





An Illinois Health Care Report Card

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Recent national and state legislation has embodied efforts to reform and improve health care, focusing on objectives of access, cost, and outcomes. Researcher D.M. Berwick and others¹ have defined this refined focus as the triple aim of improving the experience of care, the health of populations, and reducing per capita costs of health care. Another way to put it would be delivering the right care in the right place to the patient at the right time.

To achieve the triple aim in either manner for the citizens of Illinois, it is necessary to account for existing health resources and care trends so areas of opportunity and improvement can be identified. This brief report highlights key pieces of information and resources to classify basic health care usage trends and disparities in our state.

Health Care: The Basics for Illinois

Illinois had 189 community hospitals in 2009, the last year for complete data collection in this category, down from 196 a decade earlier.² These hospitals provided 33,900 hospital beds, addressing 1,558,000 hospitalizations in 2009. The average hospital daily census was 21,300 with an average cost per day of \$1,948. There were also 32.1 million outpatient visits at health care sites in Illinois during the same year adding to the cost and resource needs necessary to drive care for the residents of the state.

Health Care Quality Comparing Illinois to Other States

The Agency for Healthcare Research and Quality (AHRQ) compiles state-specific reports of health care quality.³ This scorecard defines five categories—very weak, weak, average, strong and very strong—based on the number of points for each health-related measure that is better than average, average,



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or worse than average. State-level information is based on data collected for the National Healthcare Quality Report (NHQR). Points are added together into a national and regional meter score. An aggregate score of less than 20 is defined as very weak, a score between 21 and 40 is weak, a score between 41 and 60 is average, a score between 61 and 80 is defined as strong, and a score greater than 80 is very strong.

Overall, health care quality in Illinois was rated as average.⁴ Illinois was weak in preventive and chronic care measures and average in acute care measures. Notably, when evaluating measures by setting of care, Illinois was very strong in home health care measures, average in hospital care measures and weak in nursing home care and ambulatory care measures.

When viewing care by clinical area, heart disease and maternal and child measures were average, whereas diabetes measures were weak and cancer and respiratory disease measures were rated very weak. The

¹ Berwick DM, Nolan TW, Whittington J. *Health Affairs* 27:759-69, 2008.

² Health Forum, *AHA Hospital Statistics 2011 Edition*, An American Hospital Association Company, Chicago, IL.

³ <http://state.snapshots.ahrq.gov/snaps10/Methods.jsp?menuId=67&state=#allstates>, last accessed Dec. 5, 2011.

⁴ <http://state.snapshots.ahrq.gov/snaps10/dashboard.jsp?menuId=4&state=IL&level=0>, last accessed Dec. 1, 2011.

Table 1

2010 National Healthcare Quality Report: Illinois Ranking Select Measures

Measure	Definition	All-States Average	Illinois Rate	Illinois Rank
Cancer				
Breast cancer deaths	Breast cancer deaths/100,000 female population	22.7	24.6	41
Colorectal cancer deaths	Colorectal cancer deaths/100,000 population/year	6.8	19	42
Diabetes				
Diabetes with flu shots	Percentage of non-institutionalized high-risk adults ages 18-64 with diabetes who had influenza immunization in the past year	47.0	33.2	50
End Stage Renal Disease				
Adequate dialysis	Percentage of adult hemodialysis patients with adequate dialysis	96.2	95.5	26
Timeliness				
Heart attack - PCI in 90 minutes	Percentage of hospital patients with heart attack who received percutaneous coronary intervention (PCI) within 90 minutes of arrival	82.4	80	32
Always got appointment for illness/injury/condition - adults on Medicare managed care	Percentage of adults who needed care right away for an illness, injury, or condition in the last 12 months who got care as soon as wanted, Medicare managed care	69.7	68.3	31
Heart Disease				
Heart attack - ACEI or ARB at discharge	Percentage of hospital patients with heart attack and left ventricular systolic dysfunction prescribed ACE inhibitor or ARB at discharge	94.1	93.7	31
Heart failure - recommended care received	Percentage of hospital patients with heart failure who received recommended hospital care	95.3	95.8	16

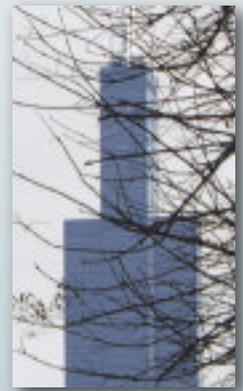
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most recently reported data for diabetes noted a hospitalization rate for diabetic complications of 249 per 100,000 people in Illinois whereas the hospitalization for diabetic complications was 237 per 100,000 for the Midwest and 238 per 100,000 for the United States in general.⁵ Steps that improve hemoglobin A1C (HbA1C) levels, a measure of blood glucose control, can help to reduce health care costs as demonstrated in one model evaluating excess costs associated with diabetes for state government employees. If the state of Illinois' employees and dependents were able to reduce HbA1C values by 0.5 percent, then spending on diabetes care for state government employees might be reduced by approximately \$1 million per year and excess costs due to lost productivity among employees with diabetes could be reduced by \$11.8 million per year.^{6,7} If state employees and dependents were able to reduce HbA1C values by 1 percent, then spending on diabetes care for state government employees might be

reduced by approximately \$1.9 million per year and excess costs due to lost productivity among employees with diabetes could be reduced by \$21.6 million per year.

Additional Health Measures

Illinois ranked 41st and 42nd among the 50 states in deaths from breast cancer and colorectal cancer in 2010 (Table 1). Illinois was ranked 31st when examining the percentage of Medicare patients [68.3 percent] who received an appointment for an injury/illness and 32nd for the percentage of hospital patients with a heart attack who received a percutaneous coronary intervention (PCI) within 90 minutes of arrival [80 percent]. Illinois' strongest measures were in improving medication management for home health care and improving pain management for ambulatory patients at home. Illinois had also previously scored high in following patients' wishes in hospital care and with low rates of collapsed lungs among



⁵ <http://state.snapshots.ahrq.gov/snaps10/diabetes.jsp?menuId=26&state=IL&level=10>, last accessed Dec. 5, 2011.

⁶ <http://state.snapshots.ahrq.gov/snaps10/diabetes.jsp?menuId=29&state=IL&level=11&page=2>, last accessed Dec. 1, 2011.

⁷ Gilmer, T.P.; O'Connor, P.J.; Rush, W.A.; Crain, A.L.; Whitebird, R.R.; Hanson, A.M.; Solberg L.I. *Diabetes Care*, 28:59-64, 2005.



Kendall, DuPage, Woodford, and McHenry Counties were ranked 1, 2, 3 and 4 as the healthiest of the 102 counties in Illinois.

⁸ <http://www.countyhealthrankings.org/illinois>, last accessed Nov. 27, 2011.

Table 1. (Continued)

2010 National Healthcare Quality Report: Illinois Ranking Select Measures

Measure	Definition	All-State Average	Illinois Rate	Illinois Rate
Maternal and Child Health				
Children fully vaccinated	Percentage of children ages 19-35 months who received all recommended vaccines (4:3:1:3:3)	77.7	78.1	22
Mental Health and Substance Abuse				
Suicide deaths	Suicide deaths/100,000 population	10.7	8.5	6
Respiratory Diseases				
Pneumonia vaccine ever - age 65 plus	Percentage of adults ≥65 who ever received a pneumococcal vaccination	67.6	57.2	50
Pneumonia - recommended hospital care received	Percentage of hospital patients with pneumonia who received recommended hospital care	90.4	89	34
HIV and AIDS				
HIV deaths	HIV infection deaths /100,000 population	2.6	2.3	14
Patient Safety				
Inpatient surgery - appropriate antibiotic timing	Percentage of adult surgery patients who received appropriate timing of antibiotics	91.9	91.7	26
Supportive and Palliative Care				
Nursing home long-stay residents - physically restrained	Percentage of long-stay nursing home residents physically restrained	3.4	3.4	26
Nursing home long-stay residents - low-risk with pressure sores	Percentage of low-risk long-stay nursing home residents with pressure sores	2.0	2	14
Functional Status Preservation and Rehabilitation				
Home health care - improved mobility	Percentage of home health care patients who improve ambulation or mobility	44.3	43.3	31
Patient Centeredness				
Always had good communication with providers - adults on Medicare managed care	Percentage of adults who had a doctor's office or clinic visit in the last 12 months whose health providers always listened carefully, explained things clearly, respected what they had to say, and spent enough time with them.	75.4	76.4	17

Source: Adapted from the Illinois 2010 National Healthcare Quality Report Ranking on Selected Measures, <http://statesnapshots.ahrq.gov/snaps10/staterankings.jsp?menuId=61&state=IL>, last accessed November 29, 2011.

hospitalized patients (iatrogenic pneumothorax). Illinois performed weakest in providing vaccination against the most common cause of community-acquired pneumonia (pneumococcal vaccine) to nursing home residents and to individuals over the age of 65, as well as providing influenza vaccination to individuals over 65 and diabetics.

A Deeper Dive: County Health Rankings

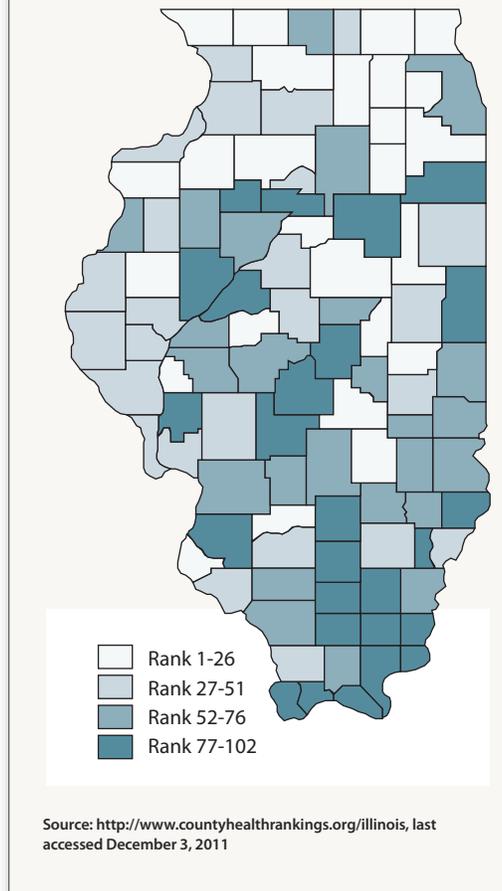
The County Health Rankings⁸ take a deeper view of health in individual counties in Illinois. These rankings are based on a model of population health emphasizing many factors that, if improved, could help make communities healthier places to live, learn,

work and play. Counties in all 50 states are ranked according to various health measures, relative to the health of other counties in the same state based on health outcomes and health factors. Health outcomes are equally weighted between a length of life measure (premature death before the age of 75) and quality of life measures (low birth weight, very low birth weight, gestational age, and health-related quality of life, morbidity). Health factors weigh a set of four factors, including health behaviors (30 percent: tobacco use, diet, exercise, alcohol use, unsafe sexual activity); clinical care (20 percent: access to care, quality of care); social and economic (40 percent: education, employment, income, family and social support, community safety); and physical environment (10 percent: environmental quality, built environment).

Kendall, DuPage, Woodford, and McHenry Counties were ranked 1, 2, 3 and 4 as the healthiest of the 102 counties in Illinois.

Despite a 21 percent rate of adult smoking, a 25 percent rate of adult obesity, a 26 percent rate of excessive drinking, and a primary care physician-to-patient ratio of 2,360:1, individuals in Kendall County were screened at higher than the national average for diabetes and mammography testing, and had markedly fewer preventable hospital stays compared to the national average (Figure 1). They also had access to healthy foods and access to recreational facilities at rates greater than the national average. When looking at health factors in aggregate, DuPage, Monroe, Kendall, and Lake Counties were ranked 1, 2, 3 and 4 (Figure 2). DuPage, Lake and Monroe counties scored highest with regard to health behaviors. Sangamon and Peoria counties had the highest ranking focused on clinical care, while DuPage and Monroe counties were ranked first and second when considering social and economic factors that affect health. Finally, Putnam and Ford counties were the Top Two in terms of physical environment factors.

Figure 1
County Health Rankings for Illinois—
Health Outcomes



A Focus on Inpatient Care and Emergency Care

The Illinois Hospital Report Card and Consumer Guide to Health Care⁹ provides health consumers with information about the quality of health care in Illinois. This information provides an overview of each hospital environment in the state, including name, address, state designated services such as neonatology, and the patient insurance mix from the previous fiscal year. The report and guide also includes information delineating process-of-care measures and quality-of-care measures, patient safety, patient satisfaction, additional services provided by the health care entity and staffing ratios, as well as pediatric services.

Additionally, the Illinois Public Health Community Map,¹⁰ supported by data



Putnam and Ford counties were the Top Two in terms of physical environment factors.

⁹ <http://www.healthcarereportcard.illinois.gov>, last accessed Dec. 2, 2011.

¹⁰ http://www.healthcarereportcard.illinois.gov/map_info, last accessed Dec. 2, 2011.



In the area of emergency department care deemed preventable or avoidable, four counties in the state exceeded the 95th percentile.

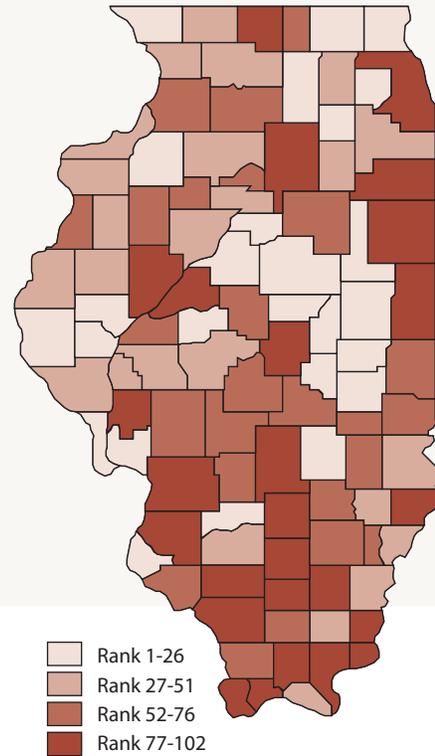
from the Illinois Hospital Report Card and Consumer Guide to Health Care, focuses on access to health care with data related to potentially preventable hospitalizations and emergency department use. The map references various health conditions and reports admission rates to hospitals. For instance, asthma is a common reason for hospitalization and emergency room visits. The statewide rate for asthma-related hospitalization is 153.8 per 100,000 population. However, only five counties—Cook, Kankakee, Marion, Pope and Hardin—have asthma-related admission rates significantly worse than the statewide benchmark. Notably, the statewide rate of admission for chronic obstructive pulmonary disease (COPD) is 224.53 per 100,000. In contrast to asthma, however, 44 counties have COPD admission rates that exceed the statewide benchmark.

Long-term complications of diabetes mellitus also account for 115.59 admissions per 100,000. Only Cook, Winnebago, Macon, St. Clair, Marion and Jefferson counties perform significantly worse than the statewide rate. Other conditions evaluated as potentially preventable admissions include perforated appendix, dehydration, urinary tract infections, hypertension, angina, congestive heart failure, uncontrolled diabetes, lower extremity amputations, short-term complications of diabetes mellitus, and bacterial pneumonia.

The other major category of metrics in the Illinois Public Health Community Map is related to emergency department use and care. Categories at present include total emergency department volume, non-emergent cases, emergent cases defined as primary care though treatable, emergent cases deemed preventable or avoidable, emergent not preventable or avoidable, injury, mental health and other.

In the area of emergency department care deemed preventable or avoidable, four counties in the state exceeded the 95th

Figure 2
County Health Rankings for Illinois—Health Factors



Source: <http://www.countyhealthrankings.org/illinois/health-factors-map>, updated 04/28/11, last accessed December 3, 2011

percentile: Morgan (426.22 cases per 10,000 population), Marion (413.22), Clay (541.84) and Hardin (551.76). Notably, Hardin (718.19), Marion (726.89), Clay (678.8), and Greene (610.47) counties led the state in emergency department care provided that could not have been prevented by ambulatory care treatment (care not preventable or avoidable) in unadjusted (crude) case rates per 10,000 area population.

Mental health care is critical for many individuals in Illinois, and the Illinois Public Health Community Map also defines mental health care as a percentage of all emergency room cases in particular areas as well as a crude rate per 10,000 area population. Marion (158.87), Clay (153.25), Franklin (146.71), and Hardin (157.32) counties led the state in cases with a principal diagnosis indicated mental health as a crude rate per 10,000 area population.