THE STATE OF RURAL HEALTH IN ILLINOIS: Great challenges and a path forward





Source: Illinois Health and Hospital Association. Advancing Rural Health in Communities Across Illinois 2018 Report

Illinois has 102 counties and covers 57,914 square miles. Our state is beautiful, dynamic, and populated by innovative, caring, talented citizens. However, Illinois has its challenges: disparities exist in the livelihood and opportunities available for people living in the state's 62 non-metropolitan counties. These differences result in a much sicker rural and underserved Illinois compared to its urban counterpart. Rural counties have higher rates of smoking, obesity, child poverty and teen pregnancies compared to urban counties. More uninsured adults live in rural areas, causing rural hospitals to close and/or cut vital services such as obstetrics care. Rural hospitals also provide fewer mental health services. Therefore, Illinois' rural residents are more likely to die from the five leading causes of death than residents living in the state's metropolitan regions.

1.5 million Illinois residents live in the 62 non-metropolitan counties. It is critically important to address rural Illinois residents' struggles to maintain healthy, active and productive lives.

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THE RURAL HEALTH SUMMIT

On August 6-7, 2018, 50 influential stakeholders across various sectors such as government, health care, public health, philanthropy and academia met to share perspectives on the state of rural health in Illinois. Organized by **Southern Illinois University (SIU) School of Medicine Department of Population Science and Policy, University of Illinois at Chicago School of Public Health, SIU Paul Simon Public Policy Institute, SIU School of Medicine Center for Rural Health and Social Service Development** and the **Illinois Department of Public Health**, the goal of this two-day Rural Health Summit was to begin building a blueprint to improve the social determinants of health in rural Illinois through sustainable, innovative programs and policies.



RURAL HEALTH SUMMIT TOPICS

















KEY FINDINGS

Illinois' rural communities have significant shortages in primary care physicians and subspecialists, especially in mental health.

The shortage of a health workforce limits the ability of rural hospitals to find providers to care for populations. 30.3 percent of small and rural hospitals are in designated primary care physician shortage areas. 93.7 percent of small and rural hospitals are in designated mental health service shortage areas.¹

Physician & Mental Health Shortages in Illinois					
	Primary Care Physicians per 100,000	Psychiatrists per 100,000			
State Average	80.7	10.5			
Large Urban Counties	87.1	12.6			
Other Urban Counties	76.7	7.0			
Rural Counties	45.5	1.6			

Source: Illinois Health and Hospital Association. Advancing Rural Health in Communities Across Illinois 2018 Report

Many of the highest rates of overdose deaths and opioid prescriptions are in the rural counties of Illinois.

In 2016, Illinois had 1,946 deaths due to opioid overdoses,² an 82 percent increase since 2013. The opioid-related death rate is 1.5 times the rate of homicides and double the rate of deaths caused by automobile accidents per year.

The neonatal abstinence syndrome (NAS) rate in rural counties increased 212 percent from 2011 to 2015.³

In 2015, 8 million opioid prescriptions were filled in Illinois (60 opioid prescriptions per 100 persons).⁴ Furthermore, injection drug use as an HIV transmission risk factor accounted for a higher proportion of diagnoses among persons living in rural counties compared to non-rural counties (11 percent vs. 5 percent).⁵

Children in rural areas experience disadvantage compared to urban children. A higher percentage of children in rural areas experience financial difficulties meeting basic needs.



Rate of patients receiving prescriptions for opioids andbenzodiazepine January 2017



Bureau 2016 population estimates - IDPH opioid data report.

A 2017 study found that almost 60 percent of rural residents reported at least one Adverse Childhood Experience (ACE) and 15 percent experienced four or more ACEs. ACEs can lead to higher risk of mental health disorder, prescription drug use, suicide and negative physical health outcomes.⁶⁷ Only 48 percent of children in Illinois' smaller, mostly rural counties attend pre-kindergarten as compared to 55 percent of their urban counterparts.⁸ A 2018 study by the Illinois State Board of Education found that 75 percent of Illinois children are not prepared for kindergarten.⁹

Source: Center for Disease and Control

Illinois' geriatric population is growing exponentially. Readmission rates, social isolation and limited health care services negatively affect the aging population.

The Illinois Department of Commerce and Economic Opportunity (DCEO) reported that the fastest growing older population group is age 85 and older. DCEO projected the 85+ age group will total 402,311 people, an increase of 109 percent, by 2030.¹⁰

Hospital location has a significant effect on readmissions. Patients discharged from rural hospitals are at 32 percent higher risk of unplanned readmissions as compared to those discharged from urban hospitals.¹¹ The study also found that patients discharged in rural areas had a 42 percent higher risk of unplanned readmissions.

Rural Illinois lacks nutrition and fitness education and practice, especially for youth, resulting in increased rates of childhood obesity.

	Number of Park Sites		Average Park Sites		
Population	City/Village	Park District	City/Village	Park District	Combined Average
<2,500	36	70	1.71	2.59	2.15
2,500-5,000	102	86	5.67	4.53	5.10
5,001-10,000	204	183	7.03	6.31	6.67
10,001-25,000	327	849	10.55	14.39	12.47
25,001-50,000	257	1627	17.13	33.20	25.17
50,000+	295	2694	32.78	89.80	61.29
Total	1,221	5,509	9.93	25.86	17.9

Source: 2014 Illinois Community Recreation Facilities & Park Lands Inventory.

Poor nutrition and fitness are evident in rural areas where almost 33 percent of residents are classified as obese. Rural Illinois residents lack safe outdoor spaces for physical activity.¹²

Food insecurity can permanently impair a child's brain development, lower academic achievement and result in more frequent hospitalizations. Conversely, children who regularly eat school breakfast score 18 percent higher on standardized math tests,¹³ attend more days of school and are more likely to graduate from high school. In Illinois, more than 800,000 students receive free or reduced price school lunch, but less than half of those kids receive school breakfast,¹⁴ putting Illinois 42nd in providing school breakfast.¹⁵ Rural counties consist of 63 percent of all counties in America but account for 85 percent of high child food-insecurity rate counties.¹⁶

Housing quality plays a large part in physical and emotional well-being. Rural Illinois struggles with housing quality and affordability.

Housing affordability empowers residents to own their own home, relieving them of the stress associated with the uncertainty of unstable housing. Poverty in rural areas reached 14.5 percent in 2016 compared with 12.8 percent in urban areas.¹⁸ Nearly 75 percent of housing stock in rural areas was built prior to 1980.¹⁹ Affordability is an issue in rural areas; 25.1 percent of families spend between 30 and 49 percent of their income on monthly housing costs and 10.4 percent spend 50 percent or more.²⁰ Nearly one in four rural



NEARLY 150,000 ILLINOISANS IN NON-METROPOLITAN COUNTIES HAVE A MODERATELY-SEVERE NEED FOR AFFORDABLE HOUSING.[™]

homes have been deemed "inadequate," which poses multiple substantial threats to the tenant's health, including but not limited to lower utilization of medical care, higher use of the emergency room for treatment, respiratory infections, psychological distress and cardiovascular disease.^{21, 22}

Rural Illinois' economy and healthcare system depend on each other. Strong economies produce healthier residents; strong healthcare systems power economies.

Small and/or rural hospitals pump \$2.5 billion into state and local economies via employee salaries and benefits.²³ Hospital employees generate \$3.5 billion in economic activity in buying power in Illinois. These hospitals create over 32,000 direct jobs and 42,000 indirect jobs in Illinois.²⁴

A PATH FORWARD: THE BEGINNINGS OF A BLUEPRINT



The health challenges faced in rural Illinois are daunting. However, public, corporate and community leaders across rural Illinois are collaborating to help improve residents' health. The following represents a sample of the innovative ideas proposed by Rural Health Summit participants:

- Expand high-speed broadband into rural areas to instantly create opportunities for higher quality access to service. Currently, 37 percent of rural Illinois lacks broadband. High speed broadband internet can access innovative learning techniques, online testing, remote learning and professional development for teachers and administrators.²⁵
- Provide income tax credits to permanently endowed social funds to help support unmet rural health and economic needs.
- Invest in telepsychiatry and Medication Assisted Treatment (MAT) programs. MAT's combination of FDA approved medications with behavioral counseling has proven to reduce illicit opioid use and improve patient adherence to treatment.²⁶
- Create public-private partnerships (government and rural health care systems) to recruit and retain a health care and behavioral health workforce, including physicians, nurse practitioners, physician assistants, social workers and behavioral therapists.
- Create and improve programs to reduce the infant mortality rate: reinforce safe sleeping and home visiting programs and increase the number of family physicians in rural areas.
- Utilize rural hospitals as community hubs and create programs that link resident wellness and events focused on community.
- Revitalize the use of USDA programs such as the Single Family Housing Direct Home Loan program, the 514/516 Farm Labor Housing Loans and Grants, the Section 521 Rural Rental Assistance program and the Section 538 Guaranteed Rural Rental Housing program.
- Enhance communication and leverage existing partnerships between communities, caregivers and aging patients, including utilizing telemedicine, integrated health homes and preventative and respite care.

A CALL TO ACTION: REINVESTMENT IN THE HEALTH OF RURAL ILLINOIS



We invite policymakers, corporate and community leaders across the state to join us in this important

work. Success will require partnerships, measures to effectively show progress and innovation that brings lasting health outcome improvement.

Illinois faces important decisions in the months and years ahead. It is vital to consider the needs of rural Illinois. Together, we can create the necessary momentum to more fully understand the health needs of our residents, innovate with communities to create effective programs and sustain that health improvement with policy change.

10 State of Illinois. State Plan on Aging: FY 2017 - FY 2019 (1-106). Illinois Department on Aging.

14 Rise and Shine, 1-24.

23 Illinois Health and Hospital Association. 1-19.

¹ Illinois Health and Hospital Association (2018). Advancing Rural Health in Communities Across Illinois (1-19).

² State of Illinois (2017). Comprehensive Opioid Data Report (1-38). Springfield, IL: State of Illinois.

³ Illinois Department of Public Health. Illinois Hospital Discharge Data. 2017.

⁴ https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state/illinois-opioid-summary

⁵ IDPH. (2014). Illinois Enhanced HIV/AIDS Reporting System.

⁶ Radcliff, E., Crouch, E., & Strompolis, M. (2018). Rural-urban differences in exposure to adverse childhood experiences among South Carolina adults. Rural and Remote Health, 18(1). 7 https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences

⁸ Christensen Gee, L., & Joseph, L. (2014). Disparities in Access to Preschool (1-31). Chicago, IL: Voices for Illinois Children.

 ⁹ Illinois State Board of Education (2018). KIDS Fall 2017 Data for Planning and Instruction (1-12). ISBE.

¹¹ Toth, M., Holmes, M., Van Houtven, C., Toles, M., Weinberger, M., & Silberman, P. (2015). Rural Medicare Beneficiaries have Fewer Follow-up Visits and Greater Emergency Department Use Postdischarge. Medical Care, 53(10), 908.

¹² Toliver, Z. (2016). Building Rural Environments for Active Living. Retrieved from https://www.ruralhealthinfo.org/rural-monitor/built-environment-active-living/

¹³ Rise and Shine Illinois (2017). Powered by Breakfast: Healthy Starts in Illinois Schools (1-24). Chicago, IL: Greater Chicago Food Depository.

¹⁵ Philbin, E. M., & Rosso, R. (2018). School Breakfast Scorecard (1-21). Washington, D.C.: Food Research & Action Center.

¹⁶ Feeding America (2018). Map the Meal Gap 2018 - A Report on County and Congressional District Food Insecurity and County Food Cost in the United States in 2016 (1-75). Feeding America. 17 Scally, C., & Gilbert, B. (2018, October 02). Rural communities need more affordable rental housing. Retrieved from https://www.urban.org/urban-wire/rural-communities-need-more-affordable-rental-housing

^{18 &}quot;Rural Health Information Hub." Rural Health for Illinois - Introduction, 29 Nov. 2016, https://www.ruralhealthinfo.org/states/illinois.

¹⁹ Housing Assistance Council. (2012). Retrieved from http://www.ruraldataportal.org/index.aspx

²⁰ Housing Assistance Council.

²¹ Housing Assistance Council.

²² Braveman, D., Egerter, S., & Pollak, C. (2018). Housing and Health. Retrieved May 1, 2011, from https://www.rwjf.org/en/library/research/2011/05/housing-and-health.html

²⁴ Illinois Health and Hospital Association. 1-19.

²⁵ Bjerga, A., & Hoffman, C. (2018, June 20). Democrats Take a Data-Driven Approach to Win Rural America. Retrieved from https://www.bloomberg.com/graphics/2018-rural-investment/ 26 "Medication-Assisted Treatment Improves Outcomes for Patients With Opioid Use Disorder." The Pew Charitable Trusts, Nov. 2016, https://www.pewtrusts.org/en/research-and-analysis/ fact-sheets/2016/11/medication-assisted-treatment-improves-outcomes-for-patients-with-opioid-use-disorder.