | Adult binge drinking                 | Percent of adults who self-report having 4 or more (women) or 5 or more (men) alcoholic beverages on at least 1 occasion in the past 30 days                                   | 2011      | 2012             | 0                                    | Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System  | Yes                                    | Down               |
| Population health | Health behaviors        | Adult insufficient physical activity | Percent of adults 18 years and older not meeting physical activity guidelines for muscle strength and aerobic activity   | 2011      | 2013             | 0                                    | Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System  | Yes                                    | Down               |
| Population health | Health behaviors        | Youth all-tobacco use                | Percent of high school students who smoked cigarettes, cigars, cigarillos, or little cigars, or used chewing tobacco, snuff or dip during past 30 days                         | 2011      | 2013             | 10                                   | Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System   | No                                     | Down               |
| Population health | Health behaviors        | Adult smoking                        | Percent of population age 18 and older that are current smokers  | 2012      | 2013             | 0                                    | Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System  | Yes                                    | Down               |
| Population health | Conditions and diseases | Infant mortality                     | Number of infant deaths per 1,000 live births (within 1 year)  | 2010      | 2011             | 0                                    | Centers for Disease Control and Prevention, Vital Statistics, as compiled by America's Health Rankings 2013 edition                           | Yes                                    | Down               |
| Population health | Conditions and diseases | Cardiovascular disease mortality     | Number of deaths due to all cardiovascular diseases, including heart disease and strokes, per 100,000 population. Age adjusted.  | 2007-2009 | 2008-2010        | 0                                    | Centers for Disease Control and Prevention, Vital Statistics, as compiled by America's Health Rankings 2013 edition                           | Yes                                    | Down               |
| Population health | Conditions and diseases | Youth obesity                        | Percent of high school students who are obese (grades 9-12)  | 2011      | 2013             | 9                                    | Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System, as compiled by the RWJF DataHub                          | Yes                                    | Down               |
| Population health | Conditions and diseases | Adult diabetes                       | Percent of adults who have been told by a health professional that they have diabetes  | 2011      | 2012             | 0                                    | Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, as compiled by America's Health Rankings 2013 edition | Yes                                    | Down               |
| Population health | Conditions and diseases | Poor mental health                   | Average number of days in the previous 30 days when a person indicates their mental health was not good (includes stress, depression, and problems with emotions; adults only) | 2011      | 2012             | 0                                    | Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, as compiled by America's Health Rankings 2013 edition | Yes                                    | Down               |
| Population health | Conditions and diseases | Suicide deaths                       | Number of deaths due to suicide per 100,000 population   | 2005      | 2010             | 0                                    | Centers for Disease Control and Prevention, Vital Statistics, as compiled by Commonwealth State Scorecard 2014 edition                        | Yes                                    | Down               |

| Domain            | Subdomain                    | Metric                                  | Metric Description  | Base Year | Most recent year | # of missing states most recent year | Data source  | Metric included in composite rankings? | Desired direction* |
|-------------------|------------------------------|---|---|-----------|------------------|--------------------------------------|--|--|--------------------|
| Population health | Conditions and diseases      | Drug overdose deaths                    | Number of deaths due to drug overdoses per 100,000 population   | 2007-2009 | 2008-2010        | 0                                    | Centers for Disease Control and Prevention, Vital Statistics, as compiled by America's Health Rankings 2013 edition                              | Yes                                    | Down               |
| Population health | Conditions and diseases      | Poor oral health                        | Percent of adults who have lost teeth due to decay, infection, or disease   | 2006      | 2012             | 0                                    | Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, as compiled by Commonwealth State Scorecard 2014 edition | Yes                                    | Down               |
| Population health | Overall health and wellbeing | Overall health status                   | Percent of adults that report fair or poor health   | 2011      | 2012             | 0                                    | Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, as compiled by America's Health Rankings 2013 edition    | Yes                                    | Down               |
| Population health | Overall health and wellbeing | Limited activity due to health problems | Average number of days in the last 30 days in which a person reports limited activity due to mental or physical health difficulties (ages 18 and older) | 2010      | 2012             | 0                                    | Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, as compiled by RWJF DataHub                              | Yes                                    | Down               |
| Population health | Overall health and wellbeing | Premature death                         | Years of Potential Life Lost before age 75 (YPLL-75)  | 2010      | 2011             | 0                                    | Centers for Disease Control and Prevention Vital Statistics, as compiled by RWJF DataHub   | Yes                                    | Down               |
| Population health | Overall health and wellbeing | Life expectancy, total                  | Life expectancy at birth based upon current mortality rates--total  | 2007      | 2009             | 0                                    | Centers for Disease Control and Prevention Vital Statistics, as compiled by RWJF DataHub   | Yes                                    | Up                 |
| Population health | Equity                       | Life expectancy, White                  | Life expectancy at birth based upon current mortality rates--White  | 2007      | 2009             | 0                                    | Centers for Disease Control and Prevention Vital Statistics, as compiled by RWJF DataHub   | No                                     | Up                 |
| Population health | Equity                       | Life expectancy, Black                  | Life expectancy at birth based upon current mortality rates--Black/African American   | 2007      | 2009             | 12                                   | Centers for Disease Control and Prevention Vital Statistics, as compiled by RWJF DataHub   | No                                     | Up                 |
| Population health | Equity                       | Life expectancy, Hispanic               | Life expectancy at birth based upon current mortality rates--Hispanic   | 2007      | 2009             | 23                                   | Centers for Disease Control and Prevention Vital Statistics, as compiled by RWJF DataHub   | No                                     | Up                 |
| Population health | Equity                       | Life expectancy, Asian                  | Life expectancy at birth based upon current mortality rates--Asian  | 2007      | 2009             | 23                                   | Centers for Disease Control and Prevention Vital Statistics, as compiled by RWJF DataHub   | No                                     | Up                 |

| Domain                  | Subdomain | Metric  | Metric Description  | Base Year | Most recent year | # of missing states most recent year | Data source   | Metric included in composite rankings? | Desired direction* |
|-------------------------|-----------|---|---|-----------|------------------|--------------------------------------|---|--|--------------------|
| <b>Healthcare costs</b> | Total     | Healthcare spending per capita  | Healthcare expenditures per capita defined as aggregate spending divided by population. Healthcare expenditures include spending for all privately and publicly funded personal health care services and products including hospital care and spending, physician services, nursing home care, and prescription drugs. Costs such as insurance program administration, research, and construction expenses are not included.                                  | 2008      | 2009             | 0                                    | Centers for Medicare & Medicaid Services National Health Expenditure Data as compiled by Kaiser Family Foundation               | Yes                                    | Down               |
| <b>Healthcare costs</b> | Total     | Health spending growth per capita   | Average annual percent growth in healthcare expenditures per capita defined as aggregate spending divided by population. Healthcare expenditures include spending for all privately and publicly funded personal health care services and products including hospital care and spending, physician services, nursing home care, and prescription drugs. Costs such as insurance program administration, research, and construction expenses are not included. | 2008      | 2009             | 0                                    | University of Cincinnati Economics Center analysis of Centers for Medicare & Medicaid Services National Health Expenditure Data | Yes                                    | Down               |
| <b>Healthcare costs</b> | Employer  | Average single premium per enrolled employee  | Average single premium for private-sector employees enrolled in single coverage under employer-based health insurance.  | 2012      | 2013             | 0                                    | Agency for Healthcare Research & Quality Medical Expenditure Panel Survey   | Yes                                    | Down               |
| <b>Healthcare costs</b> | Employer  | Average single premium per enrolled employee, percent of employer contribution to premium | Percent of employer contribution for private-sector employees enrolled in single coverage under employer-based health insurance.  | 2012      | 2013             | 0                                    | Agency for Healthcare Research & Quality Medical Expenditure Panel Survey   | No                                     | NDD                |
| <b>Healthcare costs</b> | Employer  | Average single premium per enrolled employee, percent of employee contribution to premium | Percent of employee contribution for private-sector employees enrolled in single coverage under employer-based health insurance.  | 2012      | 2013             | 0                                    | Agency for Healthcare Research & Quality Medical Expenditure Panel Survey   | No                                     | NDD                |
| <b>Healthcare costs</b> | Employer  | Average family premium per enrolled employee  | Average family premium for private-sector employees enrolled in family coverage under employer-based health insurance.  | 2012      | 2013             | 0                                    | Agency for Healthcare Research & Quality Medical Expenditure Panel Survey   | Yes                                    | Down               |

| Domain           | Subdomain | Metric  | Metric Description   | Base Year | Most recent year | # of missing states most recent year | Data source   | Metric included in composite rankings? | Desired direction* |
|------------------|-----------|---|--|-----------|------------------|--------------------------------------|---|--|--------------------|
| Healthcare costs | Employer  | Average family premium per enrolled employee, percent of employer contribution to premium | Percent of employer contribution for private-sector employees enrolled in family coverage under employer-based health insurance.   | 2012      | 2013             | 0                                    | Agency for Healthcare Research & Quality Medical Expenditure Panel Survey   | No                                     | NDD                |
| Healthcare costs | Employer  | Average family premium per enrolled employee, percent of employee contribution            | Percent of employee contribution for private-sector employees enrolled in family coverage under employer-based health insurance.   | 2012      | 2013             | 0                                    | Agency for Healthcare Research & Quality Medical Expenditure Panel Survey   | No                                     | NDD                |
| Healthcare costs | Consumer  | Total commercial health spending growth per enrollee                                      | Total reimbursements per commercially insured enrollee ages 18-64. Spending estimates include reimbursed costs for health care services from health plans, enrollees and third party payers. Outpatient prescription drug charges are not included. For more information on this metric please see Appendix B in the Commonwealth Fund <a href="#">Scorecard on U.S. Local Health System Performance, 2012</a> . | -         | 2009             | 2                                    | Analysis of the Thomson Reuters MarketScan Database as compiled by the Commonwealth Fund Local Scorecard 2012 edition   | Yes                                    | Down               |
| Healthcare costs | Consumer  | Out-of-pocket costs   | Percent of individuals who are in families where out-of-pocket spending on health care, including premiums, accounts for 10% or more of annual income  | -         | 2011-2012        | 0                                    | SHADAC analysis of the Annual Social & Economic Supplement to the Current Population Survey as compiled by the RWJF DataHub   | Yes                                    | Down               |
| Healthcare costs | Medicare  | Medicare spending per enrollee  | Medicare spending per enrollee. Spending includes personal health care services and products, such as hospital care, physician services, nursing home care and prescription drugs.   | 2008      | 2009             | 0                                    | Centers for Medicare & Medicaid Services Health Expenditures by State of Residence Data as compiled by the Kaiser Family Foundation   | Yes                                    | Down               |
| Healthcare costs | Medicare  | Medicare spending growth per enrollee   | Average annual percent growth in Medicare spending per enrollee. Medicare spending per enrollee. Spending includes personal health care services and products, such as hospital care, physician services, nursing home care and prescription drugs.  | 2008      | 2009             | 0                                    | University of Cincinnati Economics Center analysis of Centers for Medicare & Medicaid Services National Health Expenditure Data   | Yes                                    | Down               |
| Healthcare costs | Medicaid  | Medicaid spending per enrollee, all   | Average amount Medicaid spends per enrollee. Spending includes state and federal payments to Medicaid but does not include disproportionate share hospital payments.   | FY 2009   | FY 2010          | 0                                    | Kaiser Commission on Medicaid and the Uninsured and Urban Institute estimates of Medicaid Statistical Information Statistics and CMS-64 reports as compiled by the RWJF DataHub | No                                     | NDD                |

| Domain                  | Subdomain                       | Metric  | Metric Description  | Base Year    | Most recent year | # of missing states most recent year | Data source   | Metric included in composite rankings? | Desired direction* |
|-------------------------|---------------------------------|---|---|--------------|------------------|--------------------------------------|---|--|--------------------|
| <b>Healthcare costs</b> | Medicaid                        | Medicaid spending per enrollee, aged          | Average amount Medicaid spends per enrollee in the aged enrollment group. Spending includes state and federal payments to Medicaid but does not include disproportionate share hospital payments.     | FY 2009      | FY 2010          | 0                                    | Kaiser Commission on Medicaid and the Uninsured and Urban Institute estimates of Medicaid Statistical Information Statistics and CMS-64 reports as compiled by the RWJF DataHub | No                                     | NDD                |
| <b>Healthcare costs</b> | Medicaid                        | Medicaid spending per enrollee, disabled      | Average amount Medicaid spends per enrollee in the disabled enrollment group. Spending includes state and federal payments to Medicaid but does not include disproportionate share hospital payments. | FY 2009      | FY 2010          | 0                                    | Kaiser Commission on Medicaid and the Uninsured and Urban Institute estimates of Medicaid Statistical Information Statistics and CMS-64 reports as compiled by the RWJF DataHub | No                                     | NDD                |
| <b>Healthcare costs</b> | Medicaid                        | Medicaid spending per enrollee, adult         | Average amount Medicaid spends per enrollee in the adult enrollment group. Spending includes state and federal payments to Medicaid but does not include disproportionate share hospital payments.    | FY 2009      | FY 2010          | 0                                    | Kaiser Commission on Medicaid and the Uninsured and Urban Institute estimates of Medicaid Statistical Information Statistics and CMS-64 reports as compiled by the RWJF DataHub | No                                     | NDD                |
| <b>Healthcare costs</b> | Medicaid                        | Medicaid spending per enrollee, children      | Average amount Medicaid spends per enrollee in the children enrollment group. Spending includes state and federal payments to Medicaid but does not include disproportionate share hospital payments. | FY 2009      | FY 2010          | 0                                    | Kaiser Commission on Medicaid and the Uninsured and Urban Institute estimates of Medicaid Statistical Information Statistics and CMS-64 reports as compiled by the RWJF DataHub | No                                     | NDD                |
| <b>Healthcare costs</b> | Public health and mental health | Local public health funding per capita        | Per capita median of total annual expenditures for local health departments.  | 2010         | 2013             | 15                                   | National Association of County & City Health Officials  | No                                     | NDD                |
| <b>Healthcare costs</b> | Public health and mental health | State public health funding per capita        | State public health budget funding per capita during the fiscal year. Dollar amount represents state funding only.  | FY 2011-2012 | FY 2012-2013     | 0                                    | Trust for America's Health as compiled by the RWJF DataHub  | No                                     | NDD                |
| <b>Healthcare costs</b> | Public health and mental health | State mental health agency funding per capita | State mental health agency per capita mental health services expenditures. Expenditures reflect spending in the state fiscal year.  | FY 2009      | FY 2010          | 0                                    | National Association of State Mental Health Program Directors Research Institute, Inc as compiled by Kaiser Family Foundation   | No                                     | NDD                |
| <b>Access</b>           | Affordability & coverage        | Uninsured adults                              | Percent of 18-64 year olds that are uninsured in the state.   | 2012         | 2013             | 0                                    | US Census Bureau American Community Survey  | Yes                                    | Down               |
| <b>Access</b>           | Affordability & coverage        | Uninsured children                            | Percent of 0-17 year olds that are uninsured in the state.  | 2012         | 2013             | 0                                    | US Census Bureau American Community Survey  | Yes                                    | Down               |
| <b>Access</b>           | Affordability & coverage        | Lack of dental insurance                      | Data is not yet available for this metric.  | -            | -                | NA                                   | NA  | No                                     | Down               |

| Domain        | Subdomain                | Metric                                       | Metric Description  | Base Year | Most recent year | # of missing states most recent year | Data source   | Metric included in composite rankings? | Desired direction* |
|---------------|--------------------------|--|---|-----------|------------------|--------------------------------------|---|--|--------------------|
| <b>Access</b> | Affordability & coverage | Employer-sponsored health insurance coverage | Percent of all workers who work at a company that offers health insurance to its employees. Data represents 2 year estimates except in 2012.  | 2010-2011 | 2012-2013        | 0                                    | Medical Expenditure Panel Survey - Insurance Component (MEPS-IC), Agency for Healthcare Research and Quality (AHRQ), Center for Financing, Access and Cost Trends (CFACT) as compiled by the RWJF DataHub | Yes                                    | Up                 |
| <b>Access</b> | Affordability & coverage | Unable to see doctor due to cost             | Percent of adults who went without care because of cost in the past year.   | 2007      | 2012             | 0                                    | Behavioral Risk Factor Surveillance System as analyzed and compiled by Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition  | Yes                                    | Down               |
| <b>Access</b> | Primary care access      | Without a usual source of care               | Percent of adults who report they do not have at least one person they think of as their personal doctor or health care provider.   | 2007      | 2012             | 0                                    | University of Cincinnati Economics Center analysis of the Commonwealth Fund State Scorecard on Healthcare System Performance, 2014 data   | Yes                                    | Down               |
| <b>Access</b> | Primary care access      | Routine checkup                              | Percent of at-risk adults who have not visited a doctor for routine checkup in the past two years. For more information on this metric, see Appendix B in the Commonwealth Fund <a href="#">State Scorecard on Healthcare System Performance, 2014</a>  | 2007      | 2012             | 0                                    | Behavioral Risk Factor Surveillance System as analyzed and compiled by Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition  | Yes                                    | Down               |
| <b>Access</b> | Primary care access      | Medical home, children                       | Percent of children who have a personal doctor or nurse, have a usual source for sick and well care, receive family-centered care, have no problems getting needed referrals, and receive effective care coordination when needed. For more information on this metric, see Appendix B in the Commonwealth Fund <a href="#">State Scorecard on Healthcare System Performance, 2014</a> .  | 2007      | 2011-2012        | 0                                    | National Survey on Children's Health as analyzed and compiled by the Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition  | Yes                                    | Up                 |
| <b>Access</b> | Behavioral health        | Unmet need for mental health                 | Percent of adults ages 18 and older with past year mental illness who reported perceived need for treatment/counseling was not received. Data represents the annual average for years 2010-2012.  | -         | 2010-2012        | 0                                    | SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health   | Yes                                    | Down               |
| <b>Access</b> | Behavioral health        | Unmet need for illicit drug use treatment    | Percent of individuals, ages 12 and older needing but not receiving treatment for illicit drug use in the past year. Refers to respondents needing treatment for illicit drugs, but not receiving treatment for an illicit drug problem at a special facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers). Data represents annual averages for 2011 and 2012. | -         | 2011-2012        | 0                                    | SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health   | Yes                                    | Down               |

| Domain        | Subdomain   | Metric                                      | Metric Description   | Base Year | Most recent year | # of missing states most recent year | Data source  | Metric included in composite rankings? | Desired direction* |
|---------------|-------------|---|--|-----------|------------------|--------------------------------------|--|--|--------------------|
| <b>Access</b> | Oral health | Received dental care in past year, adults   | Data represent adults ages 18 and older, who reported having visited the dentist or dental clinic within the past year for any reason. Percentages are weighted to reflect population characteristics. | -         | 2012             | 0                                    | KCMU analysis of the Center for Disease Control and Prevention Behavioral Risk Factor Surveillance System 2012 Survey Results as compiled by Kaiser State Health Facts | Yes                                    | Up                 |
| <b>Access</b> | Oral health | Received dental care in past year, children | Children under age 18 who have seen a dentist at least once for preventive dental care, such as check-ups and dental cleanings, in the past year.  | 2007      | 2011-2012        | 0                                    | National Survey of Children's Health as analyzed and compiled by Kids Count Data Center  | Yes                                    | Up                 |
| <b>Access</b> | Oral health | Cost of avoidable ED dental visits          | Data is not yet available for this metric.   | -         | -                | NA                                   | NA   | No                                     | Down               |
| <b>Access</b> | Workforce   | Underserved, primary care                   | Percent of need not met by current supply in designated primary care health professional shortage areas.   | -         | 11/2014          | OH only data                         | UC Economics Center analysis of Health Resources Services Administration data  | No                                     | Down               |
| <b>Access</b> | Workforce   | Underserved, dental care                    | Percent of need not met by current supply in designated dental care health professional shortage areas.  | -         | 11/2014          | OH only data                         | UC Economics Center analysis of Health Resources Services Administration data  | No                                     | Down               |
| <b>Access</b> | Workforce   | Underserved, mental health care             | Percent of need not met by current supply in designated mental health care professional shortage areas.  | -         | 11/2014          | OH only data                         | UC Economics Center analysis of Health Resources Services Administration data  | No                                     | Down               |
| <b>Access</b> | Equity      | Unable to see doctor due to cost, White     | Percent of adults who went without care because of cost in the past year.  | 2007      | 2012             | 0                                    | Behavioral Risk Factor Surveillance System as analyzed and compiled by Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition                 | No                                     | Down               |
| <b>Access</b> | Equity      | Unable to see doctor due to cost, Black     | Percent of adults who went without care because of cost in the past year.  | 2007      | 2012             | 9                                    | Behavioral Risk Factor Surveillance System as analyzed and compiled by Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition                 | No                                     | Down               |
| <b>Access</b> | Equity      | Unable to see doctor due to cost, Hispanic  | Percent of adults who went without care because of cost in the past year.  | 2007      | 2012             | 1                                    | Behavioral Risk Factor Surveillance System as analyzed and compiled by Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition                 | No                                     | Down               |

| Domain                   | Subdomain           | Metric  | Metric Description   | Base Year       | Most recent year | # of missing states most recent year | Data source  | Metric included in composite rankings? | Desired direction* |
|--------------------------|---------------------|---|--|-----------------|------------------|--------------------------------------|--|--|--------------------|
| <b>Access</b>            | Equity              | Unable to see doctor due to cost, other                     | Percent of adults who went without care because of cost in the past year.  | 2007            | 2012             | 0                                    | Behavioral Risk Factor Surveillance System as analyzed and compiled by Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition | No                                     | Down               |
| <b>Healthcare system</b> | Preventive services | Breastfeeding support in hospitals                          | Composite Quality Practice Score for infant nutrition and care provided at hospitals and birth centers to support breastfeeding. The Composite Quality Practice Score is made up of subscores for practices in 7 dimensions of care. Scores range from 0 to 100. 100 is the highest, best possible score. The HPIO rankings differ from mPINC data because of the inclusion of Puerto Rico and other territories in that data. | 2009            | 2011             | 0                                    | National Survey of Maternity Practices in Infant Nutrition and Care, mPINC survey, Centers for Disease Control and Prevention                          | Yes                                    | Up                 |
| <b>Healthcare system</b> | Preventive services | Diabetes A1c measurements                                   | Percent of adults 18 and older with diagnosed diabetes who received 2 or more hemoglobin A1c measurements in the last year (age-adjusted).   | 2009            | 2010             | 5                                    | Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System  | Yes                                    | Up                 |
| <b>Healthcare system</b> | Preventive services | Cancer early stage diagnosis, all                           | Percent of all cancer cases diagnosed at an early stage.   | 2010            | 2011             | OH only data                         | Ohio Cancer Incidence Surveillance System  | No                                     | Up                 |
| <b>Healthcare system</b> | Preventive services | Cancer early stage diagnosis, female breast cancer cases    | Percent of female breast cancer cases diagnosed at an early stage. The denominator is total female cases in Ohio and the numerator is early stage female cases.  | 2010            | 2011             | OH only data                         | Ohio Cancer Incidence Surveillance System  | No                                     | Up                 |
| <b>Healthcare system</b> | Preventive services | Cancer early stage diagnosis, colon and rectal cancer cases | Percent of colon and rectal cancer cases diagnosed at an early stage.  | 2010            | 2011             | OH only data                         | Ohio Cancer Incidence Surveillance System  | No                                     | Up                 |
| <b>Healthcare system</b> | Preventive services | Flu vaccination   | Monthly cumulative influenza vaccination percent coverage estimates for persons $\geq 6$ months of age.  | 06/2011-05/2012 | 06/2012-05/2013  | 0                                    | National Immunization Survey and Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention FluVaxView                     | Yes                                    | Up                 |
| <b>Healthcare system</b> | Preventive services | Prenatal care   | Percent of women who completed a pregnancy in the last 12 months and who received prenatal care in the first trimester.  | 2011            | 2012             | 12                                   | National Vital Statistics System, Centers for Disease Control and Prevention   | No                                     | Up                 |

| Domain            | Subdomain            | Metric   | Metric Description   | Base Year | Most recent year | # of missing states most recent year | Data source   | Metric included in composite rankings? | Desired direction* |
|-------------------|----------------------|--|--|-----------|------------------|--------------------------------------|---|--|--------------------|
| Healthcare system | Behavioral health    | Mental illness hospitalization follow-up                         | The percentage of discharges for continuous and non-continuously enrolled Medicaid members 6 years of age and older who were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter or partial hospitalization with a mental health practitioner within 30 days of discharge. The numerator was the number of discharges for psychiatric patients and the denominator was the number of discharges for psychiatric patients to an outpatient provider meeting measure specifications. | 2013      | 2014             | OH only data                         | Ohio Department of Mental Health and Addiction Services   | No                                     | Up                 |
| Healthcare system | Behavioral health    | Substance use disorder treatment retention                       | The percent of clients ages 12 or older with an intake assessment who received one outpatient index service within 7 days and 2 additional outpatient index services within 30 days of intake. The numerator was all persons who have at least one clinical service within 7 days of assessment and 2 more clinical services within 30 days of assessment and the denominator was all persons receiving an alcohol or other drug assessment at intake.   | 2013      | 2014             | OH only data                         | Ohio Department of Mental Health and Addiction Services   | No                                     | Up                 |
| Healthcare system | Hospital utilization | All payer same hospital readmissions                             | All payer 30-day same hospital readmissions as a percent of admissions or unplanned readmissions.  | 2011      | 2012             | OH only data                         | Ohio Hospital Association   | No                                     | Down               |
| Healthcare system | Hospital utilization | Heart failure readmissions for Medicare beneficiaries            | Percent of Medicare beneficiaries discharged from the hospital with a principal diagnosis of heart failure who were readmitted for any cause within 30 days after the index admission date. This metric is hospital-specific, risk-standardized, and all-cause.  | 2010      | 2011             | 0                                    | Centers for Medicare & Medicaid Services  | Yes                                    | Down               |
| Healthcare system | Hospital utilization | Avoidable emergency department visits for Medicare beneficiaries | Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries. For more information on this metric, see Appendix B in the Commonwealth Fund <a href="#">State Scorecard on Healthcare System Performance, 2014</a> .   | -         | 2011             | 0                                    | Analysis of J.Zheng and A.Jha, Harvard School of Public Health as compiled by the Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition | Yes                                    | Down               |

| Domain            | Subdomain                                     | Metric                                  | Metric Description  | Base Year | Most recent year | # of missing states most recent year | Data source  | Metric included in composite rankings? | Desired direction* |
|-------------------|---|---|---|-----------|------------------|--------------------------------------|--|--|--------------------|
| Healthcare system | Timeliness, effectiveness and quality of care | Healthcare-associated infections        | Composite of standardized infection ratios across six healthcare-associated infections. The six healthcare-associated infections are: (1) central line-associated bloodstream infections, CLABSI (2) catheter-associated urinary tract infections, CAUTI (3) surgical site infections, Colon Surgery, SSI (4) surgical site infections, abdominal hysterectomy surgery, SSI (5) hospital-onset clostridium difficile infections (6) hospital-onset MRSA bloodstream infections. The SIR for a state is adjusted to account for factors that might cause infection rates to be higher or lower, such as hospital size, teaching status, the type of patients a hospital serves, and surgery and patient characteristics. | -         | 2012             | 0                                    | University of Cincinnati Economic Center analysis of Centers for Disease Control and Prevention data   | Yes                                    | Down               |
| Healthcare system | Timeliness, effectiveness and quality of care | Stroke care                             | Percent of ischemic stroke patients who got medicine to break up a blood clot within 3 hours after symptoms started.  | -         | 01/2013-09/2013  | 0                                    | Centers for Medicare & Medicaid Services   | Yes                                    | Up                 |
| Healthcare system | Timeliness, effectiveness and quality of care | Nursing home pressure ulcers            | Percent of long-stay high-risk nursing home residents impaired in bed mobility or transfer, comatose, or malnourished with pressure ulcers. For more information on this metric, see Appendix B in the Commonwealth Fund <a href="#">State Scorecard on Healthcare System Performance, 2014</a> .   | -         | 7/2012-3/2013    | 0                                    | Centers for Medicare & Medicaid Services as compiled by the Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition                                  | Yes                                    | Down               |
| Healthcare system | Timeliness, effectiveness and quality of care | Patient experience                      | Percent of Medicare fee-for-service beneficiaries who had a doctor's office or clinic visit in the last 12 months whose doctor sometimes or never explained things in a way they could understand   | 2010      | 2011             | 0                                    | Agency for Healthcare Research and Quality, Center for Quality Improvement and Patient Safety, National CAHPS Benchmarking Database  | Yes                                    | Down               |
| Healthcare system | Timeliness, effectiveness and quality of care | Mortality amenable to healthcare, all   | Number of deaths before age 75 per 100,000 population that resulted from causes considered at least partially treatable or preventable with timely and appropriate medical care. For more information on this metric, see Appendix B in the Commonwealth Fund <a href="#">State Scorecard on Healthcare System Performance, 2014</a>  | 2004-2005 | 2009-2010        | 0                                    | Centers for Disease Control National Vital Statistics System as analyzed and compiled by the Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition | Yes                                    | Down               |
| Healthcare system | Equity  | Mortality amenable to healthcare, Black | Number of Black deaths before age 75 per 100,000 population that resulted from causes considered at least partially treatable or preventable with timely and appropriate medical care. For more information on this metric, see Appendix B in the Commonwealth Fund <a href="#">State Scorecard on Healthcare System Performance, 2014</a>  | 2004-2005 | 2009-2010        | 13                                   | Centers for Disease Control National Vital Statistics System as analyzed and compiled by the Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition | No                                     | Down               |

| Domain                              | Subdomain   | Metric                                    | Metric Description  | Base Year | Most recent year        | # of missing states most recent year | Data source  | Metric included in composite rankings? | Desired direction* |
|-------------------------------------|---|---|---|-----------|-------------------------|--------------------------------------|--|--|--------------------|
| <b>Healthcare system</b>            | Equity  | Mortality amenable to healthcare, White   | Number of White deaths before age 75 per 100,000 population that resulted from causes considered at least partially treatable or preventable with timely and appropriate medical care. For more information on this metric, see Appendix B in the Commonwealth Fund <a href="#">State Scorecard on Healthcare System Performance, 2014</a>  | 2004-2005 | 2009-2010               | 0                                    | Centers for Disease Control National Vital Statistics System as analyzed and compiled by the Commonwealth Fund State Scorecard on Healthcare System Performance 2014 edition | No                                     | Down               |
| <b>Public health and prevention</b> | Workforce and accreditation                           | State public health workforce             | Number of state public health agency staff FTEs per 100,000 population. Data normalized per 100,000 population. ASTHO data were used to obtain the numerator and the American Community Survey 1-year population estimates for 2011 and 2012 were used for the denominator.   | 2011      | 2012                    | 2                                    | Association of State and Territorial Health Officials  | Yes                                    | Up                 |
| <b>Public health and prevention</b> | Workforce and accreditation                           | Local public health workforce             | Median number of local health department FTEs per 100,000 population  | 2010      | 2013                    | 6                                    | National Association of County and City Health Officials   | Yes                                    | Up                 |
| <b>Public health and prevention</b> | Workforce and accreditation                           | Accreditation of local health departments | Percent of local health departments that have received accreditation from the Public Health Accreditation Board. PHAB accreditation is a relatively new process; 2013 was the first year that health departments began achieving accreditation. This source is updated periodically throughout the year.  | -         | 2014 (accessed 9/14/14) | 0                                    | Public Health Accreditation Board (numerator); National Association of County and City Health Officials (denominator)  | Yes                                    | Up                 |
| <b>Public health and prevention</b> | Communicable disease control and environmental health | Chlamydia                                 | Chlamydia rate per 100,000 population   | 2012      | 2013                    | 0                                    | National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, as compiled by America's Health Rankings 2013 Edition   | Yes                                    | Down               |
| <b>Public health and prevention</b> | Communicable disease control and environmental health | Foodborne illness monitoring              | Proportion of foodborne illness outbreaks reported to Centers for Disease Control and Prevention for which an etiologic agent is confirmed. This metric is included in the National Health Security Preparedness Index. Multiple confirmed/suspected in one food was counted as a single report. So long as it contained at least one confirmed, it was reported as confirmed. Does not include multistate outbreaks. | 2011      | 2012                    | 2                                    | Foodborne Online Outbreak Database   | Yes                                    | Up                 |
| <b>Public health and prevention</b> | Communicable disease control and environmental health | Child immunization                        | Percent of children ages 19 to 35 months who received all recommended vaccines (DTaP, poliovirus, measles, Hib, HepB, varicella, PCV)   | 2012      | 2013                    | 1                                    | National Immunization Survey as compiled by RWJF DataHub   | Yes                                    | Up                 |

| Domain                              | Subdomain                       | Metric                         | Metric Description   | Base Year | Most recent year       | # of missing states most recent year | Data source   | Metric included in composite rankings? | Desired direction* |
|-------------------------------------|---------------------------------|--------------------------------|--|-----------|------------------------|--------------------------------------|---|--|--------------------|
| <b>Public health and prevention</b> | Emergency preparedness          | Emergency preparedness funding | Total per capita funding for state and local health departments' emergency preparedness (Public Health Emergency Preparedness). Data normalized to per capita. Base population year was 2012 from American Community Survey. 2013 population base estimates are not yet available. | FY 2012   | FY 2013                | 0                                    | Centers for Disease Control and Prevention, US Census   | Yes                                    | Up                 |
| <b>Public health and prevention</b> | Health promotion and prevention | Cigarette tax                  | State cigarette excise tax rate  | 2012      | 2013                   | 0                                    | Centers for Disease Control and Prevention, as compiled by RWJF DataHub   | Yes                                    | Up                 |
| <b>Public health and prevention</b> | Health promotion and prevention | Tobacco prevention spending    | Tobacco prevention and control spending as a percent to the Centers for Disease Control and Prevention-recommended level   | -         | FY 2014                | 0                                    | American Lung Association, The State of Tobacco Control   | Yes                                    | Up                 |
| <b>Public health and prevention</b> | Health promotion and prevention | Seat belt use                  | Percent of front seat occupants using a seat belt  | 2011      | 2012                   | 0                                    | National Highway Traffic Safety Administration  | Yes                                    | Up                 |
| <b>Public health and prevention</b> | Health promotion and prevention | Sales of opioid pain relievers | Kilograms of opioid pain relievers sold per 10,000 population, measured in morphine equivalents  | -         | 2010                   | 0                                    | Drug Enforcement Agency, as compiled by Trust for America's Health  | Yes                                    | Down               |
| <b>Public health and prevention</b> | Health promotion and prevention | WIC at farmers markets         | Percent of farmers markets that accept WIC coupons   | -         | 2013                   | 13                                   | Centers for Disease Control and Prevention State Indicators Report on Fruits and Vegetables 2013                | No                                     | Up                 |
| <b>Public health and prevention</b> | Health promotion and prevention | Safe sleep                     | Percent of infants most often laid on his or her back to sleep   | 2009      | 2010                   | 24                                   | Centers for Disease Control and Prevention, Pregnancy Risk Assessment Monitoring System                         | No                                     | Up                 |
| <b>Public health and prevention</b> | Health promotion and prevention | Home visiting                  | Percent of women who report a home visitor came to their home before or after their most recent pregnancy to help them prepare for their new baby and/or to help them learn how to take care of themselves or their new baby   | -         | To be reported in 2015 | NA                                   | Centers for Disease Control and Prevention, Pregnancy Risk Assessment Monitoring System                         | No                                     | Up                 |
| <b>Public health and prevention</b> | Health promotion and prevention | Youth distracted driving       | Percent of youth who report that they texted or e-mailed while driving a car or other vehicle on at least one day during the past 30 days  | -         | 2013                   | 13                                   | Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System                             | No                                     | Down               |
| <b>Public health and prevention</b> | Health promotion and prevention | Falls among older adults       | Percent of adults age 65 and older who report having had a fall within the last 3 months   | -         | 2012                   | 1                                    | Behavioral Risk Factor Surveillance System, as compiled by America's Health Rankings Senior Report 2014 edition | Yes                                    | Down               |

| Domain                                 | Subdomain                 | Metric                        | Metric Description   | Base Year | Most recent year | # of missing states most recent year | Data source  | Metric included in composite rankings? | Desired direction* |
|--|---------------------------|-------------------------------|--|-----------|------------------|--------------------------------------|--|--|--------------------|
| <b>Public health and prevention</b>    | Equity                    | Safe sleep, income level      | Percent of infants most often laid on his or her back to sleep, by income level  | -         | 2010             | 24                                   | Centers for Disease Control and Prevention, Pregnancy Risk Assessment Monitoring System                        | No                                     | Up                 |
| <b>Social and economic environment</b> | Education                 | Preschool enrollment          | Percent of 3 and 4 year-olds enrolled in preschool. Kids Count Data Center (secondary source) displays the percent of children NOT enrolled in preschool. Because the metric is the percent of children that ARE enrolled, values were subtracted from 100%. | 2010      | 2011             | 0                                    | US Census Bureau, American Community Survey, as compiled by Kids Count Data Center                             | Yes                                    | Up                 |
| <b>Social and economic environment</b> | Education                 | 4 <sup>th</sup> grade reading | Percent of 4th graders proficient in reading   | 2011      | 2013             | 0                                    | US Department of Education, National Assessment of Educational Progress, as compiled by Kids Count Data Center | Yes                                    | Up                 |
| <b>Social and economic environment</b> | Education                 | High school graduation        | Percent of incoming 9th graders who graduate in 4 years from a high school with a regular degree   | 2008-09   | 2010             | 0                                    | National Center for Education Statistics, as compiled by America's Health Rankings 2013 edition                | Yes                                    | Up                 |
| <b>Social and economic environment</b> | Education                 | Educational attainment        | Percent of adults over age 25 with a Bachelor's Degree or Higher   | 2008      | 2009             | 0                                    | US Census Bureau, American Community Survey  | Yes                                    | Up                 |
| <b>Social and economic environment</b> | Employment and poverty    | Unemployment                  | Annual average unemployment rate, ages 16 and older  | 2012      | 2013             | 0                                    | Bureau of Labor Statistics   | Yes                                    | Down               |
| <b>Social and economic environment</b> | Employment and poverty    | Child poverty                 | Percent of persons under age 18 who live in households at or below the poverty threshold (<100% FPG)   | 2011      | 2012             | 0                                    | US Census Bureau, Current Population Survey  | Yes                                    | Down               |
| <b>Social and economic environment</b> | Employment and poverty    | Adult poverty                 | Percent of persons age 18+ who live in households at or below the poverty threshold (<100% FPG)  | 2011      | 2012             | 0                                    | US Census Bureau, Current Population Survey  | Yes                                    | Down               |
| <b>Social and economic environment</b> | Family and social support | Single-parent households      | Percent of children living in single-parent households   | 2011      | 2012             | 0                                    | US Census Bureau, American Community Survey, as compiled by Kids Count Data Center                             | Yes                                    | Down               |
| <b>Social and economic environment</b> | Family and social support | Teen birth rate               | Rate per 1,000 of births to females 15-19 years of age   | 2011      | 2012             | 1                                    | Centers for Disease Control and Prevention Vital Statistics  | Yes                                    | Down               |

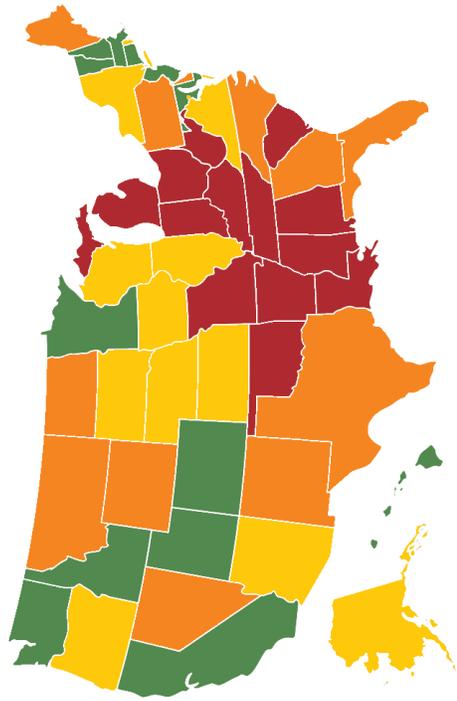
| Domain                                 | Subdomain                         | Metric   | Metric Description  | Base Year | Most recent year | # of missing states most recent year | Data source  | Metric included in composite rankings? | Desired direction* |
|--|-----------------------------------|--|---|-----------|------------------|--------------------------------------|--|--|--------------------|
| <b>Social and economic environment</b> | Family and social support         | Social-emotional support   | Percent of adults without social-emotional support. Age adjusted.   | -         | 2006-2012        | 0                                    | Behavioral Risk Factor Surveillance System, as compiled by Health Indicators Warehouse                         | Yes                                    | Down               |
| <b>Social and economic environment</b> | Family and social support         | Social capital and cohesion  | Composite measure that includes connections with neighbors, supportive neighborhoods, voter turnout, and volunteerism   | -         | 2013             | 1                                    | National Health Security Preparedness Index  | Yes                                    | Up                 |
| <b>Social and economic environment</b> | Trauma, toxic stress and violence | Child abuse and neglect  | Rate of child maltreatment victims per 1,000 children in population   | 2011      | 2012             | 1                                    | Administration for Children and Families   | Yes                                    | Down               |
| <b>Social and economic environment</b> | Trauma, toxic stress and violence | Adverse childhood experiences  | Percent of children who have experienced two or more adverse experiences, such as death of a parent, parent served time in jail, witness to domestic violence, or lived with someone with a drug or alcohol problem | -         | 2011             | 0                                    | National Survey of Children's Health   | Yes                                    | Down               |
| <b>Social and economic environment</b> | Trauma, toxic stress and violence | Violent crime  | Violent crime rate per 100,000 inhabitants  | -         | 2013             | 0                                    | National Incident-Based Reporting System/Uniform Crime Reporting, Federal Bureau of Investigation              | Yes                                    | Down               |
| <b>Social and economic environment</b> | Equity                            | Income inequality  | The Gini coefficient is a number between zero and one that measures the extent of inequality in the distribution of income. Estimates closer to one indicate greater income inequality.                             | 2012      | 2013             | 0                                    | US Census Bureau, American Community Survey, as compiled by RWJF DataHub                                       | Yes                                    | Down               |
| <b>Social and economic environment</b> | Equity                            | Fourth-grade reading, free/reduced lunch (economically disadvantaged children) | Percent of 4th-graders who qualify for free/reduced lunch (economically disadvantaged children) and who are proficient in reading   | 2011      | 2013             | 0                                    | US Department of Education, National Assessment of Educational Progress, as compiled by Kids Count Data Center | No                                     | Up                 |
| <b>Social and economic environment</b> | Equity                            | 4 <sup>th</sup> grade reading, White children                                  | Percent of White 4th-graders proficient in reading  | 2011      | 2013             | 0                                    | US Department of Education, National Assessment of Educational Progress, as compiled by Kids Count Data Center | No                                     | Up                 |
| <b>Social and economic environment</b> | Equity                            | 4 <sup>th</sup> grade reading, Black children                                  | Percent of Black 4th-graders proficient in reading  | 2011      | 2013             | 4                                    | US Department of Education, National Assessment of Educational Progress, as compiled by Kids Count Data Center | No                                     | Up                 |
| <b>Social and economic environment</b> | Equity                            | 4 <sup>th</sup> grade reading, Hispanic children                               | Percent of Hispanic 4th-graders proficient in reading   | 2011      | 2013             | 3                                    | US Department of Education, National Assessment of Educational Progress, as compiled by Kids Count Data Center | No                                     | Up                 |

| Domain                                 | Subdomain                       | Metric  | Metric Description   | Base Year | Most recent year | # of missing states most recent year | Data source  | Metric included in composite rankings? | Desired direction* |
|--|---------------------------------|---|--|-----------|------------------|--------------------------------------|--|--|--------------------|
| <b>Social and economic environment</b> | Equity                          | 4 <sup>th</sup> grade reading, Asian children | Percent of Asian 4th-graders proficient in reading   | 2011      | 2013             | 14                                   | US Department of Education, National Assessment of Educational Progress, as compiled by Kids Count Data Center   | No                                     | Up                 |
| <b>Physical environment</b>            | Air, water and toxic substances | Outdoor air quality                           | Average exposure of the general public to particulate matter of 2.5 microns or less in size (PM2.2)  | 2012      | 2013             | 0                                    | Environmental Protection Agency, as compiled by America's Health Rankings 2013 edition   | Yes                                    | Down               |
| <b>Physical environment</b>            | Air, water and toxic substances | Children exposed to secondhand smoke          | Percent of children who live in a home where someone uses tobacco or smokes inside the home  | 2007      | 2011             | 0                                    | National Survey of Children's Health   | Yes                                    | Down               |
| <b>Physical environment</b>            | Air, water and toxic substances | Safe drinking water                           | Percent of population exposed to water exceeding a violation limit during the past year  | -         | 2011             | 0                                    | US Environmental Protection Agency, Safe Drinking Water Information System   | Yes                                    | Down               |
| <b>Physical environment</b>            | Air, water and toxic substances | Fluoridated water                             | Percent of the population served by a community water system with optimally fluoridated water  | 2010      | 2012             | 0                                    | Centers for Disease Control and Prevention, Water Fluoridation Reporting System  | Yes                                    | Up                 |
| <b>Physical environment</b>            | Air, water and toxic substances | Toxic pollutants                              | Total pounds of toxic chemicals released into the environment per capita (total on-site disposal or other releases for all industries and all chemicals). The Toxic Release Inventory (TRI) includes information about releases of toxic chemicals from facilities (including air, water, land on-site, and deepwell injection) but does not reveal whether or to what degree the public is exposed to these chemicals. For this dashboard, the total pounds of chemicals released in each state from the TRI database were applied to the total population size of each state to calculate a per capita amount. The numerator is from EPA, reported total on-site disposal or other releases. Denominator from American Community Survey 2011/2012 1-year population estimates. | 2011      | 2012             | 0                                    | Numerator: US Environmental Protection Agency, Toxics Release Inventory Denominator: US Census Bureau, American Community Survey 1-year population estimates | Yes                                    | Down               |
| <b>Physical environment</b>            | Air, water and toxic substances | Lead poisoning                                | Percent of young children with elevated blood lead levels (BLL >10 ug/dL)  | 2011      | 2012             | 23                                   | Centers for Disease Control and Prevention, Childhood Blood Lead Surveillance Data   | No                                     | Down               |
| <b>Physical environment</b>            | Food access and food insecurity | Healthy food access                           | Percent of population with limited access to healthy food, defined as the percent of low-income individuals (<200% FPG) living more than 10 miles from a grocery store in rural areas and more than 1 mile in non-rural areas  | -         | 2010             | 0                                    | US Department of Agriculture, Food Research Atlas  | Yes                                    | Down               |
| <b>Physical environment</b>            | Food access and food insecurity | Food insecurity                               | Percent of households that are food insecure   | -         | 2010-2012        | 0                                    | US Census Bureau, Current Population Survey  | Yes                                    | Down               |

| Domain               | Subdomain  | Metric                           | Metric Description   | Base Year | Most recent year                       | # of missing states most recent year | Data source  | Metric included in composite rankings? | Desired direction* |
|----------------------|--|----------------------------------|--|-----------|--|--------------------------------------|--|--|--------------------|
| Physical environment | Housing, built environment and access to physical activity | Severe housing problems          | Percent of households that have one or more of the following problems: 1) housing unit lacks complete kitchen facilities; 2) housing unit lacks complete plumbing facilities; 3) household is severely overcrowded, 4) monthly housing costs, including utilities, that exceed 50% of monthly income   | -         | 2006-2010                              | 0                                    | US Department of Housing and Urban Development, as compiled by County Health Rankings 2014 edition               | Yes                                    | Down               |
| Physical environment | Housing, built environment and access to physical activity | Access to exercise opportunities | Percent of individuals in a county who live reasonably close to a location for physical activity, defined as parks or recreational facilities  | -         | 2010 and 2012                          | 0                                    | OneSource Global Business Browser and U.S. Census Bureau, as compiled County Health Rankings 2014 edition        | Yes                                    | Up                 |
| Physical environment | Housing, built environment and access to physical activity | Alternative commute modes        | Percent of trips to work via bicycle, walking, or mass transit (combined)  | 2009      | 2012                                   | 0                                    | US Census Bureau, American Community Survey  | Yes                                    | Up                 |
| Physical environment | Housing, built environment and access to physical activity | Neighborhood safety              | Percent of parents who report their children are living in a safe neighborhood   | 2007      | 2011                                   | 0                                    | National Survey of Children's Health   | Yes                                    | Up                 |
| Physical environment | Housing, built environment and access to physical activity | Safe Routes to School Programs   | Percent of K-8 public district schools with a completed school travel plan as of September 2014 (cumulative total). The number of schools with a completed school travel plan (numerator) was reported directly from the Ohio Department of Transportation and divided by the number of K-8 regular public school (1,560) from the Common Core Data Institute of Education Sciences. | -         | 2014 (cumulative as of September 2014) | OH only data                         | Ohio Department of Transportation (numerator) and Common Core Data Institute of Education Sciences (denominator) | No                                     | Up                 |
| Physical environment | Housing, built environment and access to physical activity | Complete Street policies         | Number of communities that have adopted complete streets policies  | -         | 2012                                   | OH only data                         | Smart Growth America and National Complete Streets Coalition   | No                                     | Up                 |
| Physical environment | Equity   | Residential segregation          | Black-White dissimilarity index for Ohio's biggest metro areas (Columbus, Cleveland, Cincinnati, Toledo, Akron, Dayton)  | 2009      | 2010                                   | OH only data                         | American Communities Project, Brown University   | No                                     | Down               |

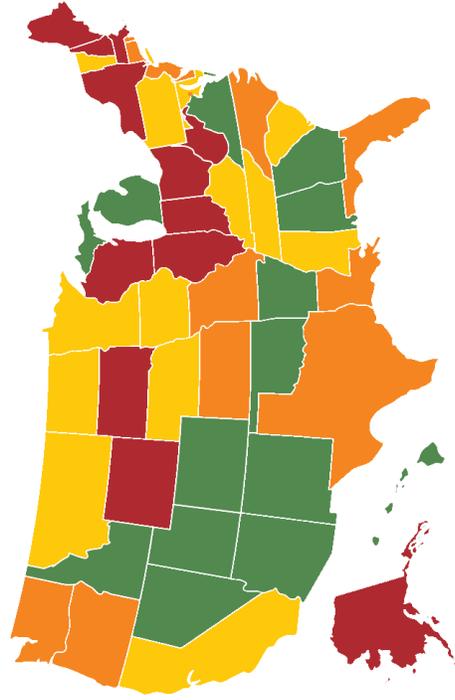
**Note:** "OH only data" indicated that data was only available for Ohio, and "-" means data is not available.

Population health

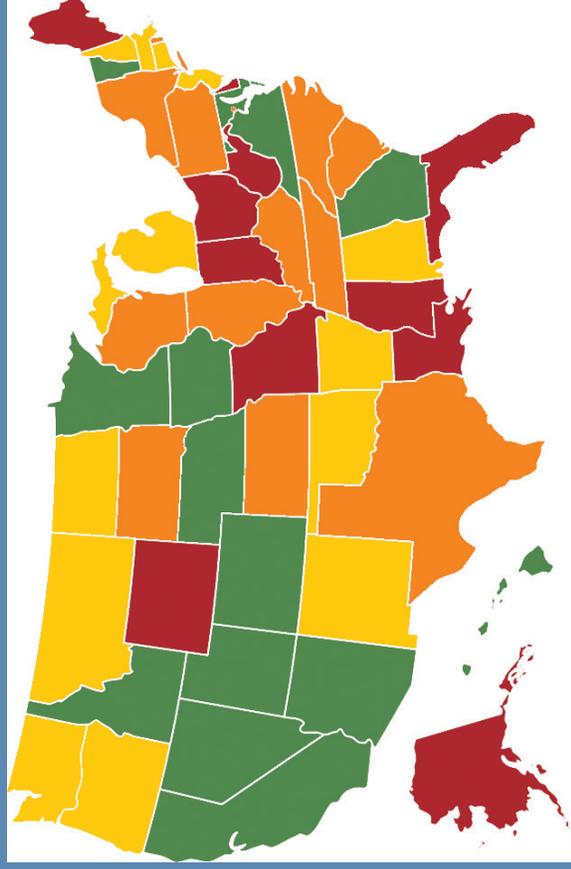


+

Healthcare costs



Health value



**Top quartile** of the 50 states and the District of Columbia.

**Second quartile** of the 50 states and the District of Columbia.

**Third quartile** of the 50 states and the District of Columbia.

**Bottom quartile** of the 50 states and the District of Columbia.

## Acknowledgements

HPIO partnered with the University of Cincinnati Economics Center to compile and rank the data for the dashboard.



## CardinalHealth

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HPIO thanks our core funders, who are helping advance the health of Ohioans through informed policy decisions.

- **Interact for Health**
- **Mt. Sinai Health Care Foundation**
- **The Cleveland Foundation**
- **The George Gund Foundation**
- **Saint Luke's Foundation of Cleveland**
- **HealthPath Foundation of Ohio**
- **Sisters of Charity Foundation of Canton**
- **Sisters of Charity Foundation of Cleveland**
- **United Way of Greater Cincinnati**
- **Mercy Health**
- **CareSource Foundation**
- **SC Ministry Foundation**
- **United Way of Central Ohio**
- **Cardinal Health Foundation**



[www.hpio.net](http://www.hpio.net)