

# TRANSFORMING THE HEALTH OF RURAL ILLINOIS A BLUEPRINT FOR INVESTMENT AND ACTION



The moment is now for the State of Illinois to expand investment to create a robust rural health agenda. The pandemic has created a renewed desire to address health disparities and improve equitable delivery of services. An ambitious health strategy with specific recommendations and action steps must be implemented to achieve healthier and more equitable rural communities. This report aims to provide appropriate recommendations for investment and action that will help improve the health of Illinois' rural communities.

This document, *Transforming the Health of Rural Illinois: A Blueprint for Investment and Action*, is the final report of the Illinois Rural Health Summit's COVID-19 and Rural Health series. Throughout the text, Rural Health Summit partners synthesize previous reports and provide comprehensive recommendations to enhance the overall economic, social and health development of Illinois' rural communities. We understand that improving rural economic development depends on elements such as access to jobs, infrastructure, healthcare and education. These recommendations focus on enhancing rural infrastructure, coordinating services to create systems of care and building a hub for rural innovation.

We hope Illinois will adopt these strategies to create a brighter and more equitable future for its rural communities.

This document contains seven specific recommendations to improve life in rural Illinois. Recommendations fall under three main categories:



## INVEST IN RURAL INFRASTRUCTURE



## COORDINATE SERVICES TO BUILD SYSTEMS OF CARE



## BUILD A HUB FOR RURAL INNOVATION



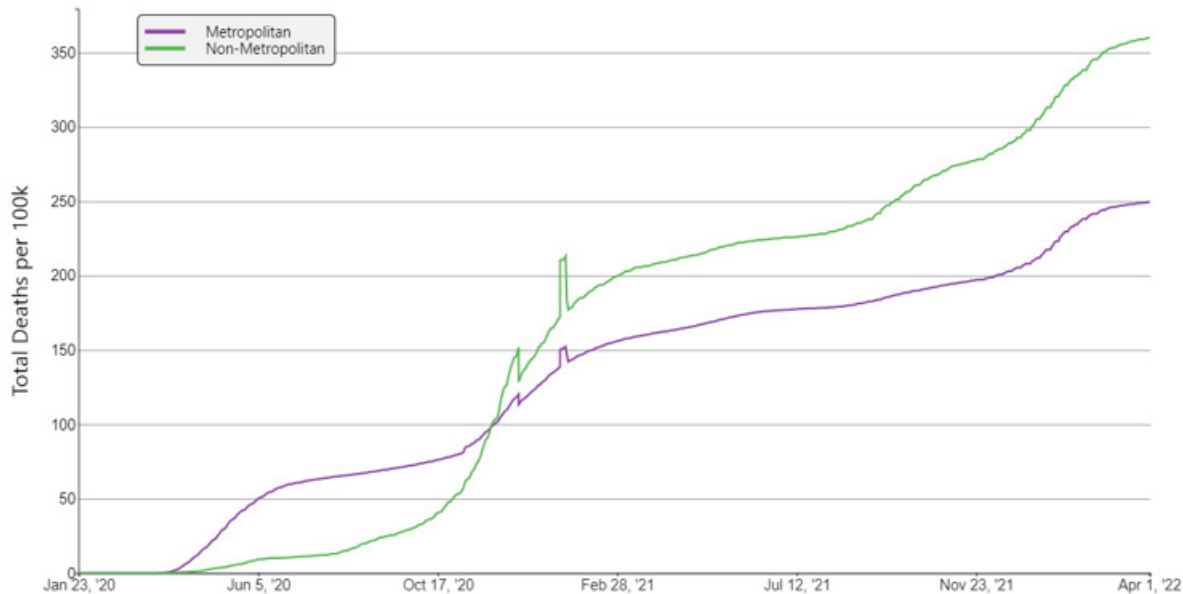
## THE PANDEMIC'S IMPACT

Since March 2021, the Illinois Rural Health Summit partners, consisting of [Southern Illinois University School of Medicine \(SIU SOM\) Department of Population Science and Policy](#), [University of Illinois at Chicago \(UIC\) School of Public Health](#), [SIU SOM Center for Rural Health and Social Service Development](#) and [SIU Paul Simon Public Policy Institute](#), released eight policy briefs focusing on topic-specific recommendations to improve the health of rural communities. Reports addressed an [aging rural population](#),<sup>1</sup> [rural mental health](#),<sup>2</sup> [rural public health systems](#),<sup>3</sup> [rural nutrition and fitness](#),<sup>4</sup> [rural children's growth and development](#),<sup>5</sup> [rural health workforce](#),<sup>6</sup> the [rural opioid epidemic](#)<sup>7</sup> and [rural housing and homelessness](#).<sup>8</sup> Each included three recommendations for action to create sustainable improvements.

The initial report, [Building a Healthier Rural Illinois: Understanding and Addressing the Challenges of COVID-19](#)<sup>9</sup> found Illinois' rural communities suffer from the "The Five D's." These communities start at a DISADVANTAGE due to living in food, healthcare, social service and data DESERTS as well as experiencing organizational and technological DISCONNECTION. Rural regions experience similar DISPARITIES to low-income urban areas but are afforded even fewer DEVELOPMENT opportunities than their urban counterparts.

Illinois' rural counties have higher rates of smoking, obesity, child poverty and teen pregnancies compared to urban or suburban counties. It is also more difficult to access health care in rural communities.<sup>10</sup> As a result, Illinois residents living in rural areas are more likely to die from the five leading causes of death: heart disease, cancer, unintentional injuries, chronic lower respiratory disease, and stroke.<sup>11</sup> COVID-19 exacerbated this DISADVANTAGE as strained health systems struggled to meet community needs. As shown in in Figure 1, Illinois' cumulative death rate as of April 1, 2022, was 360 per 100,000 people in nonmetropolitan counties compared to 249 per 100,000 people in metropolitan counties.<sup>12</sup>

FIGURE 1: COVID-19 Cumulative Death Rate per 100,000 Population in Illinois, Metro vs. Non-Metro



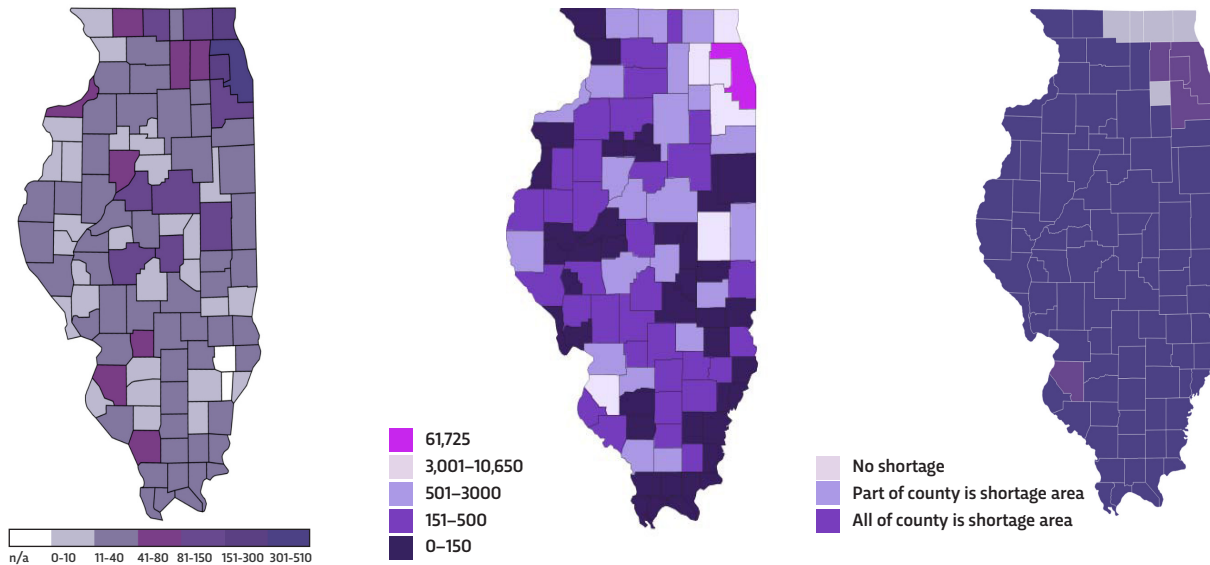
Rural disadvantage stems from rural Illinois' DESERTS of essential services. Figure 2 on the following page shows Illinois rural communities' lack access to public health care workers,<sup>13</sup> child care centers,<sup>14</sup> and mental health professionals.<sup>15</sup> Eighty-one of Illinois' 102 counties have no child or adolescent psychiatrists.<sup>16</sup>

### DEFINING "RURAL" IN ILLINOIS

Of Illinois' 102 counties, 62 are considered non-metropolitan. 1.5 million Illinois residents reside in nonmetropolitan and/or rural regions. In an effort to be inclusive, this report uses "rural" to describe non-metropolitan counties.



FIGURE 2: (Left) Number of Full Time Public Health Workers by County, 2018; (Middle) Availability of Infant and Toddler Childcare Slots by County, 2019; (Right) Illinois Health Professional Shortage Areas: Mental Health by County, 2021



Seventy percent of local health departments count 30 or fewer employees as part of their public health workforce.<sup>17</sup> As the middle map indicates, there are limited childcare slots including many counties (dark purple) that have no licensed childcare slots available.<sup>18</sup>

The organizational and technological DISCONNECTION also causes disadvantages in rural Illinois. Wide areas of the state cannot access quality internet. According to the White House, seven percent of Illinois residents lack adequate broadband infrastructure.<sup>19</sup> Furthermore, a Microsoft study found that 75 percent of households in 52 Illinois counties lacked access to high-speed internet.<sup>20</sup>

The lack of high-speed broadband has been especially devastating during the pandemic as many elements of social interaction, education and employment were only available online. Some rural Illinois school districts were forced to deliver paper copies of materials to students who lacked high-speed broadband. Many rural residents, especially the elderly, struggled to access appropriate telehealth services. The disconnection, however, is not just technological but is also organizational. Social service sectors operate with little coordination in systems that do not incentivize and often do not allow collaboration. A fragmented network of data systems hampers the ability of state organizations to easily share information between different departments.

The result of rural disadvantage, deserts and disconnection are DISPARITIES shared by Illinois' rural and low-income metropolitan communities. From the earliest days of the pandemic, Illinois' vulnerable communities have been most affected by the health and economic challenges of the pandemic. Disparities in COVID-19, mental illness, substance use, economic growth and academic delay have all widened during the pandemic.<sup>21,22,23</sup>

Illinois can close this equity gap through appropriate investment and DEVELOPMENT opportunities to allow rural residents to build brighter futures. Federal and state legislation as well as executive action have placed Illinois in an optimal position to create healthier and more equitable communities. The recommendations outlined in this document have the potential to bring resources and new program opportunities to rural communities.



## RECOMMENDATIONS: A BLUEPRINT FOR INVESTMENT AND ACTION

The policy decisions made during the pandemic have positioned Illinois to appropriately address the health disparities of rural communities. Illinois policymakers, along with partners in healthcare, public health, philanthropy, academia, business, social service and community, must come together to create change. The following recommendations for inclusion in the Illinois State Health Improvement Plan will enhance rural infrastructure, coordinate systems of care and build a hub of innovation.

### INVEST IN RURAL INFRASTRUCTURE

Improving the health of rural residents starts with greater investment in rural infrastructure. The pandemic highlighted the need for this investment in three main areas: the rural health workforce, rural data and community design.

The Rural Health Summit policy briefs, specifically the reports on the [rural health workforce](#),<sup>24</sup> [public health systems](#),<sup>25</sup> and [rural mental health](#),<sup>26</sup> detailed the dire need to increase the number of health professionals, including but not limited to physicians, nurses, advanced practice providers and public health workers. The reports on [public health systems](#)<sup>27</sup> and [rural housing and homelessness](#)<sup>28</sup> detailed the need to improve public health data collection and surveillance systems. Finally, the report on [rural nutrition and fitness](#)<sup>29</sup> described the necessity of building and designing structures and main streets to enhance healthy lifestyles.

#### **Improve and expand the rural health workforce by investing in programs to recruit and retain health workers.**

The rural health workforce shortage in Illinois presents a great opportunity for government leaders to increase funding for existing Illinois programs that work to eliminate workforce shortages. The [National Health Service Corps \(NHSC\) State Loan Repayment Program](#) provides a maximum of \$50,000 (\$25,000 per year for two years) to repay education loans for physicians, nurse practitioners, physician assistants, nurse midwives, dentists and psychiatrists who agree to serve full-time or half-time in federally designated health professional shortage areas in Illinois. After completion of the initial two-year obligation, providers are eligible for up to an additional four years of financial assistance.<sup>30</sup> Additionally, the American Rescue Plan provided a funding boost for the NHSC and Nurse Corps, which represented the largest single-year appropriation for the clinical health workforce in history. The Illinois J-1 Visa Waiver Program offers a J-1 Visa waiver to foreign physicians who agree to work in an underserved area for three years. The program waives the foreign medical residency requirement and allows them to remain in the United States. Additionally, the [Underserved Physician Workforce Program](#) provides up to \$50,000 in education loan repayment assistance for a minimum two-year commitment. This program has been supported by a recent amendment in April 2022 that expands the definition of “workforce” to include advanced practice registered nurses (APNs) and physician assistants (PAs) who accept Medicaid, Medicare, the State’s Children’s Health Insurance Program, private insurance and self-pay.<sup>31</sup> The proposed fiscal year 2023 budget aims to do even more, including \$25 million for the creation of the Pipeline for the Advancement of the Healthcare (PATH) Workforce Program to develop new nurses, certified nursing assistants, respiratory therapists, emergency medical technicians and other high-demand positions. Continued funding to support these programs is essential to improve and expand the rural health workforce.

Illinois can point to a few programs that are successfully producing rural physicians by helping medical students gain experience practicing in rural communities and connecting them to rural mentoring and preceptorship opportunities. [SIU School of Medicine’s Lincoln Scholars Program](#) offers a Doctor of Medicine track specializing in preparing Illinois’ next generation of rural primary care physicians. Students in the Lincoln Scholars Program receive clinical placements in rural communities. Another example of rural-based workforce efforts is evidenced by the [Rockford Rural Medical Education \(RMED\) Program](#) run by the University of Illinois College of Medicine. These programs need continued support and resources to ensure more physicians practice in rural areas.



In addition to primary care physicians, the COVID-19 pandemic has revealed an additional need for rural public health workers, nurses, social workers, medical specialists and behavioral health workers. A diverse, active workforce is necessary to create a more comprehensive system of care in rural communities. Creating a diverse pipeline of health workers requires a unique set of strategies, including expanding telehealth services, offering incentives like scholarships and public health loan forgiveness and proactively recruiting students through marketing campaigns at high schools, universities, community colleges and job fairs. These strategies, along with a thorough needs assessment and gap analysis, can help the rural health sector begin to build a workforce to support the growing public health infrastructure.

Illinois should offer a similar investment in its rural health workforce as it does with its behavioral health workforce. Illinois developed a plan based on the [Health Care and Human Service Reform Act](#) to address behavioral health workforce shortages with the following: 1) use funding from cannabis sales to create loan repayment programs for bachelor's and master's degree-level mental health providers; 2) create training and certification programs for persons with lived mental health expertise, 3) create the Mental Health Professional (MHP) credential to address equity in the workforce and add over 500 new jobs in five years and 4) fund the establishment of an Illinois Behavioral Health Workforce Center which authorizes a higher education institution to run a "hub and spoke" model with other institutions to research and identify the best practices to improve Illinois' behavioral health workforce.<sup>32</sup> Similar efforts could be implemented to address Illinois' rural health workforce needs.

### **Improve rural data systems by refining data collection, utilizing alternate data sources and modernizing technology.**

Accurate data is essential to plan, implement and evaluate public health practices and is needed to understand the value and effectiveness of public health systems. However, the shortage of quality, actionable data in rural areas is a common and longstanding problem. Better data will allow policymakers, researchers and community leaders to more effectively target interventions and improve health and economic outcomes. Effective health surveillance requires ongoing and systemic collection as well as analysis and interpretation of health-related data relevant for planning, implementing and evaluating public health programs and policies.<sup>33</sup> Modern, collaborative surveillance information can improve health services by targeting interventions and documenting results.

The Federal government has taken an important first step in acknowledging the need for a modern public health data infrastructure. The [CDC Data Modernization Initiative: A Roadmap of Activities and Expected Outcomes](#) includes both short-term and long-term activities and outcomes, such as coordination of people and systems and increased support for strategic innovation.<sup>34</sup> Federal efforts could be expanded by establishing national standards to enhance public health data operability. Additionally, national standards could also be established to better disaggregate data by race, ethnicity and other key social demographic characteristics.

Rural public health systems will only be able to respond to community needs with the appropriate statewide investment in data technology, infrastructure, personnel and skill development. Illinois needs a cross-agency Rural Health Data Taskforce to create a set of strategies that link public health departments, health care systems and universities to modernize the collection and analysis of rural health data.

### **Invest in transformative rural community design conducive to healthy lifestyles.**

The State of Illinois, local government, health systems and private industry should collaborate to transform rural community infrastructure to promote healthy lifestyles. Rural communities need new parks, enhanced spaces for recreational activities and community health centers with dedicated fitness and wellness facilities. These investments could help offset healthcare costs and have a positive impact on mental health and social cohesion in the community.



Illinois should maximize rural regions' existing natural resources and available outdoor recreation like hiking and biking trails, fishing, kayaking and more through tourism and wellness-focused marketing. This solution will require stakeholders from government, business, tourism and healthcare to create a culture that recognizes the natural resources and prioritizes health and wellness in these communities. [SI NOW](#) in southern Illinois, the [Lower Illinois River Valley Rural Prosperity Initiative](#) in western Illinois and [AltonForward](#) and [AltonWorks](#) in the Metro East are examples of these innovative ideas in practice. The return on investment will come in the form of reduced healthcare costs for both individuals and hospitals and increased economic activity through community development.<sup>35,36,37</sup>

Various rural towns in Illinois have also utilized a downtown revitalization strategy to revive their communities. Nineteen commercial districts in Illinois, many of which are rural, have worked with [Illinois Main Street](#) to foster economic development and revitalize their towns. The pandemic has presented the opportunity to reframe aspects of rural life to promote resiliency, livability and healthy lifestyles. Illinois' rural communities and small cities are starting to make efforts to promote regionalism, build capacity, encourage cooperation and make a collective impact on healthier community design.

## COORDINATE SERVICES TO BUILD SYSTEMS OF CARE

Deliberate, strategic coordination between healthcare and social services will make significant improvements in rural health. The Rural Health Summit policy briefs, specifically those focusing on [caring for an aging rural population](#),<sup>38</sup> [rural mental health](#)<sup>39</sup> and [rural children's growth and development](#)<sup>40</sup> detail the importance of implementing systems of care. The system of care philosophy creates a spectrum of effective, community-based services and supports for both individuals at risk for health challenges as well as for their families. Services in a system of care are organized into a coordinated network to build meaningful partnerships and address cultural needs to help families function better. Systems of care also maximize resources to reduce duplication of services.

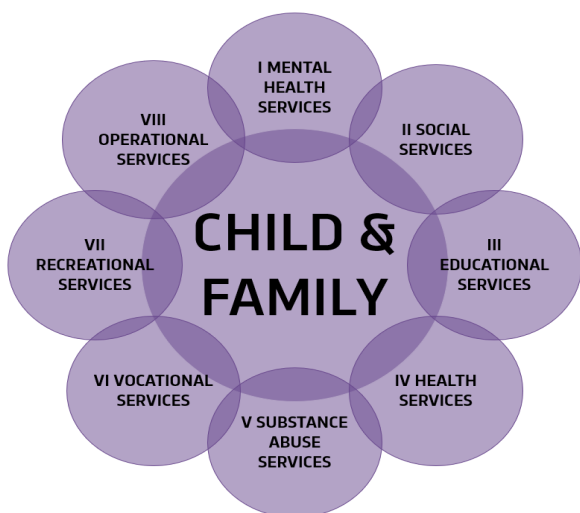
The small populations and network of personal relationships in rural communities are assets in building a system of care. Rural communities should be the example of new models of coordinated systems of care to improve health outcomes.



### Invest in new models of mental health services to integrate health care with social services and customize care based on individual needs.

Social service sectors must collaborate to maximize resources and better serve the community. Illinois has

FIGURE 3: A System of Care for Children with Severe Emotional Disturbances



some promising programs that can serve as a blueprint for expanding new models of mental health services. However, these systems must be expanded to address mental health and substance use for individuals of all ages.

Figure 3 shows an example of the many different social systems that care for a child with a mental, behavioral or developmental disorder.<sup>41</sup> Illinois communities have already been innovators in piloting systems of care to prevent, diagnose and treat children's mental, behavioral and developmental disorders. The [Illinois Children's Healthcare Foundation](#), a private foundation that funds children's healthcare statewide, is a leader in promoting systems of care work. The Foundation has invested in three cycles of [children's mental health initiatives](#) (CMHI 1.0, 2.0 and now 3.0) to build mental health systems of care. Based on findings in their [CMHI 1.0 report](#), these systems of mental health care improved integration,



increased rates of screening for behavioral and developmental concerns and built sustained capacity in these communities.<sup>42</sup>

[Illinois Department of Healthcare and Family Services](#) (HFS) recently launched a \$150 million per year initiative to reorient the healthcare delivery system in Illinois around people and communities. This [initiative](#), tied to HFS's new quality strategy focusing on pillars of maternal and child health, adult behavioral health, child behavioral health, equity and community placement, will pilot new models to transform the healthcare system. With a strong focus on adult and children's behavioral health and funding preserved for rural communities, this new program has the opportunity to bring new models of community-centered mental health care to rural Illinois. Illinois must fund and prioritize the types of grants that build these systems of care.



### **Strengthen and invest in partnerships between public health departments and rural health organizations.**

Partnerships between public health and healthcare organizations are at the core of reimagining community health in the modern age.

Rural communities are uniquely situated to have rural health organizations partner with local public health departments and serve as [chief health strategists](#) for their service areas.<sup>43</sup> This model, described as Public Health 3.0, involves public health departments partnering across multiple sectors and leveraging data and resources to address social, environmental, and economic conditions that affect health.

Rural health organizations and public health departments are acutely aware of the challenges facing their communities and have built close relationships across all service sectors. Partnerships between public health departments and local health organizations should assess needs together to develop communitywide implementation plans that can improve health outcomes.

These efforts would require greater incentives to link the community health needs assessment not-for-profit hospitals are required to complete every three years with the [Illinois Project for Local Assessment of Needs \(I-PLANS\)](#) that local public health departments are required to complete. Rural regions of the state would also benefit from more strategic regional plans with multiple hospitals and multiple health departments combining resources for regional solutions.

Examples of these types of collaborations and partnerships are growing. Central and southern Illinois have seen these types of cross-sector partnerships emerge before and during the pandemic. A partnership between Genesis Health System and Mercer County Health Department is an example of an Illinois hospital and public health department working together to create community health strategies. Another example of this type of partnership is [SIU Medicine's Center for Family Medicine's](#) collaborative efforts with different departments of public health including [Sangamon](#), [Logan](#), [Adams](#) and [Morgan](#) counties. SIU Center for Family Medicine offers a variety of services, including but not limited to school and sports physicals, STI (Sexually Transmitted Infection) testing and treatment and breast and cervical cancer screenings. State investment should move away from rewarding competition and instead promote collaboration.



### **Pilot the creation of rural community care centers to encourage the connection between health care delivery to housing, transportation and other social needs.**

Social needs (including income, housing and transportation) pose significant challenges for many rural residents. Therefore, offering health care and social services in a "one-stop-shop" could alleviate transportation challenges and time constraints to effectively address a patient's social, economic and health needs in a single visit.

Hospital buildings, federally qualified health centers or rural health clinics could be converted into



“health malls” populated by services such as primary care and behavioral health providers, post-acute care services, daycare centers and convenience retail facilities. Non-clinical services, including education and job training, social services and housing assistance, can also be integrated into these centers. Local public health departments could employ patient navigators to educate and guide clients through clinical and non-clinical services provided at the location. For example, patient navigators, including community health workers, can help clients apply for housing assistance, schedule follow-up appointments and educate patients on desirable health behaviors.

Models of innovative care delivery, including clinical and wrap-around services, have been implemented in a few states. A former hospital building in Milford, Delaware, was repurposed as the Milford Wellness Village to accommodate 15 tenants including primary and behavioral care, skilled nursing and outpatient dialysis services with transportation, housing and social services.<sup>44</sup> A Healthcare Transformation Collaborative grant led by Touchette Regional Hospital is beginning to pilot such a strategy in East St. Louis, Illinois. In this program, Touchette Regional Hospital, working with the St. Clair County Sheriff’s Department, SIU School of Medicine and local police departments, will repurpose a Touchette Regional Hospital facility to provide supportive and transitional housing for individuals experiencing homelessness, mental illness and substance abuse.

## BUILD A HUB FOR RURAL INNOVATION



**Fund an Illinois Rural Health Innovation Center to work across government agencies to collect data on state programs, assess need and offer statewide policy and implementation strategies.**

Illinois should invest in building the capacity for rural-specific data generation, analysis, program evaluation and policy development. The creation of an Illinois Rural Health Innovation Center would be instrumental

FIGURE 4: Conceptual Framework for the Illinois Rural Health Innovation Center



in facilitating coordination and improving evidence-based policies and would provide a better understanding of the context of rural challenges.

An example of such a center of excellence can be found at the [Georgia Rural Health Innovation Center](#) (GRHIC). Established in 2018 with funds from the State of Georgia, GRHIC is co-located with the Mercer University School of Medicine. The Center partners with rural counties to improve health outcomes through targeted improvement plans and rural health delivery system evaluation amongst other activities. The Center also maintains a Georgia Health Data Hub which consolidates public and private data. The data is shared with the public via dashboards and researcher data portals, as well as being used for public health monitoring and surveillance. The Center also advises on a training requirement for rural hospital executives, board members and hospital authority members called the Hospital Leadership Training Program.





Illinois can follow a similar model by creating an innovation center to perform needs assessments, predictive modeling for capacity sharing and best-practices determination. As shown in Figure 4 on the previous page, this center will allow policymakers to better address current and future rural health challenges through data-driven analysis and policy formation. Illinois should pursue a strategy of recruiting an established academic partner with the necessary partnerships, trained staff and experience in data collection, intervention design, policy analysis and coordination. This central organization can also use its established academic collaboration and partnerships to allocate and coordinate analysis projects with other universities. A centrally managed, university-based consortium can also help Illinois test innovative policy interventions through a network of 'policy incubators' which can provide field testing, analysis and scale support for state programs.

## CONCLUSION

COVID-19 has challenged Illinois' communities in unimaginable ways. Despite the health, social and economic difficulties brought by the pandemic, the state's rural communities have innovated to help address health disparities and build a more equitable Illinois. However, more work needs to be done with statewide investment in building and executing a strategy to transform the health of rural Illinois.

The Rural Health Summit partners urge state government, health care, philanthropy, academia, social service and community leaders to work together to invest in the necessary strategies to build healthier rural communities. The moment for action is now. With appropriate attention and innovation, Illinois can be a national leader in building the brightest of futures for our rural communities.

## ENDNOTES

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