

Kentucky County Healthcare Profiles

Boyle County—Health Indicators

Winter 2014 Update

In 2012, the employment share of the healthcare industry in Boyle County was 21.1%. Healthcare was the first largest industry employer in the county with 2,908 workers. Also in 2012, the healthcare industry brought in 16.0% (\$169,243,925) of the county's gross product.

| Health Outcomes | Boyle County | Bluegrass ADD* | Kentucky |
|--|--------------|----------------|----------|
| Premature death (years of potential life lost per 100,000 population) | 7,543 | 7,699 | 8,768 |
| Percent of adults reporting poor or fair health | 15.2% | 4.8% | 21.4% |
| Average number of poor physical health days in the past 30 days | 4 | 2 | 5 |
| Average number of poor mental health days in the past 30 days | 5 | 1 | 4 |
| Percent of babies born with low birth weight (less than 2,500 grams) | 8.8% | 9.0% | 9.1% |
| Percent of adults with Diabetes | 12.1% | 10.5% | 11.6% |
| HIV prevalence rate (per 100,000 population) | 83 | 27 | 140 |
| Age-adjusted mortality (per 100,000 population, if under age 75) | 402 | 389 | 445 |
| Child mortality (per 100,000 population) | n/a | 16 | 65 |
| Infant mortality (per 100,000 population) | n/a | 146 | 710 |
| Health Behaviors | | | |
| Percent of adults who smoke regularly | 22.3% | 6.4% | 26.4% |
| Percent of adults who are obese (BMI greater than or equal to 30) | 31.2% | 31.8% | 32.9% |
| Percent of adults who are physically inactive | 30.6% | 29.4% | 31.5% |
| Percent of adults who drink excessively (heavy or binge) | 7.3% | 2.8% | 11.5% |
| Motor vehicle crash deaths (per 100,000 population) | 17 | 16 | 20 |
| STDs: Chlamydia rate (per 100,000 population) | 485 | 421 | 377 |
| Teen birth rate (per 1,000 females ages 15-19) | 42 | 43 | 50 |
| Access to Care | | | |
| Percent uninsured (under age 65 without health insurance) | 18.3% | 18.2% | 17.5% |
| Percent of uninsured adults | 22.5% | 22.3% | 21.8% |
| Percent of uninsured children | 7.5% | 7.1% | 6.7% |
| Percent of adults reporting they could not see a doctor due to cost | 13.8% | n/a | 17.0% |
| Rate of preventable hospital stays (per 1,000 Medicare enrollees) | 90 | 70 | 103 |
| Percent of diabetics that receive HbA1c screenings | 83.1% | 86.4% | 83.8% |
| Percent of women receiving mammography screenings | 57.7% | 64.1% | 61.7% |
| Physical Environment | | | |
| Pollution: Average daily measure of fine particulate matter (micrograms per cubic meter) | 13 | 13 | 13 |
| Drinking water safety: Percent of the population exposed to water exceeding a violation limit in the past year | 4.4% | 10.6% | 10.9% |
| Rate of recreational facilities (per 100,000 population) | 11 | 10 | 8 |
| Percent of the population that lives within half a mile of a park | 17.0% | 6.4% | 24.0% |

In your county:

12.1%

of adults have diabetes

22.3%

of adults are regular smokers

31.2%

of adults are obese

22.5%

of adults &

7.5%

of children are without health insurance

*Area Development District

Source: County Health Rankings, 2013. See Insights for specific years of each indicator.

Number of providers per 1,000 population:

Primary Care Physicians: 1.47

Dentists: 0.65

Mental Health Providers: 2.41

| | |
|-------------------------------|-------|
| Supply of Physicians | 115 |
| Primary Care Physicians (PCP) | 42 |
| Specialist Physicians | 73 |
| Percent Physicians over 65 | 7.0% |
| Percent Kentucky trained | 52.2% |
| Percent Foreign trained | 17.4% |
| PCP who Accept Medicaid | 27 |

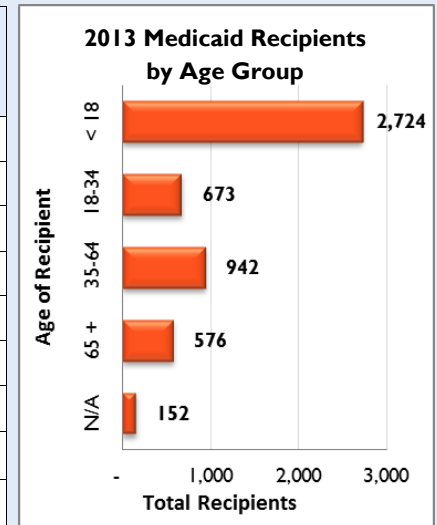
| Healthcare Providers | 2012 | | | 2017 | |
|---------------------------|--------|------|------|------|------|
| | Supply | Need | Gap | Need | Gap |
| Physicians | 115 | 75 | -40 | 76 | -39 |
| Physician Assistants | 10 | 6 | -4 | 6 | -4 |
| Nurse Practitioners | 19 | 11 | -8 | 12 | -7 |
| Registered Nurses | 533 | 229 | -304 | 233 | -300 |
| Licensed Practical Nurses | 165 | 61 | -104 | 62 | -103 |
| Nurse Aides | 371 | 119 | -252 | 121 | -250 |
| Dentists | 19 | 14 | -5 | 14 | -4 |
| Mental Health Providers | 69 | 53 | -16 | 54 | -15 |
| Optometrists | 4 | 5 | 1 | 5 | 1 |

Source: KY Health Benefit Exchange & Deloitte, 2012

Source: KY Health Benefit Exchange & Deloitte, 2012

| NAICS Health Sector | 2008 Jobs | 2013 Jobs | 2023 Projected Jobs | 2013 Establishments |
|---|-----------|-----------|---------------------|---------------------|
| Offices of Physicians | 334 | 413 | 598 | 40 |
| Offices of Dentists | 122 | 126 | 168 | 16 |
| Offices of Other Health Practitioners | 80 | 82 | 155 | 18 |
| Outpatient Care Centers | 90 | 111 | 114 | 8 |
| Medical & Diagnostic Laboratories | 0 | 0 | <10 | 2 |
| Home Health Care Services | 125 | 202 | 357 | 7 |
| General Medical & Surgical Hospitals | 1,324 | 1,156 | 1,261 | 1 |
| Psychiatric & Substance Abuse Hospitals | 0 | 0 | 0 | 0 |
| Specialty Hospitals (not Psychiatric & Substance Abuse) | 0 | 0 | 0 | 0 |
| Average Earnings Per Worker (2013) | \$51,339 | | | |

Source: EMSI, 2013

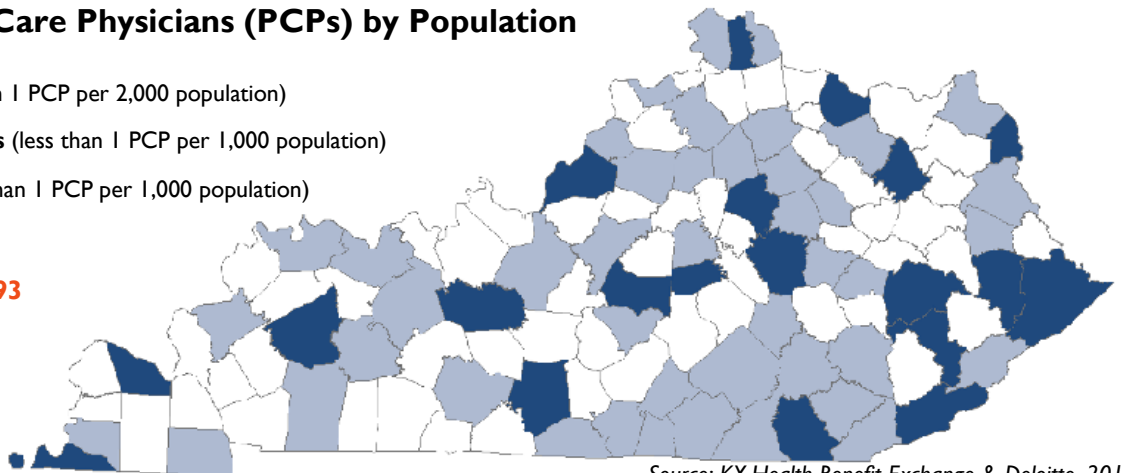


Source: KY Cabinet for Health and Family Services, 2013

Access to Primary Care Physicians (PCPs) by Population

- Low Access** (less than 1 PCP per 2,000 population)
- Intermediate Access** (less than 1 PCP per 1,000 population)
- High Access** (more than 1 PCP per 1,000 population)

In 2012, Kentucky had .93 primary care physicians per 1,000 population.



Source: KY Health Benefit Exchange & Deloitte, 2012

Kentucky County Healthcare Profiles

Insights for Data Interpretation

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CEDIK's Healthcare Profile is comprised of three major parts. The first page is an overview of selected Health Indicators, while the second page offers a closer look at the Healthcare Industry and Healthcare Access. This short overview provides additional clarification to the selected measures in the profile.

Health Indicators

The first page begins with a statement on the status of the Healthcare Industry in the county, based on three criteria: the share of total county employment share in the healthcare industry, the rank of the healthcare industry relative to all other industries in county based on employment, and the percent (and dollar amount) that the healthcare industry brings to the county's gross product. For most counties, the healthcare industry ranks in top five industries in that county. The source of data is Economic Modeling Specialists Inc. (EMSI).

The table on the first page provides data on selected health indicators grouped into four categories: Health Outcomes, Health Behaviors, Access to Care, and Physical Environment. Numbers are provided for the county, Area Development District (ADD), and Kentucky. The source of the data and description for the Health Indicators is County Health Rankings for the year 2013. However, individual indicators themselves come from different years (see County Health Rankings Sources table below).

First, the Health Outcomes indicators include variables such as premature death, age-adjusted mortality, and percent of adults with diabetes. The premature death is measured in the number of years of potential life lost before the age of 75. For example, if a person died at age 50, then that person contributes 25 years to a county's premature death number. Next, the age-adjusted mortality rate (for residents under 75 years old) is a standard way of reporting the mortality rate so that counties with a younger population can be compared to those with an older population more fairly. The age-adjusted mortality rate reports the average mortality rate if all Kentucky counties had the same age distribution in

their populations. Please note that premature death, HIV prevalence rate, age-adjusted mortality, child mortality and infant mortality are reported as a rate per 100,000 population. Of course, most counties have far less than 100,000 residents, but the data are reported this way because the amounts are very small.

Second, the measures under Health Behavior are important markers of risky health behaviors that affect the community and the healthcare system in a county, ADD, or the state. Each one of these indicators increases the risk of various diseases and of premature death. Third, Access to Care indicators include the percent of people, adults, and children that are uninsured, and the percent of adults that could not see a doctor due to cost. These measures indicate a barrier in accessing needed health care. Finally, the table reports indicators of the county's Physical Environment, which are important for promoting public health.

Industry Indicators

The top of the second page reports the number of healthcare providers in the county, including physicians, dentists, mental health providers, and six other professions. The data show the supply, need, and gap for 2012, and the projected need and gap for 2017. The gap of healthcare providers is calculated as the difference between need and supply. If for a given occupation the need is greater than the supply, then the gap is positive—the county requires more providers for that occupation than it currently has. Likewise, if the supply is greater than the need for a given occupations, then the gap is negative; in this case, the county has an excess of providers for that occupation given the size of its population.

To the left of the primary table, the 2012 supply of physicians is unpacked into number of primary care physicians (PCP) and specialist physicians. The percent of physicians over 65 and percent of physicians that are trained in Kentucky or abroad are also reported. The upper-left corner reports the number of providers for 1,000 people for PCPs, dentists, and mental health

providers. These three healthcare occupations are used to designate Health Professional Shortage Areas (HPSA) and medically underserved populations (MUPs) by the U.S. Department of Health and Human Resources. In 2013, there were approximately 5,800 PCP HPSAs, 4,600 Dental HPSA, and 3,700 Mental Health HPSAs in the United States. For both of these tables at the top of the second page, the data source is a study implemented by the Kentucky Health Benefit Exchange and Deloitte in 2012 called the “Kentucky Health Care Workforce Capacity Report,” which painstakingly verified data from the Kentucky Board of Medical Licensure and similar boards to ensure accuracy.

The left table in the middle section of the second page reports the total number of jobs for 2008, 2013, and projections for 2023. It also includes the number of health sector establishments and average earnings per worker in 2013 for the main healthcare subsectors. These subsectors are based on 4-digit codes of the North American Industry Classification System (NAICS) for the county. For information on NAICS, please see the Insights for CEDIK’s Economic Profile. The data source for this section is EMSI.

Healthcare Access

The bar graph on the right provides information about Medicaid recipients by age group for the county. Data come from the Kentucky Cabinet for Health and Family Services/Department of Medicaid Services as of July 2013. Whereas Medicare is a federally run insurance program for people over 65 and younger disabled and dialysis patients, Medicaid is a federal-state assistance program in which medical bills are paid from federal, state and local tax funds. In Kentucky as of 2014, children aged 0-1 are eligible for Medicaid if they live in a household below 195% of the federal poverty level (FPL), and other children aged 1-18 are eligible if below 159% of the FPL. Additionally, pregnant women are eligible for Medicaid if in a household below 195% of the FPL, while parents and other adults are eligible if below 133% of the FPL.

However, keep in mind that this figure shows Medicaid recipients in the county, and that there are likely others who are eligible but are not recipients.

Finally, the profile ends with a Kentucky map of Access to Primary Care Physicians (PCP) by population. The map was constructed using the same ratio provided in the upper-left corner of the number of PCPs per 1,000 population. A darker color on the map indicates higher access to PCPs. The 2012 rate of PCP per 1,000 people for the state of Kentucky is also provided on the map. All of the High Access counties have higher than average access to PCPs for the state, while all of the Low Access and most of the Intermediate Access have lower than average access to PCPs for the state.

References:

- County Health Rankings for Health Indicators, retrieved from <http://www.countyhealthrankings.org/app/kentucky/2013/rankings/outcomes/overall/by-rank>
- Economic Modeling Specialists Inc. (EMSI) for Employment Data, retrieved from <http://www.economicmodeling.com/>
- KY Cabinet for Health and Family Services/Department of Medicaid Services for Medicaid Data, retrieved from <http://chfs.ky.gov/dms/stats.htm>
- KY Health Benefit Exchange and Deloitte 2012 Report for Provider Data, retrieved from <http://healthbenefitexchange.ky.gov/Pages/Kentucky-Health-Care-Workforce-Capacity-Report.aspx>
- “What is the difference between Medicare and Medicaid?” US Department of Health & Human Services, retrieved from <http://answers.hhs.gov/questions/3094>
- “Medicaid and CHIP Eligibility Levels”, Center for Medicare & Medicaid Services, retrieved from <http://www.medicaid.gov/AffordableCareAct/Medicaid-Moving-Forward-2014/Medicaid-and-CHIP-Eligibility-Levels/medicaid-chip-eligibility-levels.html>

Data Sources:

(see table on next page)

Data retrieved from County Health Rankings at www.countyhealthrankings.org, a collaboration between Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute

| Health Outcomes | Original Source | Year |
|--|---|-------------|
| Premature death (years of potential life lost per 100,000 population) | National Center for Health Statistics | 2008-2010 |
| Percent of adults reporting poor or fair health | Behavioral Risk Factor Surveillance System | 2005-2011 |
| Average number of poor physical health days in the past 30 days | Behavioral Risk Factor Surveillance System | 2005-2011 |
| Average number of poor mental health days in the past 30 days | Behavioral Risk Factor Surveillance System | 2005-2011 |
| Percent of babies born w/ low birth weight (less than 2,500 grams) | National Center for Health Statistics | 2004-2010 |
| Percent of adults with diabetes | National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation | 2009 |
| HIV prevalence rate (per 100,000 population) | National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention | 2009 |
| Age-adjusted mortality (per 100,000 population, if under age 75) | CDC WONDER mortality data | 2008-2010 |
| Child mortality (per 100,000 population) | CDC WONDER mortality data | 2007-2010 |
| Infant mortality (per 100,000 population) | CDC WONDER mortality data | 2006-2010 |
| Health Behaviors | Original Source | Year |
| Percent of adults who smoke regularly | Behavioral Risk Factor Surveillance System | 2005-2011 |
| Percent of adults who are obese (BMI greater than or equal to 30) | National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation | 2009 |
| Percent of adults who are physically inactive | National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation | 2009 |
| Percent of adults who drink excessively (heavy or binge) | Behavioral Risk Factor Surveillance System | 2005-2011 |
| Motor vehicle crash deaths (per 100,000 population) | National Center for Health Statistics | 2004-2010 |
| STDs: Chlamydia rate (per 100,000 population) | National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention | 2010 |
| Teen birth rate (per 1,000 females ages 15-19) | National Center for Health Statistics | 2004-2010 |
| Access to Care | Original Source | Year |
| Percent uninsured (under age 65 without health insurance) | Small Area Health Insurance Estimates | 2010 |
| Percent of uninsured adults | Small Area Health Insurance Estimates | 2010 |
| Percent of uninsured children | Small Area Health Insurance Estimates | 2010 |
| Percent of adults that could not see a doctor due to cost | Behavioral Risk Factor Surveillance System | 2005-2011 |
| Rate of preventable hospital stays (per 1,000 Medicare enrollees) | Dartmouth Atlas of Health Care | 2010 |
| Percent of diabetics that receive HbA1c screenings | Dartmouth Atlas of Health Care | 2010 |
| Percent of women receiving mammography screenings | Dartmouth Atlas of Health Care | 2010 |
| Physical Environment | Original Source | Year |
| Pollution: Average daily measure of fine particulate matter (micrograms per cubic meter) | CDC WONDER Environmental data | 2008 |
| Drinking water safety: Percent of the population exposed to water exceeding violation limit in the past year | Safe Drinking Water Information System | 2012 |
| Rate of recreational facilities (per 100,000 population) | County Business Patterns | 2010 |
| Percent of the population that lives within half a mile of a park | Environmental Public Health Tracking Network | 2010 |