2017 Health Value Dashboard™

Process, methodology and metric information

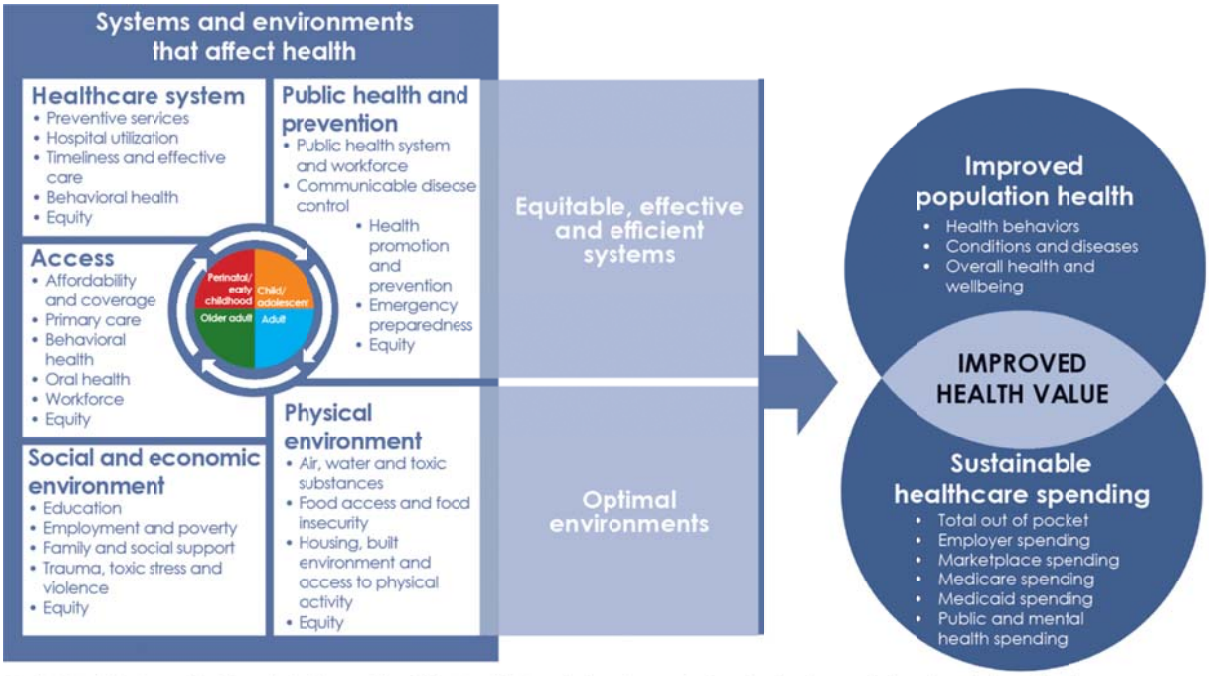
What is the Health Policy Institute of Ohio (HPIO)?

Founded in 2003 by a group of health funders, the Health Policy Institute of Ohio partners with state policymakers and other stakeholders engaged in the policymaking process to provide the independent and nonpartisan analysis needed to create evidence-informed state health policy. The intended outcome of HPIO's work is that state-level public policy decisions lead to improved health value, meaning better health outcomes and sustainable healthcare spending. HPIO produces written and online products, hosts educational forums, facilitates multi-stakeholder discussions and offers technical assistance and consulting services. Foundations and united ways contribute most of HPIO's annual operating budget of $1.2-1.3 million.

What is the *Dashboard*?

The HPIO *Health Value Dashboard* is a tool to track Ohio's progress towards health value – a composite measure that equally weights Ohio's performance on population health outcomes and healthcare spending. The *Dashboard* examines Ohio's performance relative to other states, tracks change over time, identifies Ohio's greatest disparities and inequities and highlights evidence-informed strategies that can be implemented to improve Ohio's performance.

The *Dashboard* is based on the *Pathway to Health Value* conceptual framework. The framework defines health value as the combination of improved population health outcomes and sustainable healthcare spending and outlines the systems and environments that affect health. The *Dashboard* tracks Ohio's performance across all seven domains of the conceptual framework.



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

What makes the HPIO *Health Value Dashboard* different?

The Health Value *Dashboard* builds upon existing national scorecards and rankings, but:

- Includes significant focus on healthcare spending
- Includes a comprehensive set of health determinants
- Provides an at-a-glance format in addition to detailed analysis

What's new to the 2017 *Health Value Dashboard*?

HPIO released the first edition of the *Dashboard* in December 2014. Several updates have been made to improve the 2017 *Dashboard*. These changes are outlined in the table below:

Update	**Description of update to the 2017 *Dashboard***
Emphasizes change over time	• Domain profiles include a new "trend" section that identifies improvement or worsening on a metric based on five levels of change (ranging from greatly worsened to greatly improved and identifying metrics for which there was no significant change) • Domain profiles highlight the most improved state(s) based this calculation of trend • A separate trend component highlights change over time for selected metrics and displays the extent to which Ohio and Midwestern and neighboring states have improved or worsened
Examines disparities and inequities	Includes a separate equity section that calculates disparity ratios across a set of 29 metrics by race/ethnicity, education level, income level and disability status when data is available to highlight Ohio's greatest health disparities and inequities
Uses an improved ranking methodology	Uses an improved ranking methodology that takes a more nuanced look at data variation in state performance on individual metrics, resulting in fewer ties between states when calculating the subdomain and domain ranks
Includes additional or refined metrics	Metrics were modified, removed or replaced due to changes in the data description or source or to ensure we are using the most relevant, timely and publicly available sources
Highlights evidence-informed strategies to improve health value	• Includes a separate section that highlights resources for evidence-informed strategies that can be implemented to improve Ohio's performance • Identifies approaches that are most likely to yield the biggest improvements to health outcomes over time

HPIO's *Health Value Dashboard* process

HPIO convened a wide array of Ohio stakeholders as part of HPIO's multi-sector Health Measurement Advisory Group (HMAG) to advise development of both the 2014 and 2017 editions of the *Dashboard*s. Visit the HMAG web page for a **full list of HMAG members**. In 2014, HMAG developed the *Pathway to Health Value* conceptual framework on which the *Dashboard* is based.

Members of HMAG also served on various workgroups to help in updating metrics and advising on the layout, methodology, trend and equity components of the 2017 *Dashboard*.

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

Metric selection

The first step of the metric selection process for the 2014 edition of the *Dashboard* was to review metrics included in existing scorecards and data initiatives, such as America's Health Rankings, County Health Rankings and the Commonwealth Fund State Scorecard. Drawing upon these existing national tools and their own expertise, HMAG metric workgroup members selected approximately 15 metrics per domain based upon a set of specific criteria, such as availability of state-level data, alignment with state and national initiatives, data quality and relevance. (See the 2014 *Dashboard* for a complete list of criteria.)

In preparation for the 2017 edition, HPIO reconvened the domain-specific metric selection workgroups. These groups were charged with reviewing the list of metrics from the 2014 edition to determine if any changes were needed. The goal was to maintain as much consistency as possible across editions of the *Dashboard*, but to consider changes if better data had emerged or a source was no longer available. The workgroups used three types of criteria to determine whether a metric should be changed: rigor (e.g., changes to data quality), relevance (e.g., alignment with existing initiatives or emerging issues) and reality (e.g., data still available for all or most states, data has been updated since 2014 edition).

As a result of this review process, the following changes were made for the 2017 *Dashboard*:

- 22 metrics are similar (same topic, but different source or slightly different definition)
- 17 metrics are different (new topic)
- 79 metrics are the same

There are a total of 118 metrics in the *Dashboard* grouped into 7 domains and 29 subdomains. An additional 29 metrics were analyzed as part of the equity component of the *Dashboard*.

Data sources and years

All *Dashboard* data were compiled from publicly available sources, including national population health surveys, vital statistics and administrative data from federal agencies.

The 2017 *Dashboard* includes data from 58 different sources. For this reason, the data years vary by metric. When possible, the Ohio University researchers obtained the three most recently-available years of data. At least two years of data were available for 79 metrics for Ohio, allowing for trend analysis. Most baseline year data were from 2010-2013 and most recent-year data were from 2014-2016. See the detailed metric description table for specific years for each metric.

When possible, the researchers compiled data for all states and DC. Nine metrics are missing data from more than 10 states and are therefore not ranked.

Data gaps and limitations

The *Dashboard* includes existing data from a variety of publicly available sources, including survey, vital statistics, administrative and claims data. While care was taken to select metrics from credible sources, it is important to keep in mind that each of these sources has its own limitations, such as reliance upon self-reported conditions or behaviors, or changes in methodology from year to year. Other data gaps and limitations are outlined below:

Data lag: Most of the data in the *Dashboard* are from publicly-available sources, such as government surveys or birth and death records. There is typically a lag of one to three years between the time this information is collected and when it is released. From a policy perspective, this is important to acknowledge. At times, data may predate effectuation of an important policy change such as new Medicaid eligibility levels, recent policy changes intended to address a health crisis, such as the increase in opiate addiction or changing delivery and payment systems.

Data on disparities and inequities: Data on race and ethnicity, education level, income level and disability status is not consistently collected or reported across all population groups. As a result, there is more information on some groups as compared to others (e.g., data may be available for race or ethnicity but not by disability status).

When displaying data on racial and ethnic disparities or other population characteristics, categorizations were taken from the primary source. For example, one source may use the category African-American/black while another source may use the category black (non-Hispanic). Similarly, there is variation across metrics in how education level, income level and disability status are described. To the extent possible, comparable groupings across metrics were made. It is also important to note that aggregated data can mask disparities within population groups. For example, sub-populations within the Asian/Pacific Islander population, such as Southeast Asians and new immigrant or refugee communities, may experience poorer health outcomes than the aggregated group for which data is available.

Change over time: Because the researchers did not have the underlying raw data for *Dashboard* metrics, it was not possible to measure the statistical significance of changes from baseline to most recent year. Instead, meaningful differences in the absolute change from baseline to most recent year were identified by establishing a consistent threshold that took into consideration the range of data values across states. (See trend methodology below.)

Ranking methodology

Metric ranking

A commonly used standardization technique that normalizes each metric on the basis of the metric's mean and standard deviation was used as the basis for the *Dashboard* metric rankings. Specifically, each metric was converted into its corresponding $z-scores$[1] where:

$$z = \frac{\text{metric's value for a given jurisdiction} - \text{mean of the metric's values for all jurisdictions}}{\text{standard deviation of the metric's values for all jurisdictions}}$$

Using the resulting z-scores for a given metric, percentile ranks were constructed for each state (and D.C.). Percentile ranks are the proportion of scores in a distribution that a specific score exceeds or is equal to. Data were not available for all states (and D.C.) for every metric. As a result, states with missing metric values are not ranked for the relevant metric.

Metrics with more than 10 missing states were not ranked. Some metrics were also not ranked due to underlying variations in the metric across states or lack of a designated desired direction.

Sub-domain and domain ranking

Sub-domain ranks were calculated by first making sure each metric was ranked in a consistent order such that higher ranks (1, 2, 3, etc.) correspond to better performance while lower ranks (49, 50, and 51) refer to a worse performance. In the healthcare spending

domain, higher ranks correspond to higher spending and lower ranks correspond to lower spending.

However, since each of the seven domains is composed of sub-domains, with a different number of metrics per sub-domain within any given domain, ranks were constructed for the sub-domains and domains as follows:

- First, z-scores for all metrics that constitute a sub-domain were summed.
- The sum of these z-scores was then used to construct percentile ranks for each state. States with missing data for one or more metrics are not automatically excluded from the ranking procedure. A similar approach is used to generate rankings for each of the seven domains.

Health value ranking

The health value rank was calculated by summing the z-scores for all of the metrics in the population health domain. This calculation was repeated for all of the metrics in the healthcare spending domain. Since the population health domain has 15 ranked metrics while healthcare spending has 10, in order to weight the two domains equally we calculate the sum of the two z-scores as follows:

$$sum = (0.6 \times \text{ Population Health}_z) + (1.0 \times \text{ Healthcare Spending}_z).$$

This weighting ensures that the population health domain is not dominating the health value rank simply because it is contributing information from more metrics than is the healthcare spending domain.

The 2017 approach versus the 2014 approach

In the *2014 Health Value Dashboard,* percentile ranks were used to create sub-domain and domain ranks while the 2017 *Dashboard* starts with transforming each metric's original value into a z-score. These z-scores are then converted into percentile ranks that are in turn used to generate discrete ranks (1 through 51) for each state and Washington D.C. These two methods generate the same rank for any metric. Where they differ is that z-scores span a larger range of possible values whereas percentile ranks are by design constrained to lie within the 0 to 1 range. While these differences do not have an impact on any metric's rank, the z-score approach allows for finer differences between states to be captured in the domain ranks. In contrast, the percentile rank approach would lead to more states looking similar (i.e., sharing a rank). It is important to note that both methodologies are highly correlated and produce similar results.

Trend methodology

The method to assess change from the baseline year is consistent with the approach used in the Commonwealth Fund's Health Care System State Scorecard. Using all available years of data for each metric, the researchers calculated one-half standard deviation of the metric's values and then calculated the absolute change between the current year's value and the baseline year value as $\text{current value} - \text{base value}$ for each state. This absolute change, relative to the standard deviation of the metric, is labeled using the following 5-point classification scheme:

- No change: the change is within 0.5 standard deviations
- Moderately improved: the change is between +0.5 and +1.0 standard deviations
- Greatly improved: the change is more than +1.0 standard deviations
- Moderately worsened: the change is between -0.5 and -1.0 standard deviations
- Greatly worsened: the change is more than -1.0 standard deviations

Equity methodology

Disparities and inequities were examined across a set of 29 metrics by race and ethnicity, education level, income level and disability status through disparity ratios. Metrics and population groups examined were selected in partnership with the HMAG equity workgroup. Disparity ratios were calculated by dividing the rate of the group with the worst outcomes by the rate of the group with the best outcomes within each of the population groups. For example, the depression rate in Ohio for non-Hispanic blacks (group with best outcomes) is 15.46%. The rate for Hispanics (group with worst outcomes) is 26.7%.

Disparity ratio = 26.7/15.46 or 1.73.

Disparity ratio thresholds were assigned based on Healthy People 2020 criteria. A disparity ratio of less than 1.10 was considered to be little to no disparity. Disparity ratios between 1.10 and 1.99 were considered as moderate. Any disparity ratio over 2 was considered to be a large disparity.

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

Disaggregated metrics were also available for varying levels of group delineations. For example, some metrics were available by both race and ethnicity (Non-Hispanic White, Non-Hispanic Black, and so on) while others were only available for all-encompassing racial groupings (for example, White, Black, Hispanic, and so on). Consequently, all groups were simplified to common levels outlined below and data was compiled when available:

- Race = non-Hispanic White/White, non-Hispanic Black/Black, Asian/Pacific Islander, Hispanic
- Income = Highest income group, lowest income group (thresholds established by data available for the metric)
- Educational attainment = Did not graduate high school, high school diploma or equivalent
- Disability status = With a disability, without a disability

Measuring estimated impact if disparity eliminated

The *Dashboard* also includes a rough estimate calculation to answer the question: How many individuals of a specific group would have had a better outcome if their prevalence/exposure rate were that of the group with the best outcome?

The base population sizes for each group were derived from the American Community Survey's 2011-2015 5-year release. The number of individuals in the group with the worst outcomes that are currently affected was calculated as follows:

number currently affected = group with worst outcomes rate X number of individuals in the group with worst outcomes base population

The number of individuals in the same group who would be affected if the rate of the group with the worst outcome's rate was equal to that of the group with the best outcomes was calculated in a similar fashion:

number potentially affected = group with the best outcomes rate X number of individuals in the group with the worst outcome's base population.

The number of Ohioans impacted is then calculated by: *number currently affected – number potentially affected*

[1] The z-score approach has been used in other well-known health *Dashboard*s (for example, the County Health Rankings) and is also commonly used in the social, behavioral and natural sciences.

2017 Health Value Dashboard™

Appendix: Detailed metric information

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Population health						
Health behaviors	Excessive drinking	Percent of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average.	2014	—	2015	Behavioral Risk Factor Surveillance System as compiled by America's Health Rankings
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	2015	Behavioral Risk Factor Surveillance System
Health behaviors	Youth all- tobacco use	Percent of youth ages 12-17 who used cigarettes, smokeless tobacco, cigars, or pipe tobacco during past 30 days	2011-2012	2012-2013	2013-2014	National Survey on Drug Use and Health
Health behaviors	Adult smoking =	Percent of population age 18 and older that are current smokers	2013	2014	2015	Behavioral Risk Factor Surveillance System
Conditions and diseases	Infant mortality =	Number of infant deaths per 1,000 live births (within 1 year). Note that the Population Health domain profile includes 2015 data for Ohio, which is not available for other states.	2012	2013	2014 rank; 2015 trend	Centers for Disease Control and Prevention, Vital Statistics, National Center for Health Statistics, National Vital Statistics Reports. Source for 2015 Ohio data: 2015 Ohio Infant Mortality Data: General Findings, Ohio Department of 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)	2013	2014	2015	Centers for Disease Control and Prevention, Vital Statistics, WONDER
Conditions and diseases	Adult overweight and obesity* =	Percent of population age 18 and older that are overweight or obese	—	—	2015	Behavioral Risk Factor Surveillance System
Conditions and diseases	Youth overweight and obesity =	Percent of children ages 12-17 who are overweight or obese	2010	2012	2015	Ohio Medicaid Assessment Survey
Conditions and diseases	Adult diabetes =	Percent of adults who have been told by a health professional that they have diabetes	2013	2014	2015	Behavioral Risk Factor Surveillance System
Conditions and diseases	Adult depression =	Percent of adults who have ever been told they have depression	2013	2014	2015	Behavioral Risk Factor Surveillance System

= Metrics are also examined in the 2017 *Dashboard* health equity profiles.

*This metric was only examined in the 2017 *Dashboard* health equity profiles.

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Population health (cont.)						
Conditions and diseases	Suicide deaths	Number of deaths due to suicide per 100,000 population	2010	2012	2013	Centers for Disease Control and Prevention, Vital Statistics, National Vital Statistics System as compiled by Commonwealth State Scorecard
Conditions and diseases	Drug overdose deaths (=)	Number of deaths due to drug overdoses per 100,000 population (age-adjusted)	2013	2014	2015	Centers for Disease Control and Prevention Vital Statistics
Conditions and diseases	Poor oral health	Percent of adults who have lost teeth due to decay, infection, or disease	2006	2012	2014	Behavioral Risk Factor Surveillance System as compiled by Commonwealth State Scorecard
Overall health and wellbeing	Overall health status	Percent of adults that report excellent, very good or good health	2013	2014	2015	Behavioral Risk Factor Surveillance System
Overall health and wellbeing	Limited activity due to health problems	Average number of days in the previous 30 days when a person reports limited activity due to physical or mental health difficulties (ages 18 and older)	2012	2013	2014	Behavioral Risk Factor Surveillance System, analysis by State Health Access Data Assistance Center, as compiled by Robert Wood Johnson Foundation Data Hub
Overall health and wellbeing	Premature death (=)	Years of potential life lost before age 75 (YPLL-75) per 100,000 population	2012	2013	2014	Centers for Disease Control and Prevention, Web-based Injury Statistics Query and Reporting as compiled by Robert Wood Johnson Foundation DataHub
Overall health and wellbeing	Life expectancy (=)	Life expectancy at birth based on current mortality rates	2005	2008	2010	Centers for Disease Control and Prevention, Vital Statistics, analysis by Measure of America, as compiled by Robert Wood Johnson Foundation DataHub

(=) Metrics are also examined in the 2017 *Dashboard* health equity profiles.

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Healthcare spending						
Total out-of-pocket spending	Out-of-pocket spending	Percent of individuals who are in families where out-of-pocket spending on health care, including premiums, accounted for more than 10% of annual income	2012	2013	2014	State Health Access Data Assistance Center analysis of the Annual Social and Economic Supplement to the Current Population Survey as compiled by the Robert Wood Johnson Foundation DataHub
Employer spending	Average single premium, per enrolled employee	Average total single premium for any-provider plans per enrolled employee at private-sector establishments that offer health insurance (includes self-insured employers)	2013	2014	2015	Agency for Healthcare Research & Quality Medical Expenditure Panel Survey
Employer spending	Average single premium, per enrolled employee, percent of employer contribution	Average total single premium for any-provider plans per enrolled employee at private-sector establishments that offer health insurance (includes self-insured employers), percent of employer contribution	2013	2014	2015	Agency for Healthcare Research & Quality Medical Expenditure Panel Survey
Employer spending	Average single premium, per enrolled employee, percent of employee contribution	Average total single premium for any-provider plans per enrolled employee at private-sector establishments that offer health insurance (includes self-insured employers), percent of employee contribution	2013	2014	2015	Agency for Healthcare Research & Quality Medical Expenditure Panel Survey
Employer spending	Average family premium per enrolled employee	Average total family premium for any-provider plans per enrolled employee at private-sector establishments that offer health insurance (includes self-insured employers)	2013	2014	2015	Agency for Healthcare Research & Quality Medical Expenditure Panel Survey
Employer spending	Average family premium per enrolled employee, percent of employer contribution	Average total family premium for any-provider plans per enrolled employee at private-sector establishments that offer health insurance (includes self-insured employers), percent of employer contribution	2013	2014	2015	Agency for Healthcare Research & Quality Medical Expenditure Panel Survey
Employer spending	Average family premium per enrolled employee, percent of employee contribution	Average total family premium for any-provider plans per enrolled employee at private-sector establishments that offer health insurance (includes self-insured employers), percent of employee contribution	2013	2014	2015	Agency for Healthcare Research & Quality Medical Expenditure Panel Survey

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Healthcare spending (cont.)						
Employer spending	Total spending per enrollee with employer-sponsored health insurance	Total spending per enrollee with employer-sponsored health insurance, ages 18-64. Total per enrollee spending estimates from a sophisticated regression model include reimbursed costs for health care services from all sources of payment including the health plan, enrollee, and any third-party payers incurred in 2013 and in 2014. Outpatient prescription drug charges are excluded. Enrollees with capitated plans and their associated claims are also excluded. Estimates for each HRR were adjusted for enrollees' age and sex, the interaction of age and sex, partial year enrollment and regional wage difference. Analysis conducted by M. Chernew, Harvard Medical School Department of Health Care Policy, of the Truven Marketscan Database.	2013	—	2014	Commonwealth Fund Scorecard on Local Health System Performance
Marketplace spending	Average monthly marketplace premiums, after advanced premium tax credit	Average monthly premium for all enrollees in the federal marketplace or for states that use healthcare.gov, after application of an advanced premium tax credit	2014	2015	2016	Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, Final enrollment reports
Medicare spending	Total Medicare spending (Parts A and B), per Medicare enrollee	Price, age, sex and race-adjusted Medicare reimbursements per Medicare enrollee (Parts A and B), age 65-99	2010	2011	2012	Dartmouth Atlas of Health Care
Medicare spending	Average total cost, risk adjusted, for Medicare beneficiaries, without chronic conditions	Annual averages of all costs for Medicare beneficiaries without chronic conditions	2012	2013	2014	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool
Medicare spending	Average total cost, risk adjusted, for Medicare beneficiaries, one chronic condition	Annual averages of all costs for Medicare beneficiaries with claim(s) indicating beneficiary is receiving service or treatment for one chronic condition	2012	2013	2014	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool
Medicare spending	Average total cost, risk adjusted, for Medicare beneficiaries, two chronic conditions	Annual averages of all costs for Medicare beneficiaries with claim(s) indicating beneficiary is receiving service or treatment for two chronic conditions	2012	2013	2014	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool
Medicare spending	Average total cost, risk adjusted, for Medicare beneficiaries, three or more chronic conditions	Annual averages of all costs for Medicare beneficiaries with claim(s) indicating beneficiary is receiving service or treatment for three or more chronic condition	2012	2013	2014	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Healthcare spending (cont.)						
Medicaid spending	Medicaid spending per enrollee, all enrollees	Average amount Medicaid spends per enrollee per year (includes all enrollees not just full benefit), all enrollees	FY 2011	FY 2012	FY 2013	Medicaid and CHIP Payment and Access Commission, MACSTATS
Medicaid spending	Medicaid spending per enrollee, child	Average amount Medicaid spends per enrollee per year (includes all enrollees not just full benefit), children	FY 2011	FY 2012	FY 2013	Medicaid and CHIP Payment and Access Commission, MACSTATS
Medicaid spending	Medicaid spending per enrollee, adult	Average amount Medicaid spends per enrollee per year (includes all enrollees not just full benefit), adults	FY 2011	FY 2012	FY 2013	Medicaid and CHIP Payment and Access Commission, MACSTATS
Medicaid spending	Medicaid spending per enrollee, disabled	Average amount Medicaid spends per enrollee per year (includes all enrollees not just full benefit), disabled	FY 2011	FY 2012	FY 2013	Medicaid and CHIP Payment and Access Commission, MACSTATS page
Medicaid spending	Medicaid spending per enrollee, aged	Average amount Medicaid spends per enrollee per year (includes all enrollees not just full benefit), aged	FY 2011	FY 2012	FY 2013	Medicaid and CHIP Payment and Access Commission, MACSTATS
Public and mental heatlh spending	Local public health spending, per capita	Per capita median of total annual expenditures for local health departments	2010	—	2013	National Association of County and City Health Officials
Public and mental heatlh spending	State public health funding, per capita	State public health budget funding per capita during the fiscal year. Dollar amounts represent state funding only.	2013	2014	2015	*Shortchanging America's Health 2005-2010, Investing in America's Health 2011-2016*, Trust for America's Health, as compiled by the Robert Wood Johnson Foundation DataHub
Public and mental heatlh spending	State mental health agency spending, per capita	State mental health agency per capita mental health services expenditures. Expenditures reflect spending in the state fiscal year.	2011	2012	2013	National Association of State Mental Health Program Directors Research Institute, Inc data, as compiled by Kaiser Family Foundation State Health Facts

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Access to care						
Coverage and affordability	Uninsured adults =	Percent of 18-64 year olds that are uninsured in the state.	2012	2013	2014	U.S. Census Bureau, American Community Survey
Coverage and affordability	Uninsured children	Percent of 0-17 year olds that are uninsured in the state.	2012	2013	2014	U.S. Census Bureau, American Community Survey
Coverage and affordability	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.	2013	2014	2015	Agency for Healthcare Research & Quality Medical Expenditure Panel Survey data as compiled by the Robert Wood Johnson Foundation DataHub
Coverage and affordability	Unable to see doctor due to cost =	Percent of adults who went without care because of cost in the past year.	2013	2014	2015	Behavioral Risk Factor Surveillance System
Primary care access	Without a usual source of care =	Percent of adults ages 18 and older who report they do not have at least one person they think of as their personal healthcare provider.	2013	2014	2015	Behavioral Risk Factor Surveillance System
Primary care access	Routine checkup	Percent of adults age 50 or older, in fair or poor health, or ever told they have diabetes or pre-diabetes, acute myocardial infarction, heart disease, stroke, or asthma who did not visit a doctor for a routine checkup in the past two years	2012	2013	2014	Behavioral Risk Factor Surveillance System as compiled by Commonwealth Fund Scorecard on State Health System Performance
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.	2007	—	2011-2012	National Survey of Children's Health as compiled by Commonwealth Fund Scorecard on State Health System Performance
Behavioral health	Unmet need for mental health treatment	Percent of adults ages 18 and older with past year mental illness who reported perceived need for treatment/counseling was not received.	2009-2011	—	2012-2014	Ohio Department of Mental Health and Addiction Services
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).	2011-2012	2012-2013	2013-2014	Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Access to care (cont.)						
Behavioral health	Youth with depression who did not receive mental health treatment	Percent of youth with major depressive episode who did not receive any mental health treatment.	2010-2011	—	2012-2013	Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, as compiled by Mental Health America
Oral health	Received dental care in past year, adults	Percent of 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	—	2014	Behavioral Risk Factor Surveillance System
Oral health	Received dental care in past year, children	Percent of 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	National Survey of Children's Health as compiled by the Kids Count data center (all states and OH). **Note:** Ohio Medicaid Assessment Survey Child Dashboard provides more recent data for Ohio
Workforce	Underserved, primary care physicians	Percent of need not met by current supply of primary care physicians in designated primary care health professional shortage areas.	04/2014	—	09/2016	Health Resources Services Administration
Workforce	Underserved, dentists	Percent of need not met by current supply of dentists in designated dental care health professional shortage areas.	04/2014	—	09/2016	Health Resources Services Administration
Workforce	Underserved, psychiatrists	Percent of need not met by current supply of psychiatrists in designated mental health care professional shortage areas.	04/2014	—	09/2016	Health Resources Services Administration

= Metrics are also examined in the 2017 *Dashboard* health equity profiles.

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
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	2015	Ohio Department of Mental Health and Addiction Services
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	2015	Ohio Department of Mental Health and Addiction Services
Hospital utilization	Diabetes with long-term complications	Admissions for Medicare beneficiaries with a principal diagnosis of diabetes with long-term complications per 100,000 beneficiaries, ages 18 years and older. Excludes obstetric admissions and transfers from other institutions.	2012	2013	2014	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities tool
Hospital utilization	Overall hospital readmission rate	This data was provided from the Ohio Hospital Association all-payer database to create all-cause, all-age, all-payer, all-hospital readmission rates. Subsequent admissions to other hospitals during the 30 days post discharge from an index admission within the collaborative are tracked using a deterministic model matching patient on date of birth, gender and zip code of residence.	2012	2013	2014	Ohio Hospital Association

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Healthcare system (cont.)						
Hospital utilization	Heart failure readmissions for Medicare beneficiaries =	Rate 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, all-cause, and per 100 index cases.	2012	2013	2014	Centers for Medicare and Medicaid Services, Mapping Medicare Disparities Tool
Hospital utilization	Avoidable emergency department visits for Medicare beneficiaries	Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries.	2011	2012	2013	J. Zheng, Harvard University, analysis of 2012 and 2013 Medicare Enrollment and Claims Data, as compiled by Commonwealth Fund Scorecard on State Health System Performance
Hospital utilization	Hospital admissions for asthma per 100,000 population, ages 2-17	Admissions for asthma per 100,000 population, ages 2-17	2011	2012	2013	Agency for Healthcare Research and Quality, State Snapshots
Preventive services	Breastfeeding support in hospitals	Average Maternity Practice in Infant Nutrtion and Care (mPINC) score among hospitals and birthing facilities to support breastfeeding. The score is the average across 7 categories of supports that hospitals and birth centers can provide for breastfeeding. Scores range from 0 to 100. 100 is the highest, best possible score.	2009	2011	2013	Centers for Disease Control and Prevention, National Survey of Maternity Practices in Infant Nutrition and Care, mPINC
Preventive services	Cancer early stage diagnosis, all	Percent of all cancer cases diagnosed at an early stage.	2007-2011	2008-2012	2009-2013	North American Association of Central Cancer Registries, 2009-2013 Cancer Incidence in North America monograph
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.	2007-2011	2008-2012	2009-2013	North American Association of Central Cancer Registries, 2009-2013 Cancer Incidence in North America monograph
Preventive services	Cancer early stage diagnosis, colon and rectal cancer cases	Percent of colon and rectal cancer cases diagnosed at an early stage.	2007-2011	2008-2012	2009-2013	North American Association of Central Cancer Registries, 2009-2013 Cancer Incidence in North America monograph
Preventive services	Flu vaccination	Percent of population ≥ 6 months old vaccinated for flu within the past year.	2012	2013	2014	Centers for Disease Control and Prevention, National Immunization Survey and Behavioral Risk Factor Surveillance System, FluVaxView interactive trend report

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Healthcare system (cont.)						
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.	2012	2013	2014	Centers for Disease Control and Prevention, Vital Statistics, WONDER
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.	—	—	2014	Centers for Disease Control and Prevention, Healthcare Associated Infections Progress Report
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.	4/1/2013 to 3/31/2014	—	10/1/2014 to 9/30/2015	Centers for Medicare and Medicaid Services, Hospital Compare
Timeliness, effectiveness and quality of care	Nursing home pressure sores	Percent of long-stay, high-risk nursing home residents impaired in bed mobility or transfer, comatose, or malnourished with pressure sores.	07/2012 - 03/2013	2013	2014	Centers for Medicare and Medicaid Services, Nursing Home Compare as compiled by the Commonwealth Fund Scorecard on State Health System Performance
Timeliness, effectiveness and quality of care	Patient experience, Medicare fee-for-service	Percent of Medicare fee-for-service patients 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.	2011	2013	2014	Agency for Healthcare Research and Quality, Center for Quality Improvement and Patient Safety, National Consumer Assessment of Healthcare Providers and Systems Benchmarking Database
Timeliness, effectiveness and quality of care	Patient experience, Medicare managed care	Percent of Medicare managed care patients 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.	2011	2013	2014	Agency for Healthcare Research and Quality, Center for Quality Improvement and Patient Safety, National Consumer Assessment of Healthcare Providers and Systems Benchmarking Database

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Healthcare system (cont.)						
Timeliness, effectiveness and quality of care	Mortality amenable to healthcare=	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.	2009-2010	2010-2011	2012-2013	Commonwealth Fund Scorecard on State Health System Performance

= Metrics are also examined in the 2017 *Dashboard* health equity profiles.

*Metric examined in 2017 *Dashboard* equity profiles was:

- Percent of women who completed a pregnancy in the last 12 months and who **did not** recieve prenatal care in the first trimester

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Public health and prevention						
Public health system and workforce	Comprehensiveness of public health system	Percent of population served by a comprehensive public health system, defined as those communities in which a broad array of the recommended public health activities are available in the community, AND in which a relatively broad range of organizations contribute to implementing these activities, AND/OR in which the local public health agency contributes relatively large share of the effort to implement these activities. Data were provided directly from the Systems for Action National Program Office. Ohio data is based upon a sample of 42 local health departments that completed the 2014 survey.	—	—	2014	Systems for Action National Program Office, National Longitudinal Survey of Public Health
Public health system and workforce	Local public health workforce	Median number of local health department FTEs per 100,000 population.	2010	—	2013	National Association of County and City Health Officials
Public health system and workforce	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.	2007	2011	2012	Association of State and Territorial Health Officials
Communicable disease control and environmental health	Chlamydia	Chlamydia rate per 100,000 population.	2013	2014	2015	Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, as compiled by America's Health Rankings
Health Promotion and Prevention	Youth marijuana use	Past-year initiation of marijuana use (used it for the first time), percent of youth ages 12-17	2012	2013	2014	National Survey on Drug Use and Health

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Public health and prevention (cont.)						
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.	2013	2014	2015	Centers for Disease Control and Prevention, Foodborne Online Outbreak Database
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). Data limitation: The primary source for this data is the National Immunization Survey (NIS). The NIS surveys a random sample of households and then, with parent permission, administers a questionnaire to the eligible child's vaccination provider to determine whether a child received the vaccinations recommeded by the Advisory Committee on Immunization Practices. The NIS is the best-available source of state-level information about child immunization coverage. However, NIS sample sizes are relatively small and the confidence intervals are relatively large. Results should be interpreted with caution.	2011	2012	2013	National Immunization Survey as compiled by Robert Wood Johnson Foundation DataHub
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.	—	—	2016	Centers for Disease Control and Prevention, Office of Public Health Preparedness and Response, and US Census population estimates
Health promotion and prevention	Cigarette tax	State cigarette excise tax rate. Note that Ohio's cigarette tax increased $0.35 in July 2015 to $1.60 (after this state data was compiled)	2013	2014	2015	Centers for Disease Control and Prevention, State Tobacco Activities Tracking and Evaluation System, as compiled by Robert Wood Johnson Foundation DataHub
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	—	FY 2017	American Lung Association, The State of Tobacco Control

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Public health and prevention (cont.)						
Health promotion and prevention	Seat belt use	Percent of front seat occupants using a seat belt.	2013	2014	2015	National Highway Traffic Safety Administration
Health promotion and prevention	Sales of opioid pain relievers	Kilograms of opioid pain relievers sold per 10,000 population, measured in morphine equivalents.	—	—	2010	Drug Enforcement Agency, as compiled by Trust for America's Health
Health promotion and prevention	Falls among older adults	Percent of adults age 65 and older who report having had a fall within the last 12 months.	—	—	2014	Behavioral Risk Factor Surveillance System, as compiled by America's Health Rankings Senior Report
Health promotion and prevention	Safe sleep	Percent of infants most often laid on his or her back to sleep.	2009	—	2011	Centers for Disease Control and Prevention, Pregnancy Risk Assessment Monitoring System
Health promotion and prevention	Low birth weight	Percent of live births where the infant weighed less than 2.500 grams.	2012	2013	2014	Centers for Disease Control and Prevention, Vital Statistics, National Vital Statistics System, WONDER
Health promotion and prevention	Teen birth rate	Rate per 1,000 births to females 15-19 years of age	2013	2014	2015	Centers for Disease Control and Prevention, Vital Statistics, National Vital Statistics Reports

= Metrics are also examined in the 2017 *Dashboard* health equity profiles.

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Social and economic environment						
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%.	2010-2012	2011-2013	2012-2014	U.S. Census Bureau, American Community Survey, as compiled by Kids Count Data Center
Education	*Fourth-grade reading	Percent of fourth graders proficient in reading by a national assessment (NAEP)	2011	2013	2015	U.S. Department of Education, National Assessment of Educational Progress, as compiled by Kids Count Data Center
Education	*High school graduation	Percent of incoming 9th graders who graduate in 4 years from a public high school with a regular degree (using the Adjusted Cohort Graduation Rate)	2012-2013	2013-2014	2014-2015	Institute of Education Sciences, National Center for Education Statistics
Education	Some college	Percent of adults ages 25-44 with some post-secondary education	2012	2013	2014	U.S. Census Bureau, American Community Survey, as compiled by County Health Rankings 2016 edition
Employment and Poverty	Income inequality	The ratio of median household income at the 80th percentile to that at the 20th percentile.	—	—	2014	U.S. Census Bureau, American Community Survey, as compiled by America's Health Rankings 2015 edition
Employment and poverty	Unemployment	Annual average unemployment rate, ages 16 and older	2013	2014	2015	Bureau of Labor Statistics
Employment and poverty	Labor force participation rate	The labor force participation rate represents the percentage of the non-institutionalized population ages 16 and older that is either employed (full- or part-time) or unemployed (i.e., actively seeking work and able to work). People who are not the in the labor force do not have jobs and are not actively looking for work, including, for example, students, retirees, and individuals with family responsibilities that keep them from working (e.g. stay-at-home parents and other familial caregivers).	2013	2014	2015	Bureau of Labor Statistics
Employment and poverty	Child poverty	Percent of persons under age 18 who live in households at or below the poverty threshold (≤100% FPG)	2013	2014	2015	U.S. Census Bureau, American Community Survey, poverty status in the past 12 months
Employment and poverty	Adult poverty	Percent of persons age 18+ who live in households at or below the poverty threshold (≤100% FPG)	2013	2014	2015	U.S. Census Bureau, American Community Survey, poverty status in the past 12 months

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Social and economic environment (cont.)						
Family and social support	Low-income working families with children	The share of families that met three criteria: (1) the family income was less than twice the federal poverty level; (2) at least one parent worked 50 or more weeks during the previous year; (3) there was at least one "own child" under age 18 in the family.	2012	2013	2014	U.S. Census Bureau American Community Survey, as compiled by Kids Count Data Center
Family and social support	Adult incarceration	Imprisonment rate of sentenced prisoners under the jurisdiction of state or federal correctional authorities, per 100,000 residents.	2012	2013	2014	U.S. Bureau of Justice Statistics
Family and social support	Social capital and cohesion	Composite measure that includes connections with neighbors, supportive neighborhoods, voter turnout, and volunteerism	2013	2014	2015	National Health Security Preparedness Index
Trauma, toxic stress and violence	Child abuse and neglect	Rate of child maltreatment victims per 1,000 children in population	2012	2013	2014	Administration for Children and Families
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	—	—	2011-2012	National Survey of Children's Health
Trauma, toxic stress and violence	Violent crime	Violent crime rate per 100,000 inhabitants (murders, rapes, robberies, and aggravated assaults)	2011	2012	2013	National Incident-Based Reporting System/Uniform Crime Reporting, Federal Bureau of Investigation as compiled by America's Health Rankings 2015 edition

(=) Metrics are also examined in the 2017 *Dashboard* health equity profiles.

* Metrics examined in 2017 *Dashboard* equity profiles were:
- Percent of fourth graders **not** proficient in reading by a national assessment
- Percent of incoming ninth graders who **did not** graduate in four years from a public high school with a regular degree

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Physical environment						
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 (PM2.5)	2010 - 2012	2011-2013	2012 - 2014	U.S. Environmental Protection Agency, as compiled by America's Health Rankings 2015 edition
Air, water and toxic substances	Children exposed to second-hand smoke =	Percent of children who live in a home where someone uses tobacco and smokes inside the home	2007	—	2011-2012	National Survey of Children's Health
Air, water and toxic substances	Safe drinking water	Percent of population exposed to water exceeding a violation limit during the past year	FY 2012-2013	—	FY 2013-2014	US EPA Safe Drinking Water Information System, as compiled by County Health Rankings
Air, water and toxic substances	Fluoridated water	Percent of the population served by a community water system with optimally fluoridated water	2010	2012	2014	Centers for Disease Control and Prevention, Water Fluoridation Reporting System
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.	2012	2013	2014	U.S. Environmental Protection Agency, Toxic Release Inventory; and American Community Survey
Air, water and toxic substances	Lead poisoning	Percent of young children with elevated blood lead levels (BLL > 5 ug/dL)	2012	2013	2014	Ohio Department of Health, Lead Test Results (Venous), 2010-2014, as compiled by the Kirwan Institute.
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	—	—	2011	U.S. Department of Agriculture, Food Environment Atlas, as compiled by County Health Rankings 2016 edition
Food access and food insecurity	Food insecurity	Percent of households that are food insecure	2011-2013	2012-2014	2013-2015	U.S. Census Bureau, Current Population Survey

Subdomain	Metric	Metric Description	Base year	Mid-year	Most recent year	Source
Physical environment (cont.)						
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	2007-2011	2008-2012	U.S. Department of Housing and Urban Development, as compiled by County Health Rankings 2016 edition
Housing, built environment and access to physical activity	Access to exercise opportunities	Percent of individuals in who live reasonably close to a location for physical activity, defined as parks or recreational facilities	2010 & 2012	2010 & 2013	2010 & 2014	Business Analyst, Delorme map data, ESRI, & U.S. Census Tigerline Files, as compiled by County Health Rankings 2016 edition
Housing, built environment and access to physical activity	Alternative commute modes	Percent of trips to work via bicycle, walking, or mass transit (combined)	2013	2014	2015	U.S. Census Bureau, American Community Survey
Housing, built environment and access to physical activity	Neighborhood safety (=)	Percent of parents who report their children are living in a safe neighborhood	2003	2007	2011-2012	National Survey of Children's Health
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.	—	—	2016	Ohio Department of Transportation (numerator) and Common Core Data Institute of Education Sciences (denominator)
Housing, built environment and access to physical activity	Bike and pedestrian infrastructure	Per capita federal transportation funding obligated to bike and/or pedestrian projects (Average annual spending per capita on bike/ped projects, FY 2006-08, 2009-11, 2012-14)	2006-2008	2009-2011	2012-14	Alliance for Biking and Walking 2016 Benchmarking Report
Housing, built environment and access to physical activity	Residential segregation (=)	Black-White dissimilarity index for Ohio's biggest metro areas (Columbus, Cleveland, Cincinnati, Toledo, Akron, Dayton)	—	—	2010-2014	U.S. Census Bureau, American Community Survey, as compiled by the Kirwan Institute

(=) Metrics are also examined in the 2017 *Dashboard* health equity profiles.