

Rural Health in Indiana Challenges and Strategies

Bowen Center for Health Workforce Research and Policy

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Rural Health Care Resources



HOSPITALS



EMS



WORKFORCE



**MENTAL
HEALTH**



**SCHOOL-
BASED
HEALTH**



State of Rural Health in America

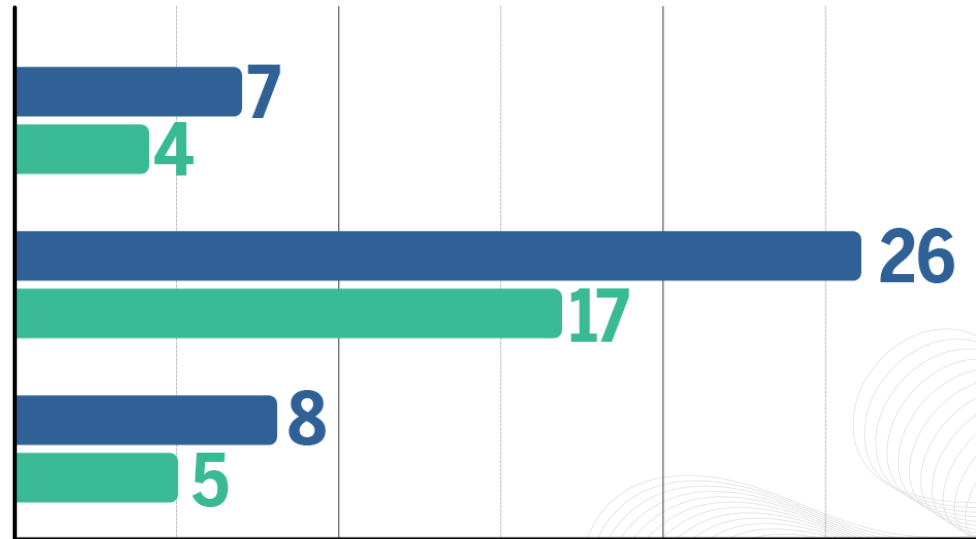
WORKFORCE SHORTAGES NATIONWIDE



PROVIDERS PER 10,000 PEOPLE



DENTISTS



MENTAL HEALTH CARE PROVIDERS



PRIMARY CARE PHYSICIANS

Rural healthcare disparities

Workforce Shortages

- Rural areas account for the most acute staffing shortages, representing a majority of federally designated Health Professional Shortage Areas as of March 2022.



State of Rural Health in America

RURAL MORTALITY NATIONWIDE

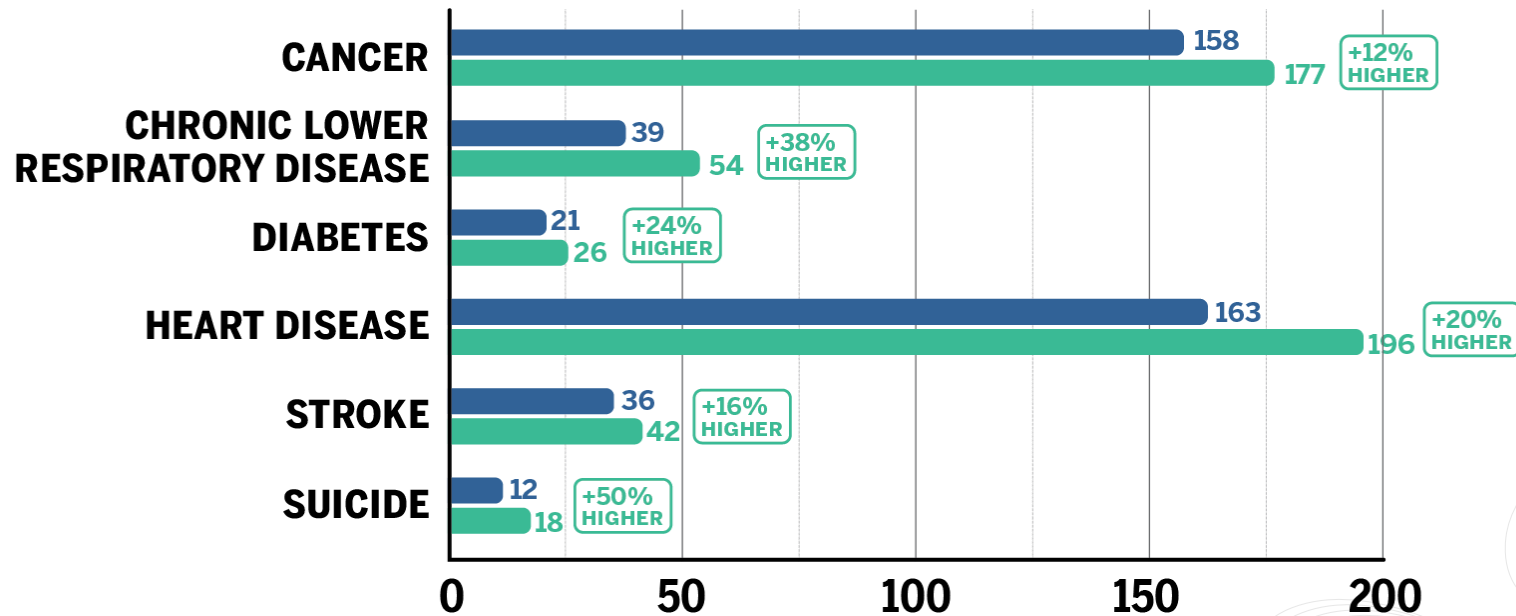


URBAN



RURAL

DEATHS PER 100,000 PEOPLE



Rural healthcare disparities

Life expectancy (LE) has increased *less* in rural areas from 1999 - 2019.

- Rural LE increased by 0.8 yrs. (292 days)
- Urban LE increased by 2.5 yrs. (912 days)

Rural Mortality Rates

- Differences between rural and urban death rates for heart disease, cancer, and CLRD widened from 1999 through 2019





HOSPITALS

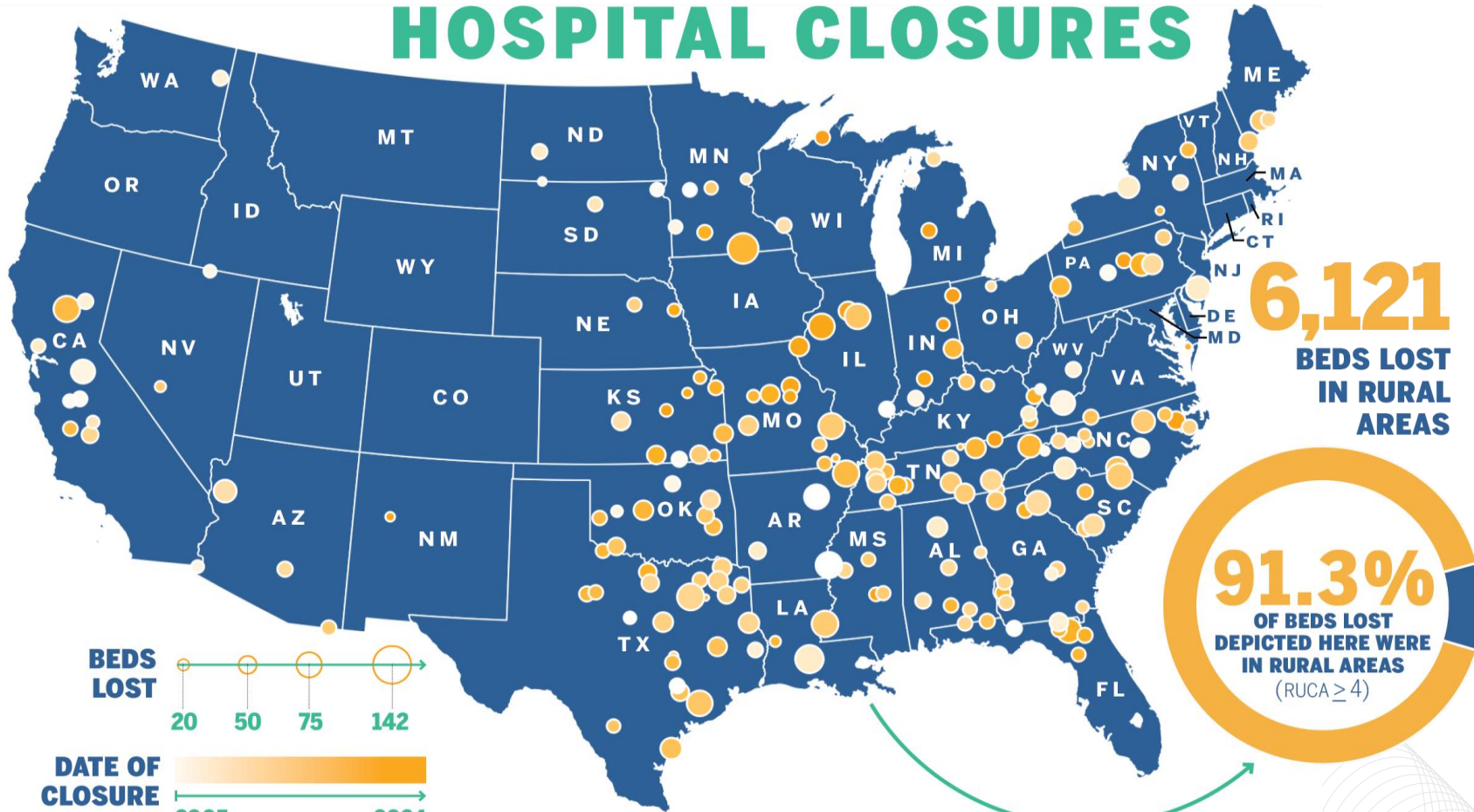


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Rural Hospital Closures and Mergers



HOSPITAL CLOSURES



192

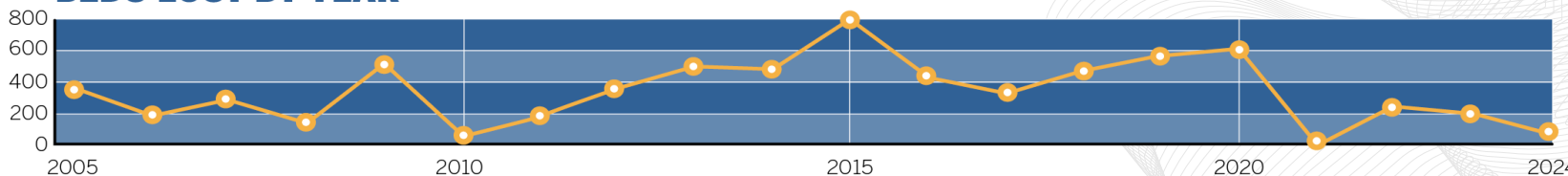
HOSPITAL CLOSURES
AND CONVERSIONS
SINCE 2005



One-third of the rural hospitals still operating are unprofitable due to:

- Low patient volume
- High fixed costs
- A greater reliance on public payers than privately insured patients.

BEDS LOST BY YEAR

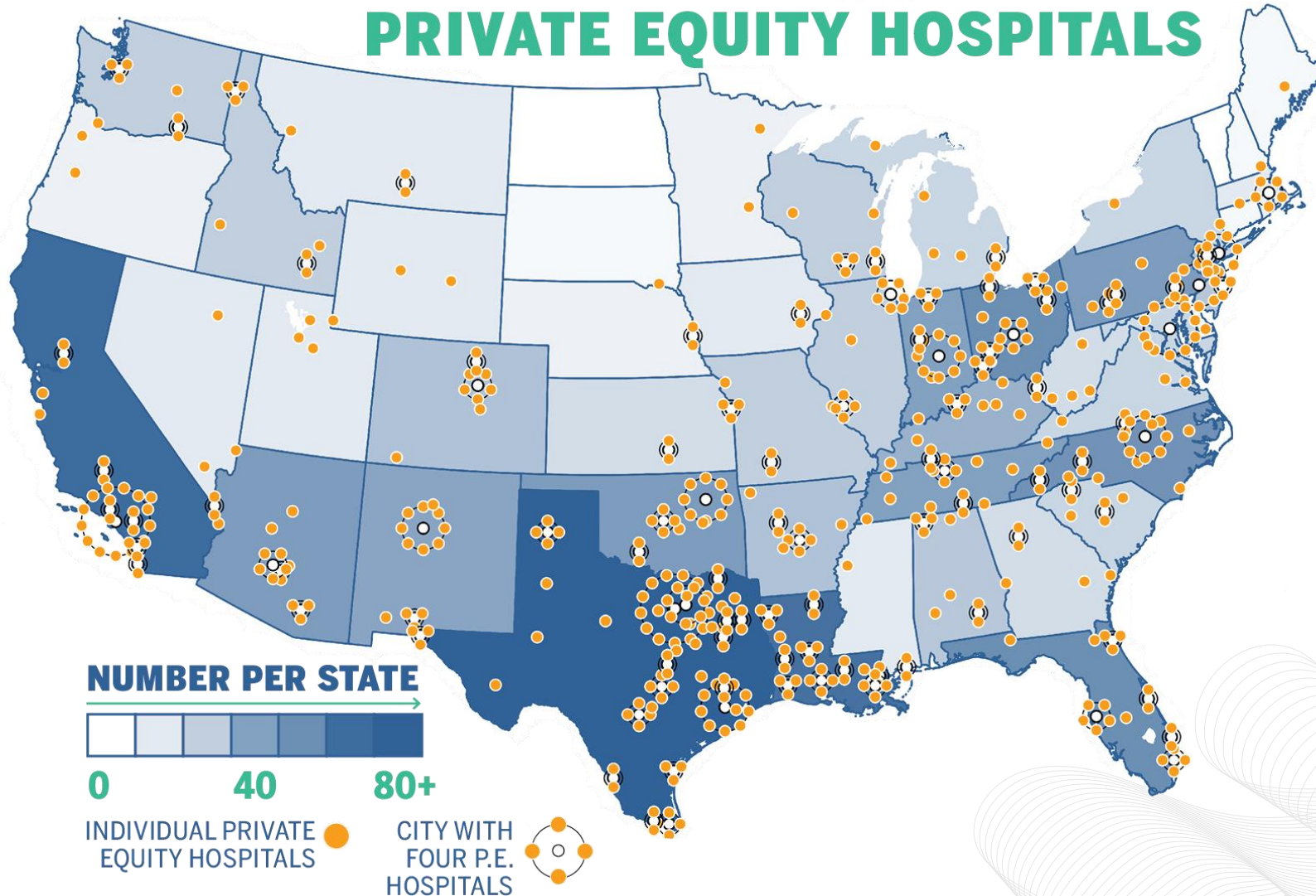


Source: NC Rural Health Research Program



Private Equity Owned Rural Hospitals

PRIVATE EQUITY HOSPITALS



Private equity investing in rural healthcare can be positive, but it also carries risks.

- Increased out-of-pocket costs
- Potential threats to quality of care
- Reduced access to services that are not profitable
- Exacerbated staffing issues

Indiana Rural Hospital Closures & Acquisitions



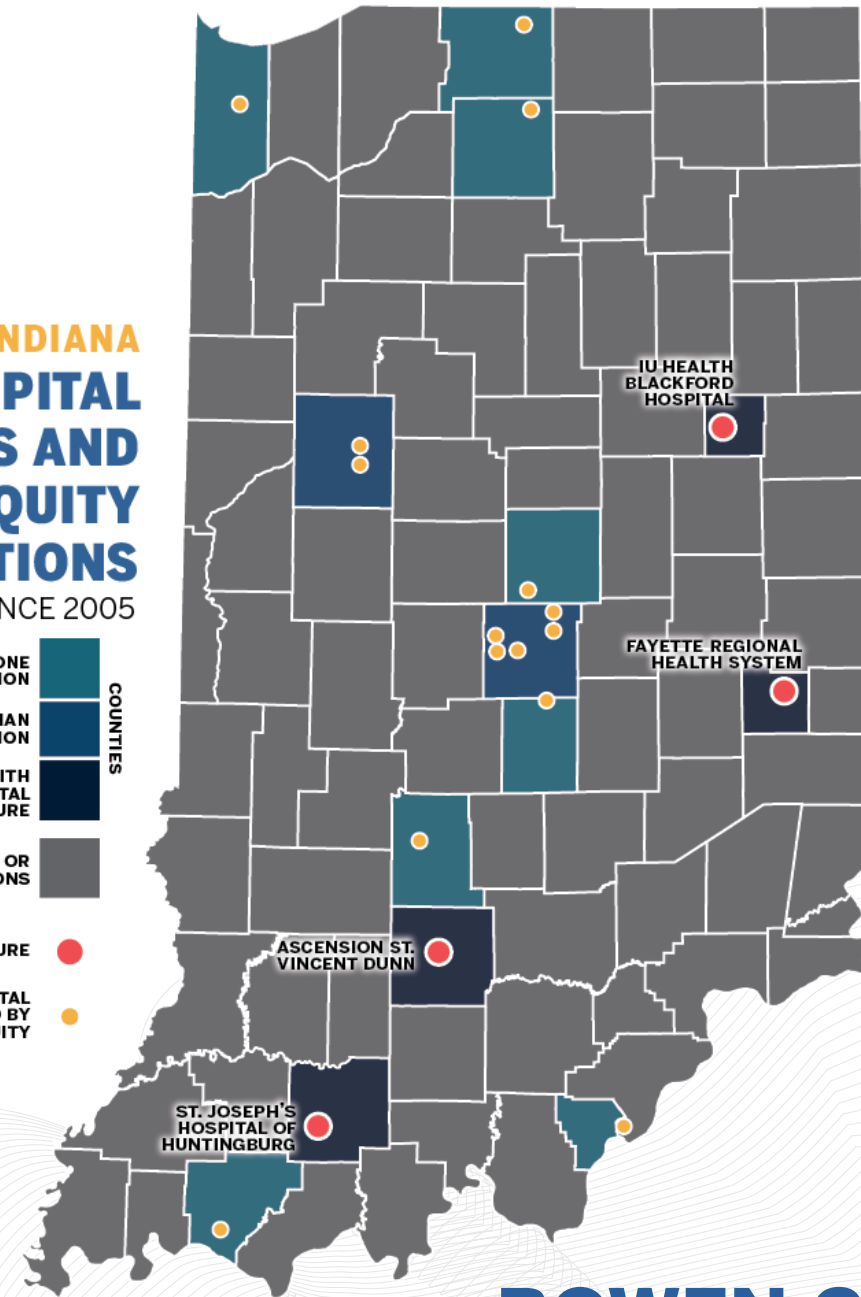
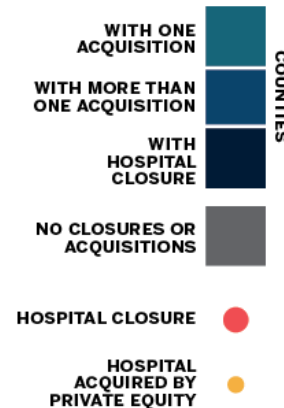
Indiana

- Hospital Closures since 2005 – 4
- Current (2024) rural hospitals – 52
- Current open hospitals with loss of services – 13 (25%)
- Hospitals at risk of closure in 2024– 5 (10%)
 - At immediate risk of closure* – 4 (8%)

*Immediate Risk: Loss of income over multi-year period & very low financial reserves.

INDIANA HOSPITAL CLOSURES AND PRIVATE EQUITY ACQUISITIONS

SINCE 2005



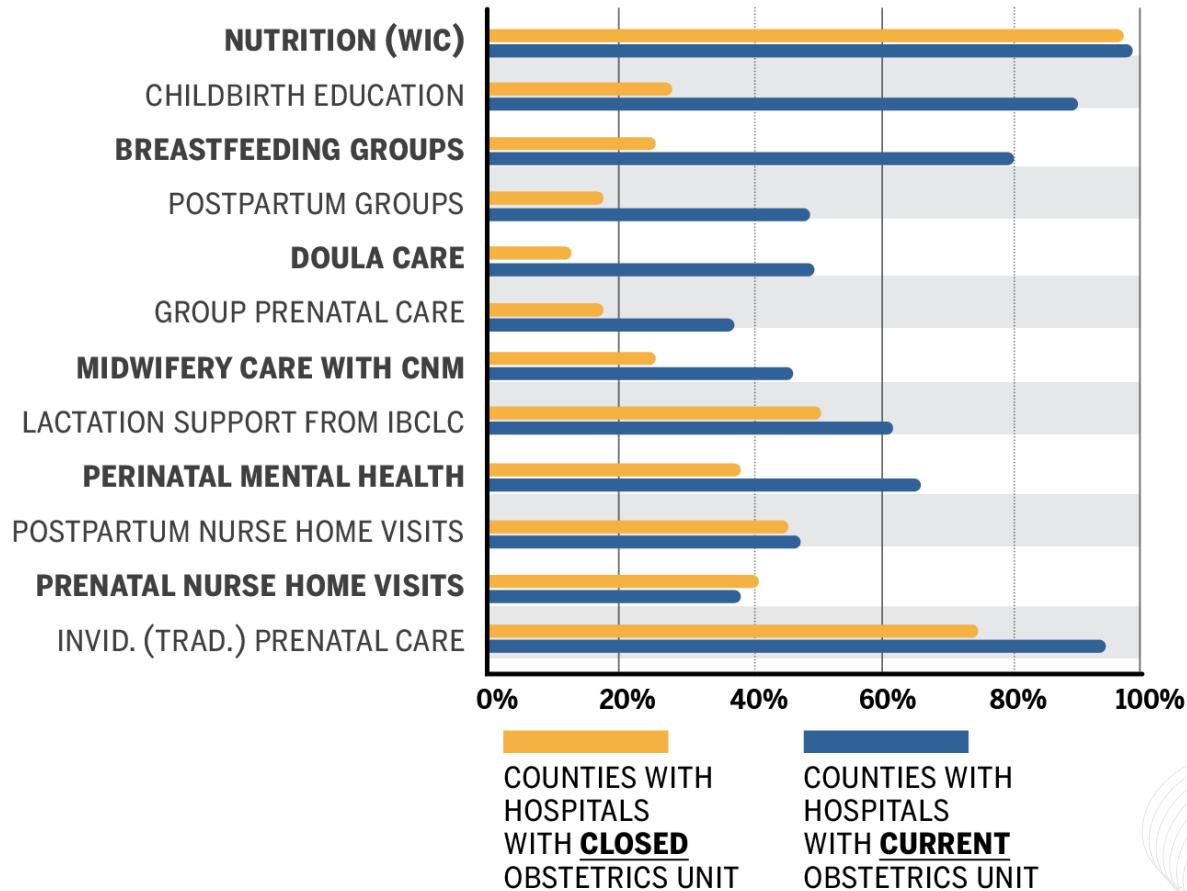
Rural Hospital-Based OB Services

Loss of Hospital-Based Obstetric Services in Rural Counties in the United States, 2010-2022



RURAL HOSPITALS

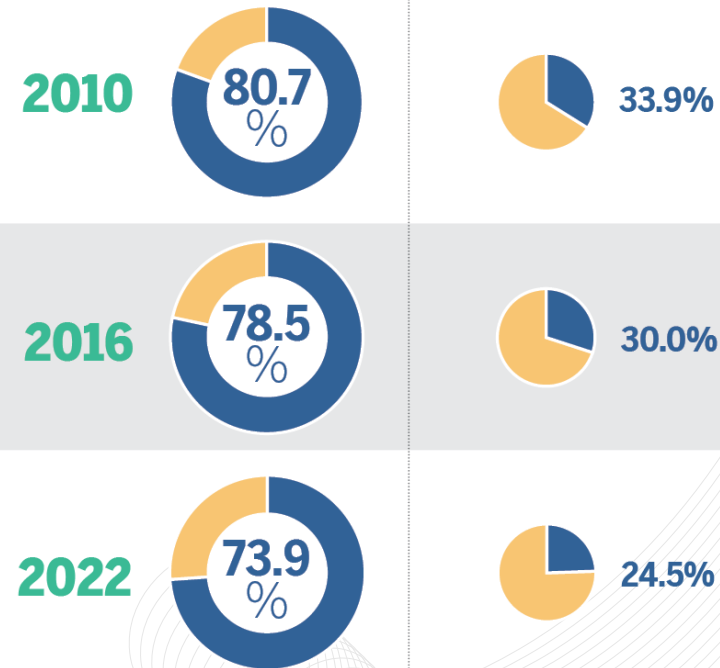
% COUNTIES WITH TYPES OF OBSTETRIC CARE



% WITH IN-HOSPITAL OBSTETRICS UNIT

HOSPITALS IN MICROPOLITAN COUNTIES

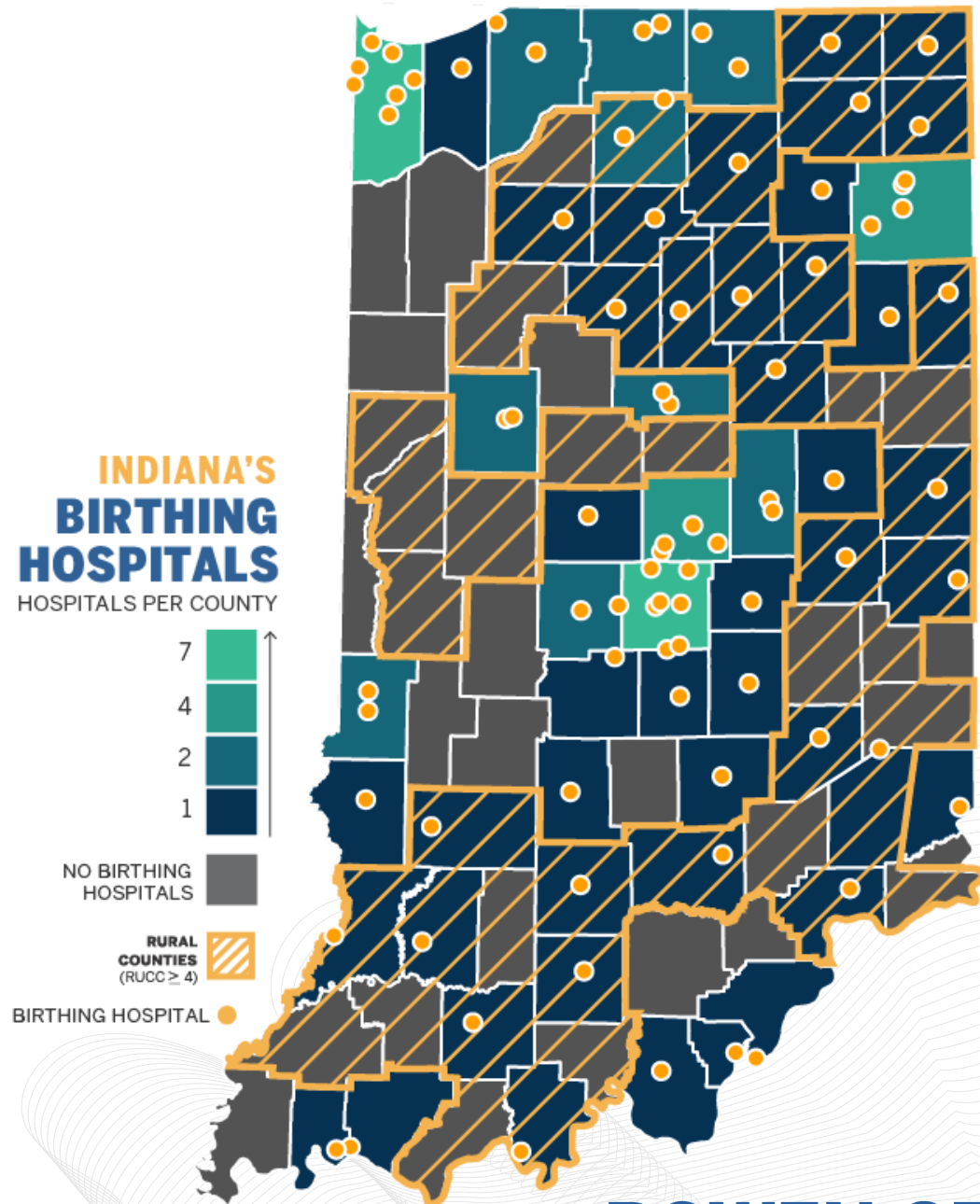
HOSPITALS IN NON-CORE COUNTIES

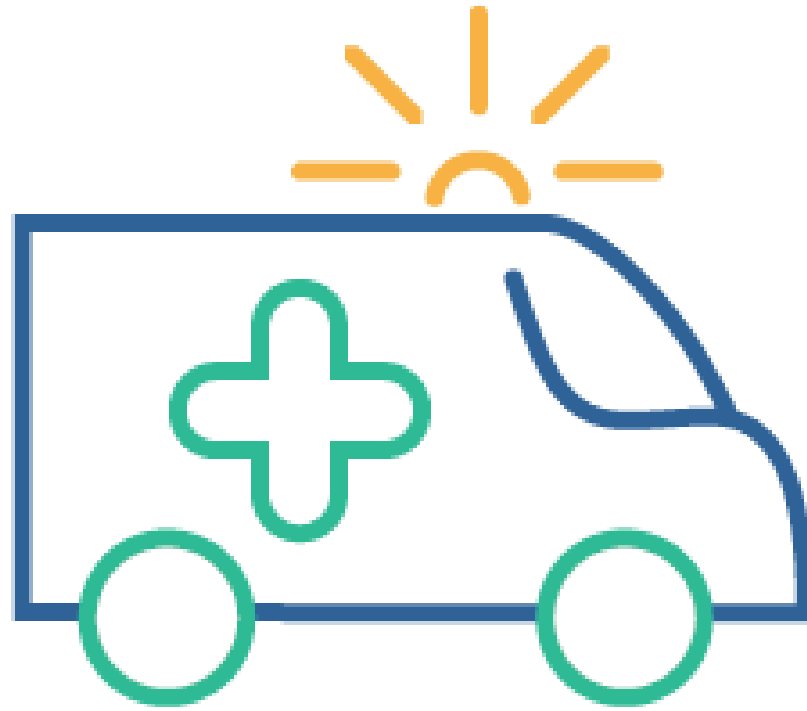


Annual percentage of all rural micropolitan (*with a town of 10,000-50,000 residents*) and rural noncore counties (*without a town of at least 10,000 residents*) with at least one hospital providing obstetric care in-county between 2010 and 2022

Indiana Obstetric Hospital Care

- Indiana maternity care services are clustered in metropolitan areas, mostly around Indianapolis, Fort Wayne and near the Chicagoland area.
- 35 counties do not have a birthing hospital (24 of which are non-metro counties)
- 93,234 Women of childbearing age live in a county with no birthing hospital
- 255,117 women of childbearing age live in a non-metro county
- 27 of Indiana's 92 counties are left without a labor and delivery provider





EMS

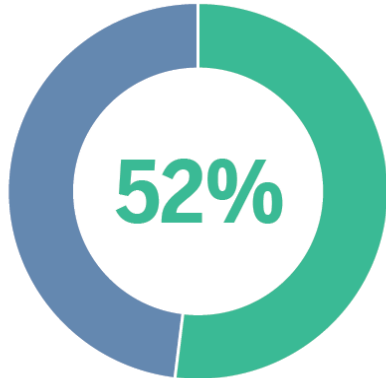


EMS: Nationwide

4.5 MILLION PEOPLE
LIVE IN AN AMBULANCE DESERT



2.3 MILLION OF THEM
LIVE IN RURAL COUNTIES

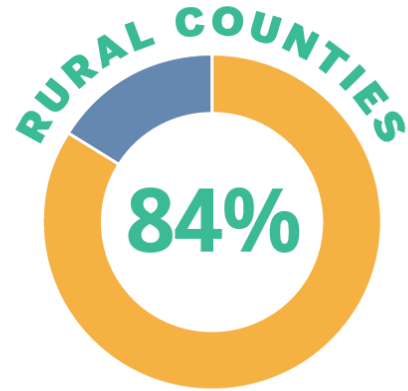


52% OF PEOPLE LIVING
IN AMBULANCE DESERTS
LIVE IN RURAL COUNTIES

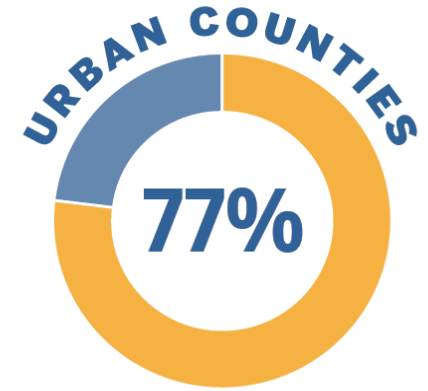
Ambulance Desert: Communities and/or people who are more than 25 minutes from an ambulance station.



% OF COUNTIES WITH AMBULANCE DESERTS



RURAL COUNTIES ARE
MORE LIKELY TO HAVE
AMBULANCE DESERTS
THAN URBAN COUNTIES

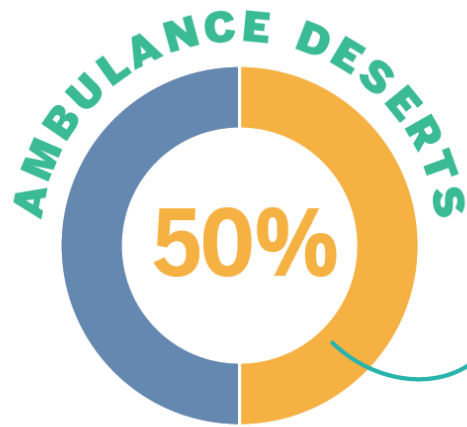


Hospital closures in rural areas can have a significant impact on EMS service providers by:

- Expanding the service areas
- Increasing response and transport times
- Increasing the time an EMS professional must care for complex patients.

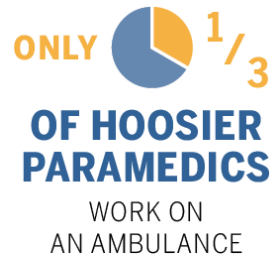


EMS: Indiana

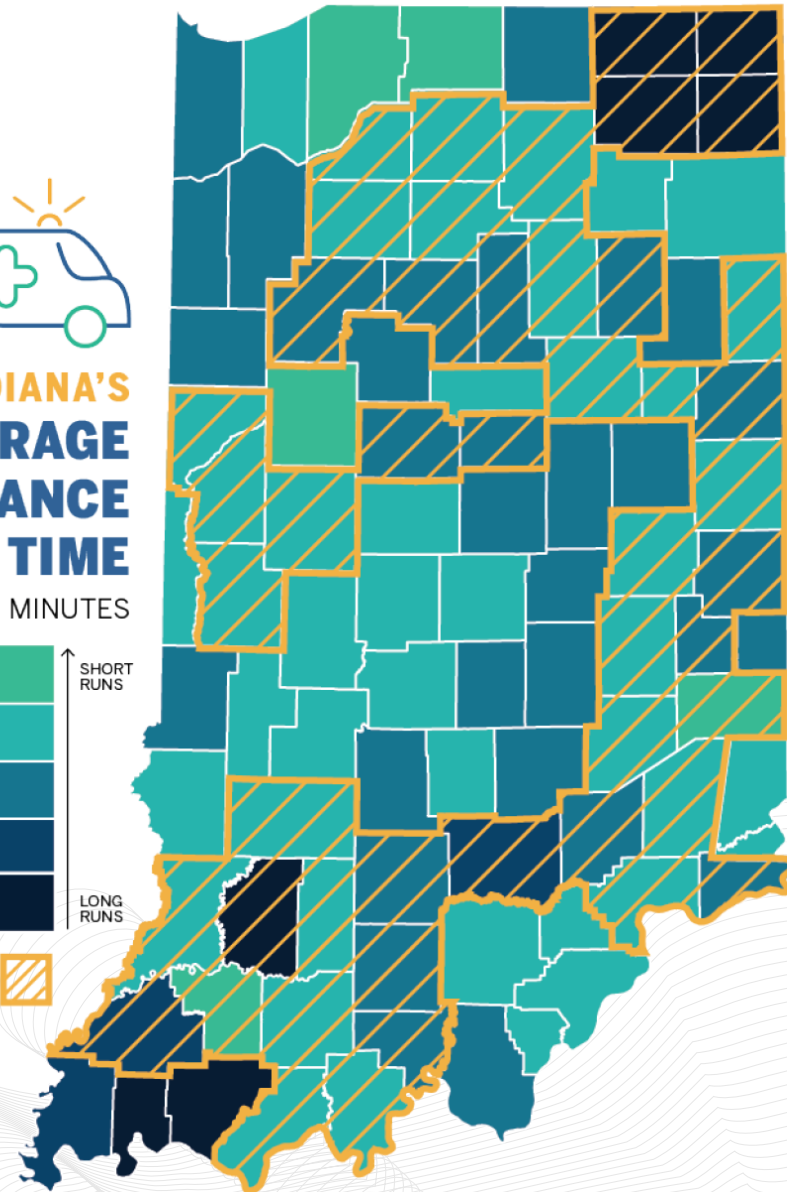
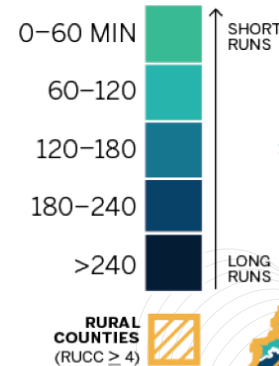


HALF OF INDIANA'S COUNTIES MEET THE CRITERIA FOR AMBULANCE DESERT...

... LEAVING NEARLY **100,000** HOOSIERS AT RISK



AVERAGE RESPONSE AND TRANSPORT TIMES





WORKFORCE

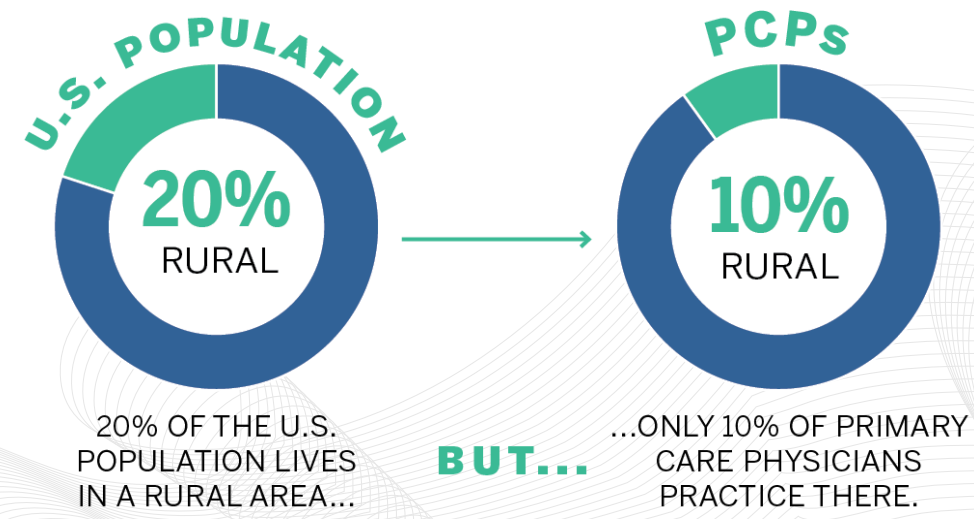
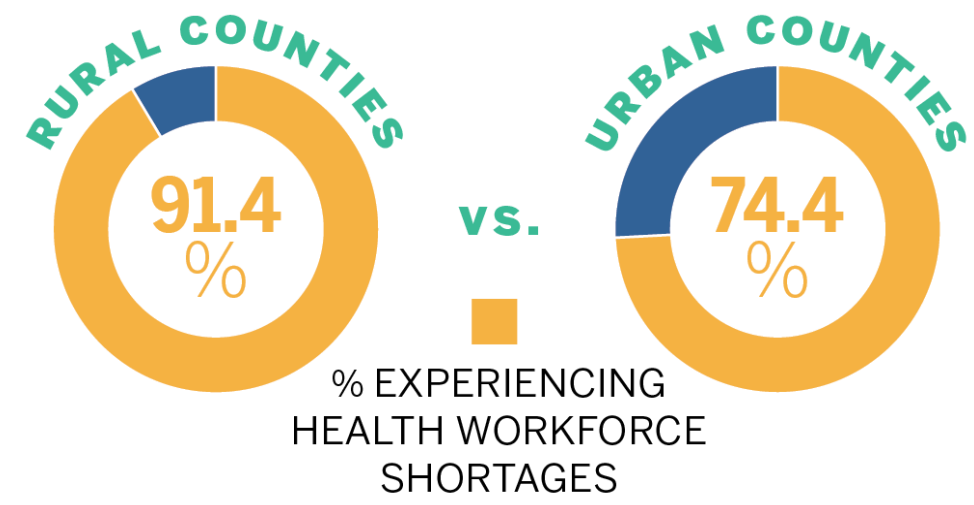
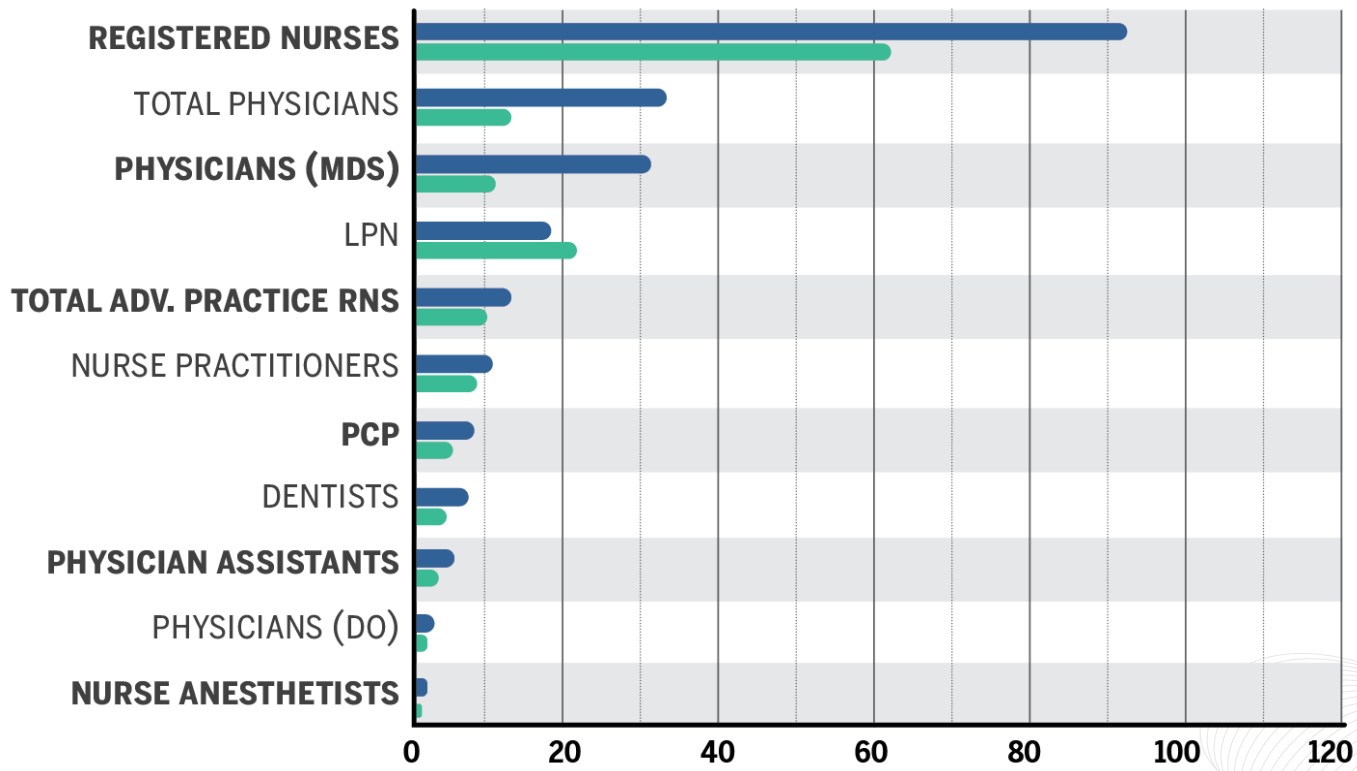


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Rural Health Workforce Shortages



HEALTH PROVIDERS PER 10,000 PEOPLE



Source: Rural Health Information Hub; Addressing Rural Health Worker Shortages Will Improve Population Health and Create Job Opportunities. 2024. U.S. Congress Joint Economic Committee.

Rural Health Workforce Shortages



15% DECREASE
IN PRIMARY CARE
PHYSICIANS



IN RURAL AREAS
4.7 DENTISTS
PER 10,000 PEOPLE

IN URBAN AREAS
7.5 DENTISTS
PER 10,000 PEOPLE



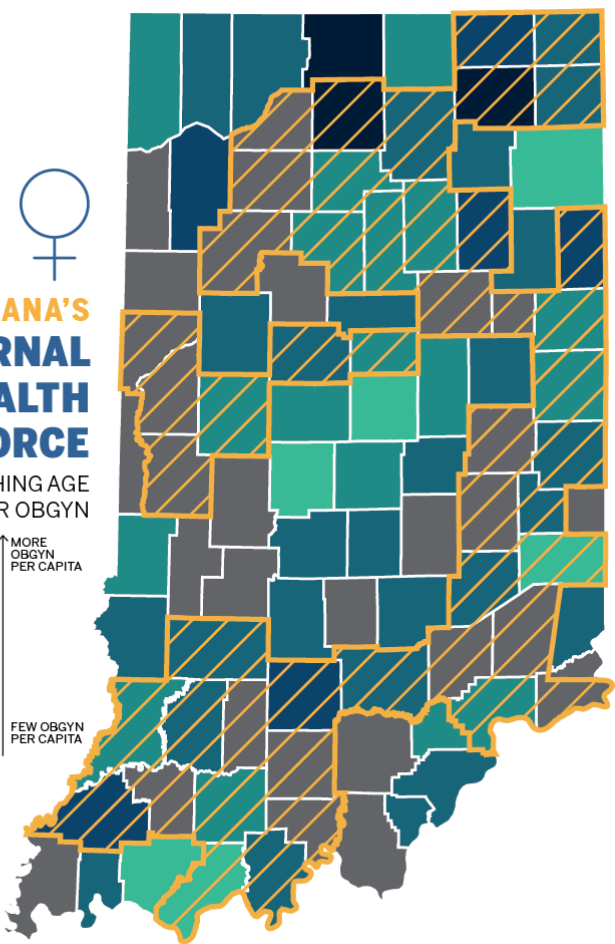
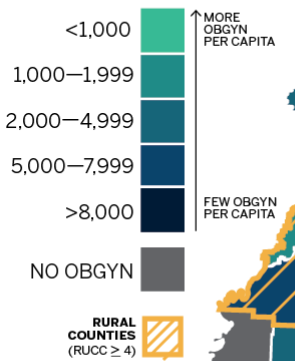
ONLY
4.3% OF OBGYNs
PRACTICE IN RURAL AREAS

BUT
10.6% OF WOMEN
OF BIRTHING AGE
LIVE IN RURAL AREAS

Indiana Mirrors National Shortages

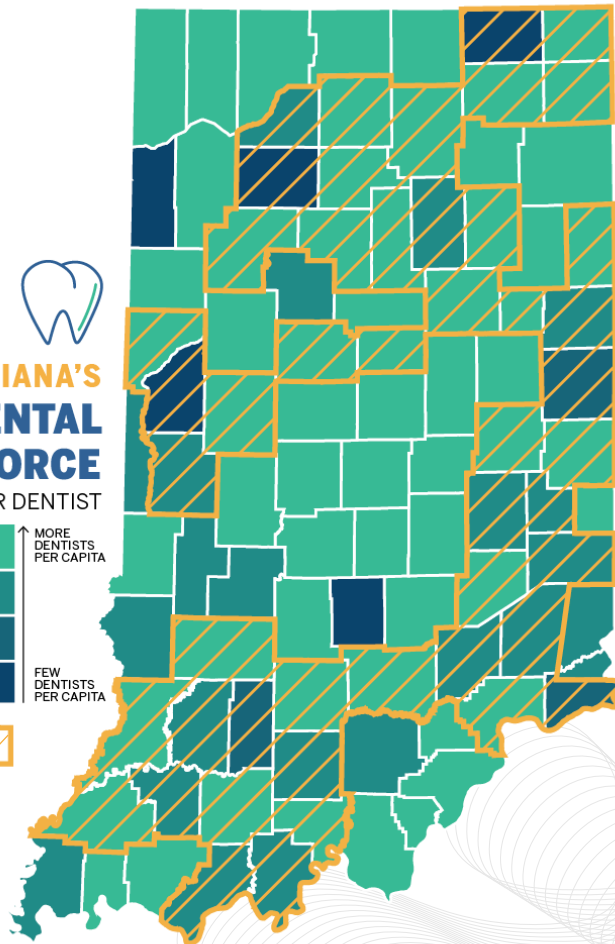
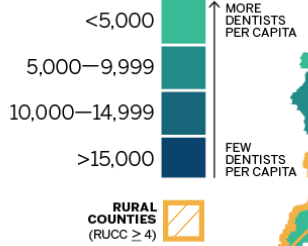
INDIANA'S MATERNAL HEALTH WORKFORCE

WOMEN OF BIRTHING AGE PER OBGYN



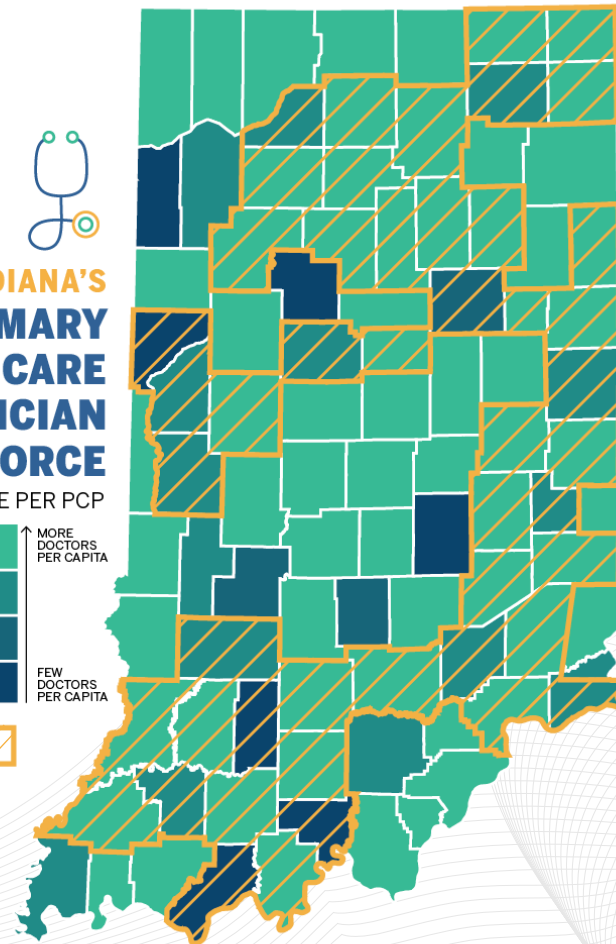
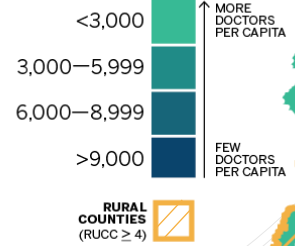
INDIANA'S DENTAL WORKFORCE

PEOPLE PER DENTIST



INDIANA'S PRIMARY CARE PHYSICIAN WORKFORCE

PEOPLE PER PCP



Sources: <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/maternal-health-workforce-brief-2022.pdf>



MENTAL HEALTH



Mental Health



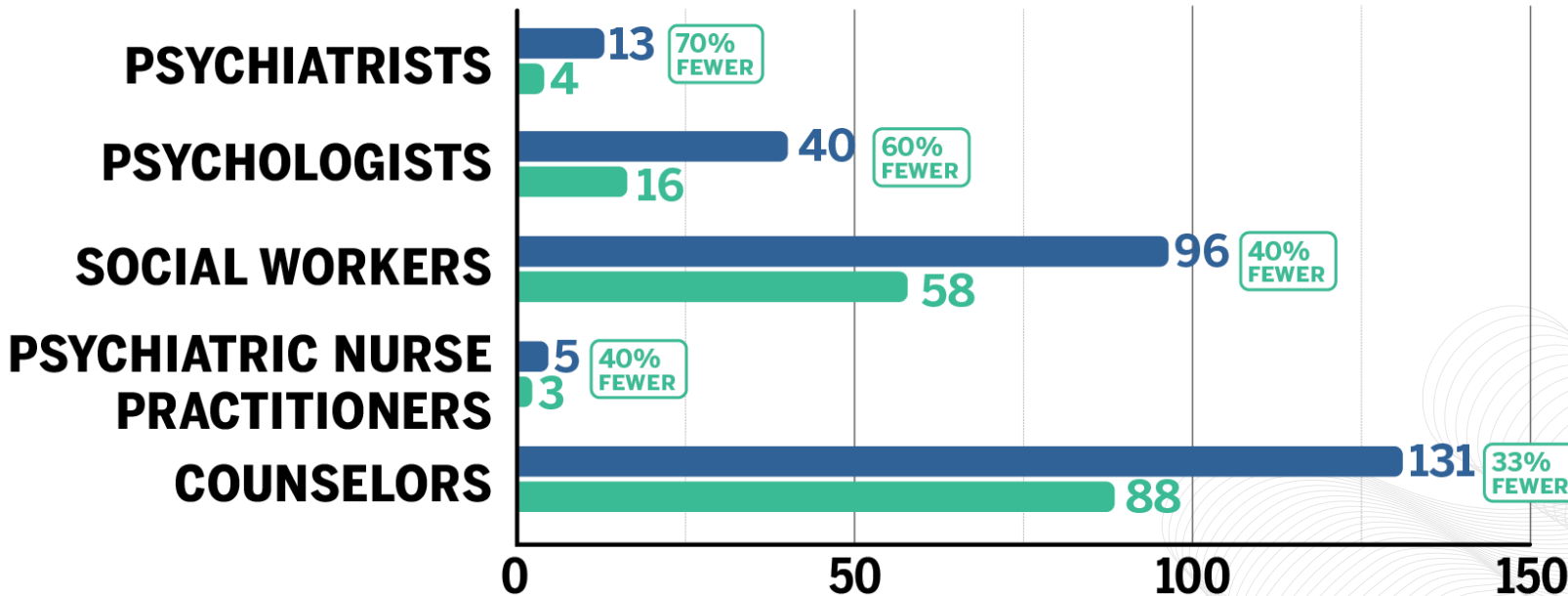
MENTAL HEALTH WORKFORCE DISPARITIES NATIONWIDE



23%
OF RURAL ADULTS
REPORT MENTAL
ILLNESS

5.7%
HAVE SERIOUS
THOUGHTS
OF SUICIDE

PROVIDERS PER 100,000 PEOPLE



- Behavioral health professionals: two-thirds fewer in rural areas.
- Four major challenges:

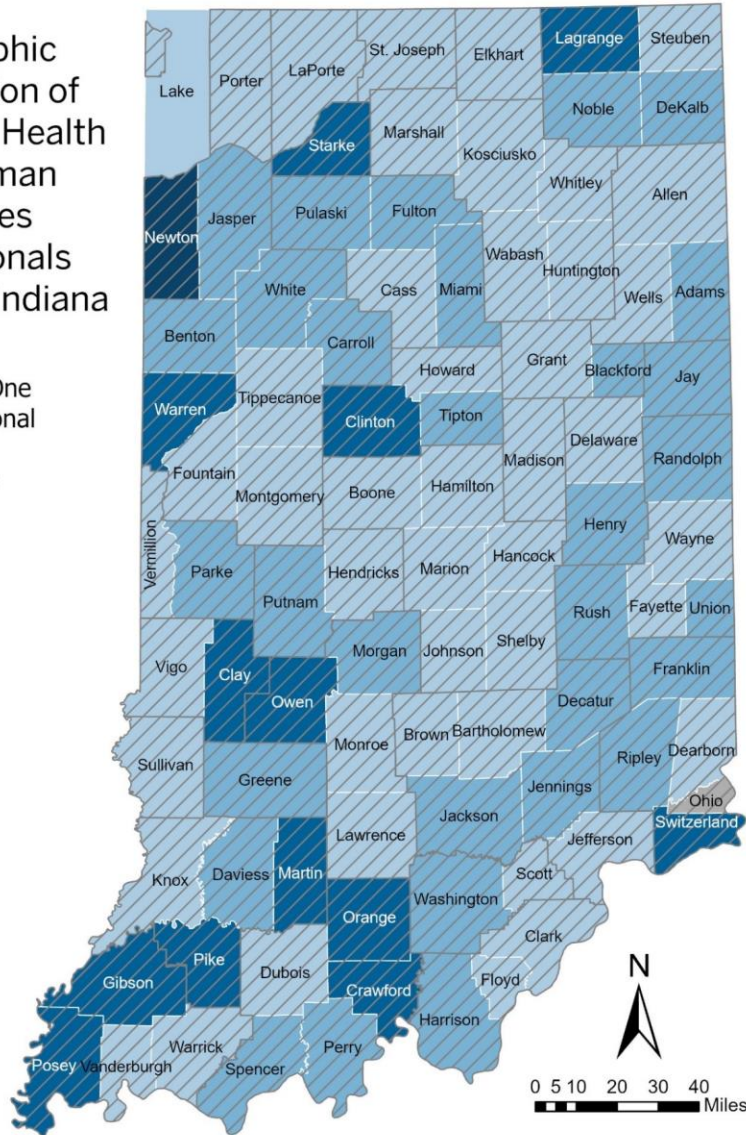
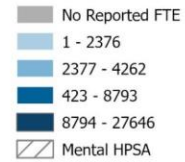
Accessibility
Availability
Affordability
Acceptability



Mental Health Services in Indiana

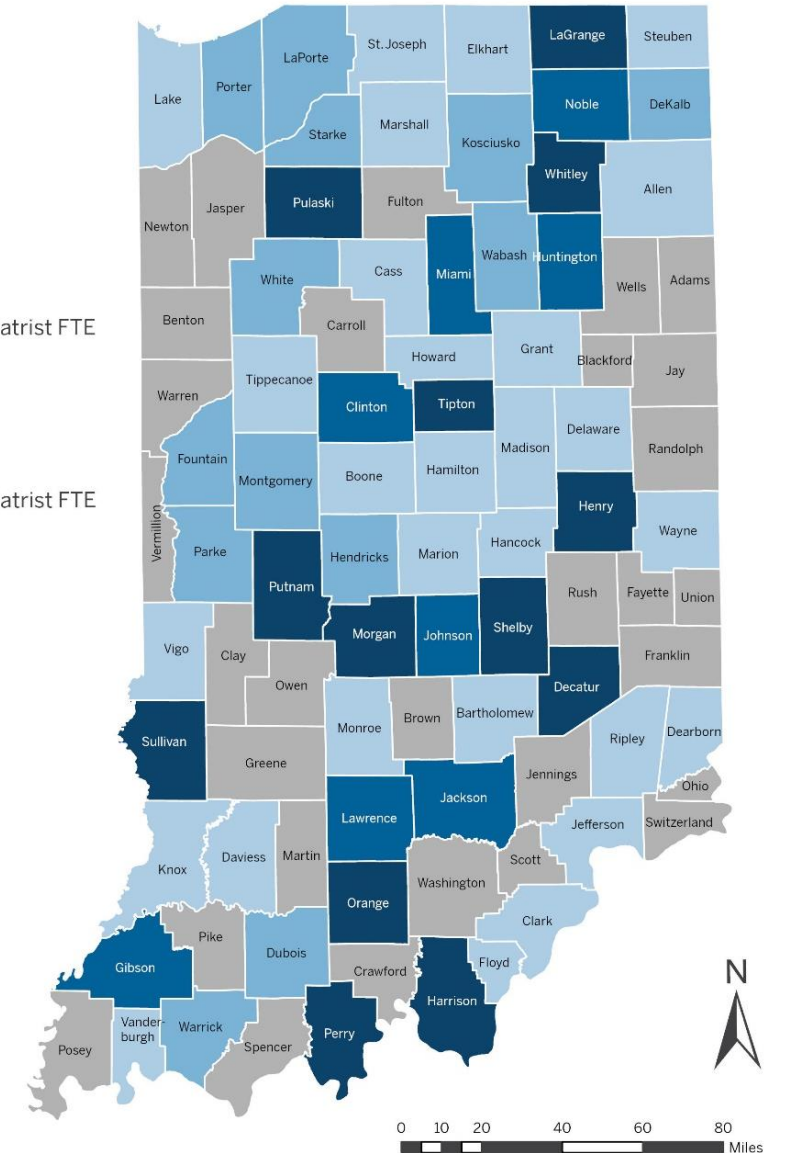
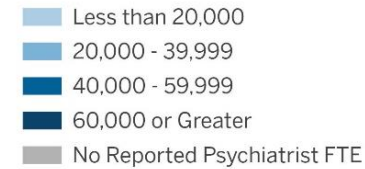
Geographic Distribution of Behavioral Health and Human Services Professionals (BHHS) in Indiana

Population to One BHHS Professional FTE



Source: Indiana Behavioral Health and Human Services License and Supplemental Survey Data, 2022
Notes: This graph includes all license types.

Population to One Psychiatrist FTE



Source: 2021 Indiana Physician License and Supplemental Survey Data; U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates
Note: Population-to-provider FTE ratios cannot be calculated for counties with no reported physician FTE.





SCHOOL- BASED HEALTH

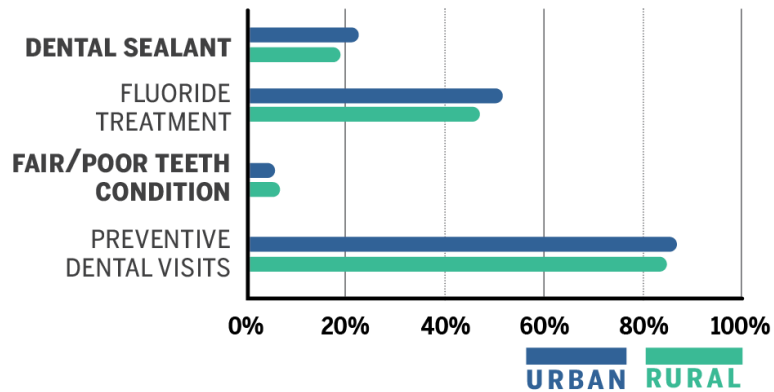


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School-Based Health: Nationwide

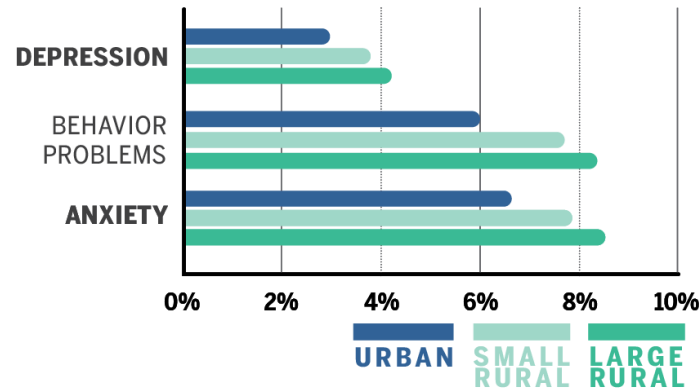
ORAL HEALTH

URBAN VS. RURAL STUDENTS



MENTAL HEALTH

URBAN VS. RURAL CHILDREN, AGES 3-17



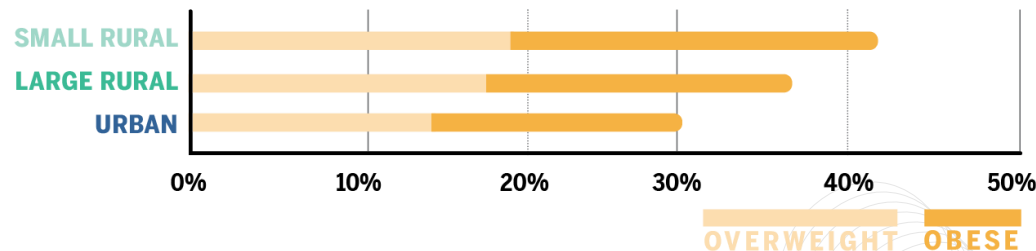
RURAL SCHOOLS ARE **CRITICAL** FOR HEALTH INITIATIVES (RHI)



RURAL CHILDREN HAVE HIGHER RATES OF **MENTAL HEALTH CONDITIONS (CDC)**

OBESITY

URBAN VS. RURAL CHILDREN, AGES 10-17



Challenges

- Staffing shortages • Inadequate funding • Technology limitations
- Low population density • Transportation barriers

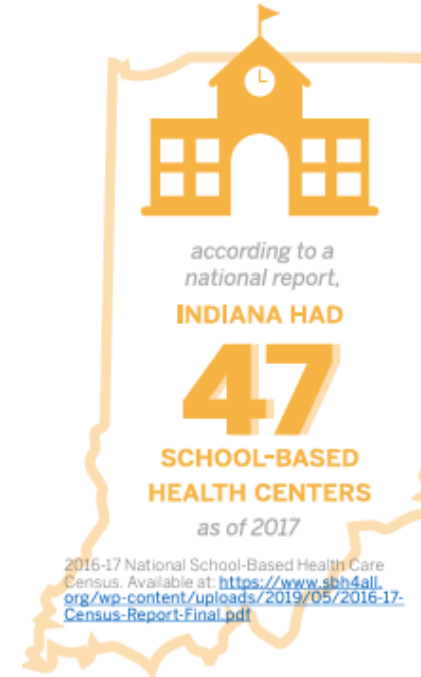
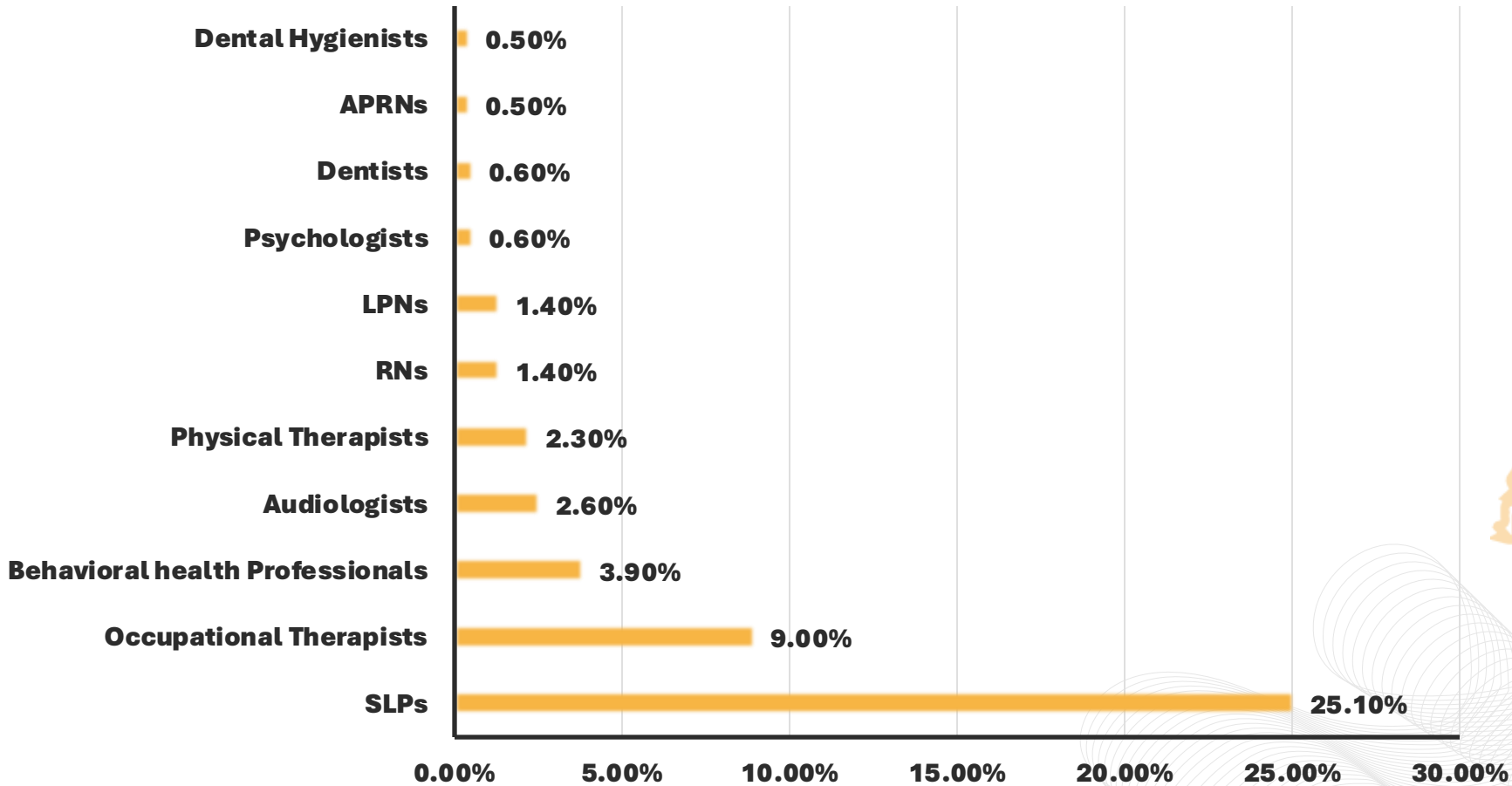


Source: Crouch E, Nelson J, Merrell MA, Martin A. The oral health status of America's rural children: An opportunity for policy change. J Public Health Dent. 2021 Dec;81(4):251-260. doi: 10.1111/jphd.12444. Epub 2021 Jan 27. PMID: 33501720.

Rural/Urban Differences in Children's Health. NSCH Data Brief. 2020. Health Resources and Services Administration, Maternal and Child Health

School-Based Health: Indiana

Percent of Indiana Health Professionals Who Report Practicing in a School-Based Setting



Sources: Maxey H, Medlock C, Vaughn S. Indiana's School-Based Health Workforce. 2020. Bowen Center for Health Workforce Research and Policy, Indiana University School of Medicine.

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Rural Health Care Resources: Strategies



HOSPITALS



EMS



WORKFORCE



**MENTAL
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**SCHOOL-
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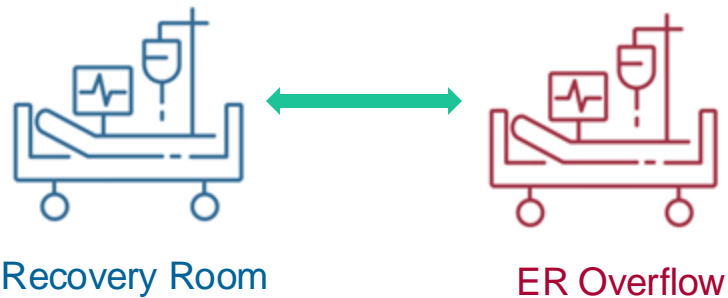


Rural Hospitals



Adaptable and Flexible Facilities

Creating multiple use spaces can reduce costs and maximize type of care that can be provided. Also allows the hospital to meet the changing population demands.



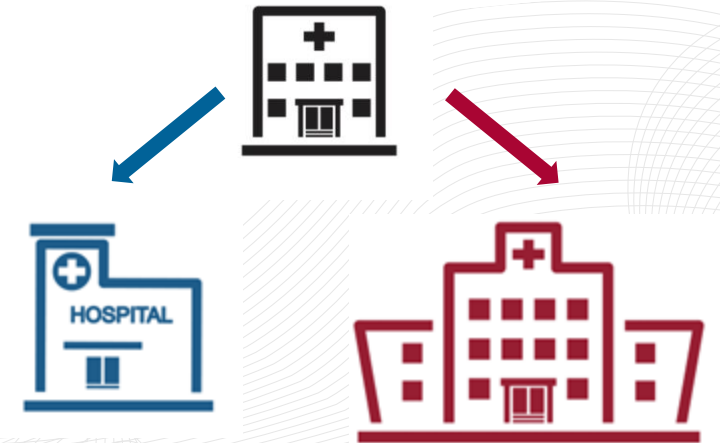
Increase Chronic Care Services

Bringing chronic care services closer to home will be beneficial for the aging population and those in recovery.



Replacing vs. Renovating

As the population changes, the health care needs will also change. Consider what is the most financially feasible (not always renovating).



Source: Albert, Jim. "Strategies to rebuild rural health care facilities: focusing capital in key areas can help to strengthen rural hospital and provide stability." Health Facilities Management, American Hospital Association. August 26, 2020

Rural EMS



Optimize Telehealth

Find solutions for sustainable connectivity that can help coordinate care and increase access.



Mutual Aid Agreements

Ensure backup resources are available for rural EMS agencies through cooperation.



Community Engagement

EMS Community

Building a culture of trust and respect

Rural Community

Capitalize on what makes rural communities unique – connection

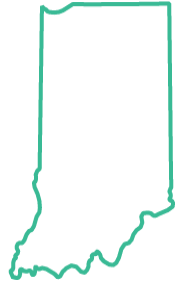


Strategic Recruitment

Develop a volunteer corps and expand training to “grow your own”.



Rural Health Workforce + Mental Health



State-level Initiatives

- Funding
- Policy



Rural Health Care Facilities

- Telehealth service
- Interprofessional care teams
- Training and educational opportunities



Health Professional Schools

- Rural-centric training tracks



International Medical Graduates

- Recruit with J-1 visa waivers



Rural School-Based Health



Revamp Health Education

- Nutrition and Health Eating
- Health Fairs
- Injury prevention
- Keep the staff in mind



Strategic Funding

- Resources for human services (food, shelter, transportation, etc.)
- Incentives for health professionals to work in rural, underserved areas



Building Community

- Clubs that involve students, staff, and the community.
- Community programs
- Local health career programs for students



Expand Telehealth

- Support integrated care
- Increase access to specialized behavioral health services.





Thank you!

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