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Empowering Rural Oklahoma:
Using Telehealth Navigators to Promote Digital Health
Equity

Oklahoma State University Virtual Care

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No disclosures or
conflicts of interest



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Enhance Digital Health Equity

Prioritize digital health equity by ensuring that rural Oklahomans have the tools, knowledge, and support needed to effectively access telehealth services through the use of telehealth navigators.

Expand Access of Virtual Care

Increase access to a range of virtual healthcare services, including primary care, specialized care, and emergency services, in key rural locations such as hospitals, extension offices, and clinics across Oklahoma.

Collaborate to Improve Healthcare Outcomes

Partner with universities and healthcare institutions to expand telehealth access, share best practices, and learn from other initiatives, with the goal of improving healthcare delivery and patient outcomes across multiple states.

Health/ Medical Operations | MEDICINE



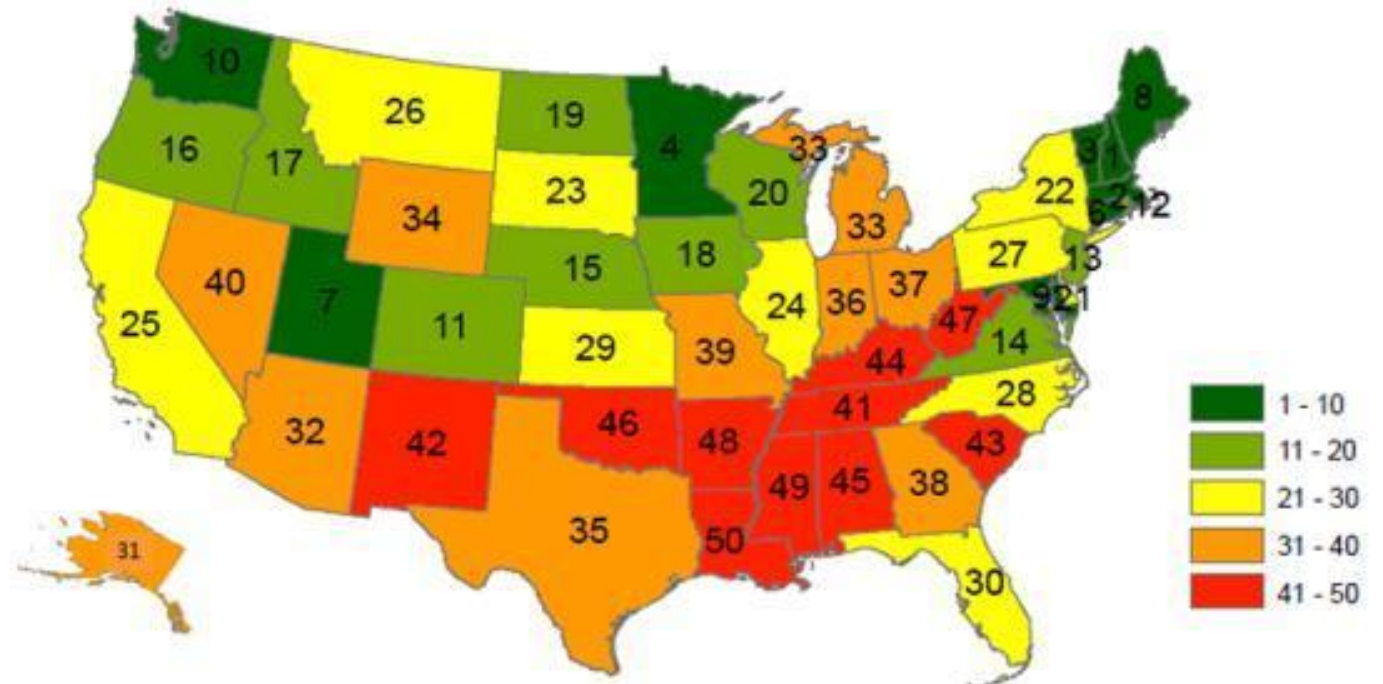
Healthcare in Oklahoma

RANKED 46TH IN OVERALL
HEALTH IN 2021



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Figure 1: State Ranking Map, 2021



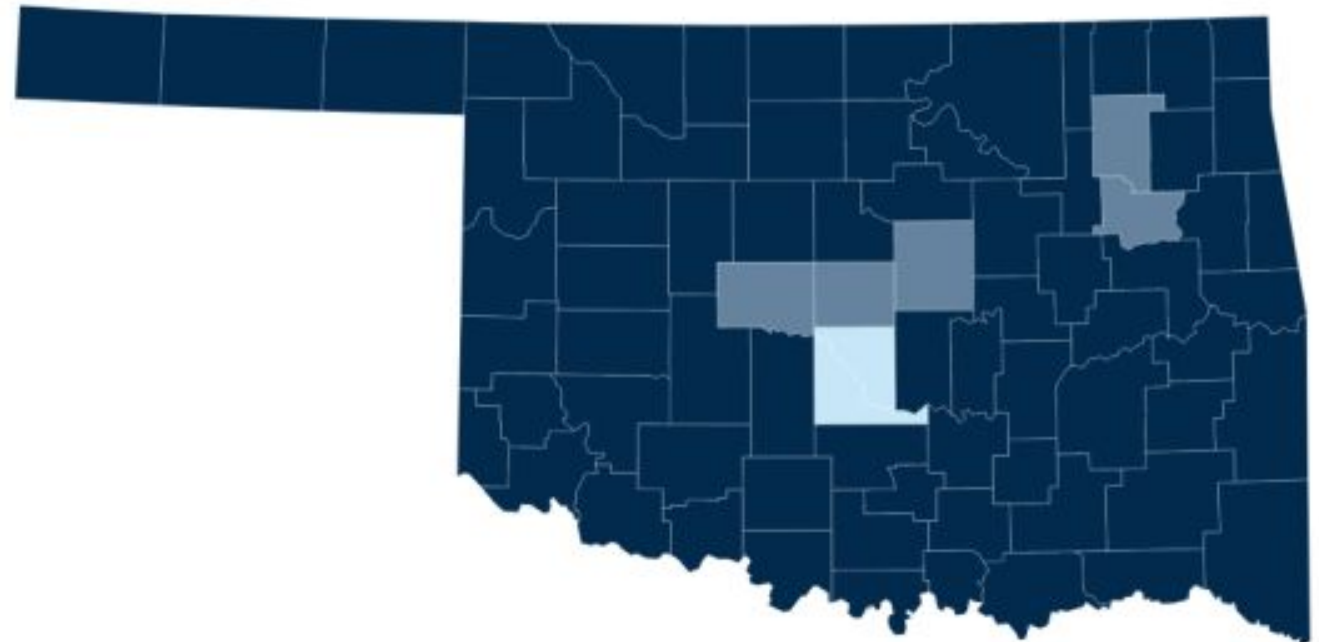
Healthcare in Oklahoma

SHORTAGE OF PRIMARY CARE PROVIDERS



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Health Professional Shortage Areas: Primary Care, by County, October 2024 - Oklahoma

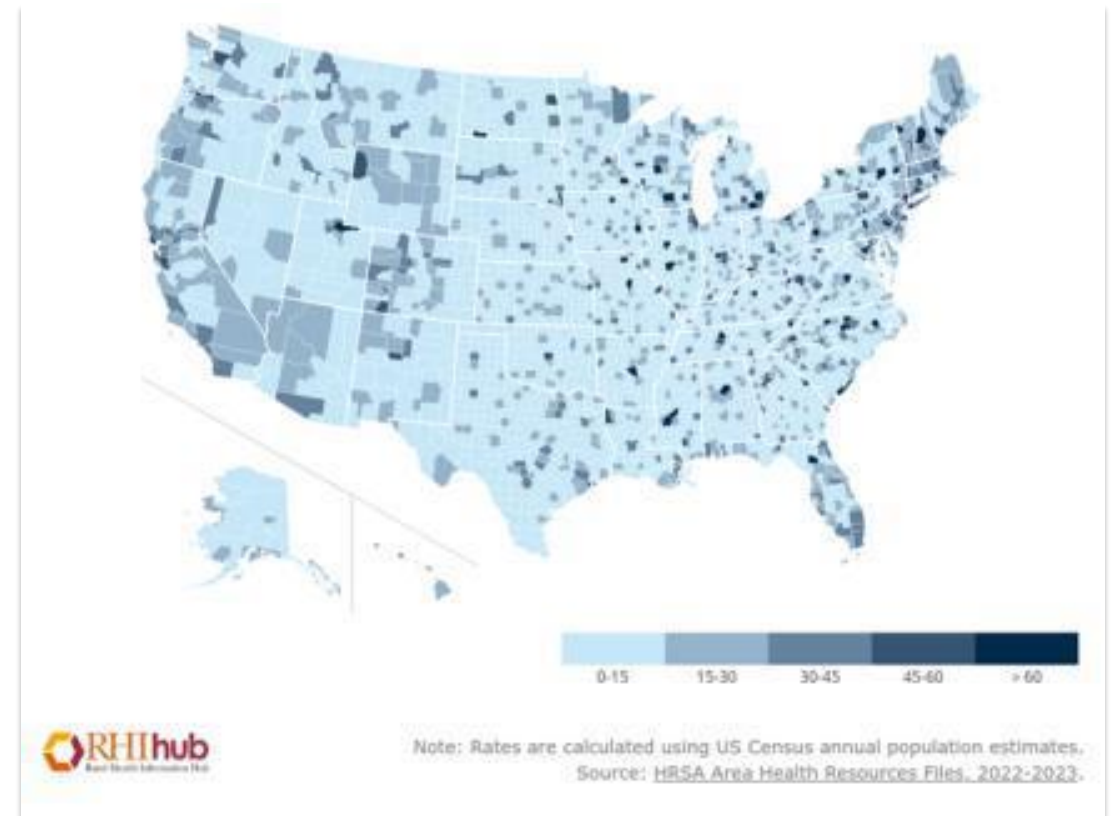
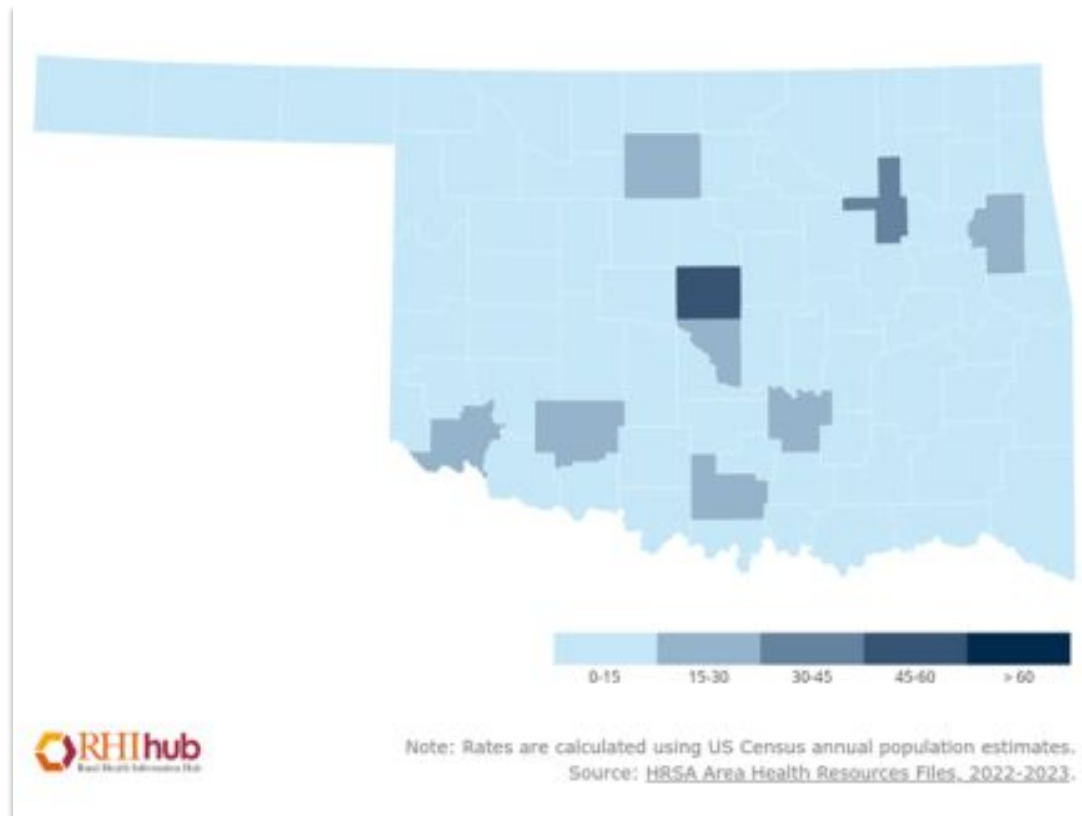


Healthcare in Oklahoma

Number of Physicians per 10,000 people



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How do we connect the dots?



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**Rural Counties/
Access to
Healthcare**

Virtual Care!

HEALTH CARE

High Quality
Healthcare

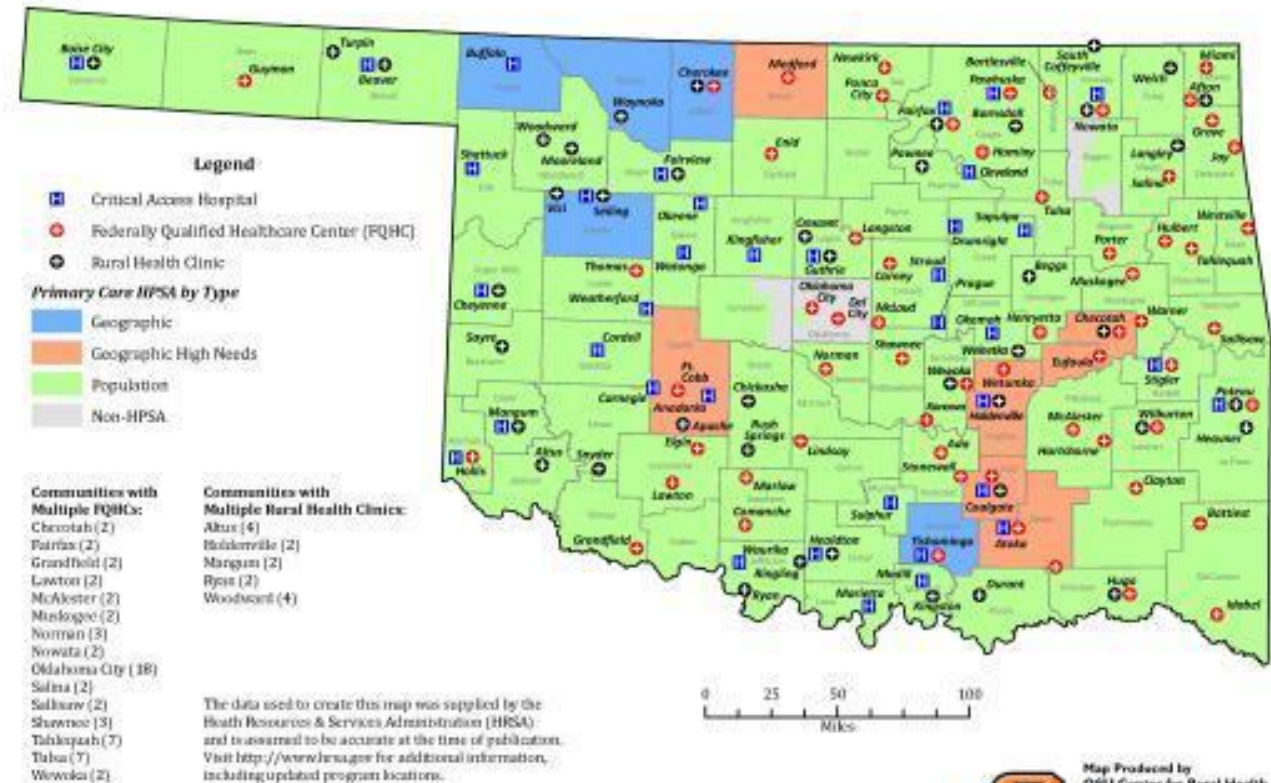




Critical Access Hospitals

- CAH are rural health safety nets but often are the centers of healthcare for a community
- Many of our services concentrate around critical access hospital systems

Rural Health Clinics, FQHCs & Critical Access Hospitals Oklahoma
April 2017





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OSU EXPANSION OF TELEMEDICINE

OSU VIRTUAL CARE

**LEVERAGING TECHNOLOGY TO RAPIDLY EXPAND ACCESS TO MEDICAL CARE ACROSS
OKLAHOMA**

“OSU continues to innovate as the leader in telehealth and virtual care, as technology continues to broaden the possibilities of reaching across the state to provide specialty care. Through these efforts, we are working to address both patient needs as well as health care workforce shortage issues.”

- Dr. Johnny Stephens, OSU Center for Health Sciences President



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Services provided by OSU Virtual Care

Hospitalist

Cardiology
Consults

Pulmonology
Consults

ED
Psychiatric
and Addiction
Medicine
Consults

School Based
Quick Care/
Behavioral
Therapy

Free mobile
virtual clinics
with
extension
office

Primary Care
Office

Choctaw
Nation Urgent
Care

ED Provider
Training
Program



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Hospital Based Services

Hospitalist:

Direct supervision model

Consult model

Potential Future Services:

Pulmonology

Endocrinology

OB/GYN

Pediatrics

Cardiology:

Consults inpatient and outpatient

Psychiatric and Addiction Medicine:

Emergency room consults

Inpatient consults



Targeted Need Across Oklahoma



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Healthcare
for rural
school age
children





School Based Virtual Quick Care Clinics

Seen by a virtual
provider in the
school

Parent can join
virtually

Coughs, colds,
abdominal pain,
ear pain, nausea
and vomiting



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OSU Virtual Care Goal

1

Increase
access to
quality care

2

Decrease
absenteeism

3

Keep
parents at
work

4

Improve
school
attendance

5

Improve the
time to care

Behavioral Health Therapy



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Unable to provide
emergent services



Support for
established protocols



Free, no insurance
needed



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FREE MOBILE CLINIC VISITS

Bridging the gap in Primary care



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Patients

Children to adults

Location

**OSU extension
offices**

Cost

Free

**What can
we do?**

**Prescribe medication
and perform labs**

**Community
help**

**Community health
worker**

APP ED training Program



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- Providing training to rural ER APPs across the state
- Three Components
 - Modules
 - In person sessions
 - Consults

Primary Care Coverage



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- Primary care clinic coverage
- Assisting with shortage of primary care
- Spot coverage for primary providers who are out.

Urgent Care coverage



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- **Telehealth Urgent care coverage**
- **Walk in urgent clinic**
- **Partnerships with healthcare systems**
- **Provide immediate medications and prescriptions if needed**



Virtual Nursing



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Transitional Care Management



Telemetry services



Admission/Discharge review and education



Sepsis



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Business Operations





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Why do we call it Virtual Care

Telemedicine

E-Medicine

Teleconsults

Teletherapy

**Remote
Patient
Monitoring**

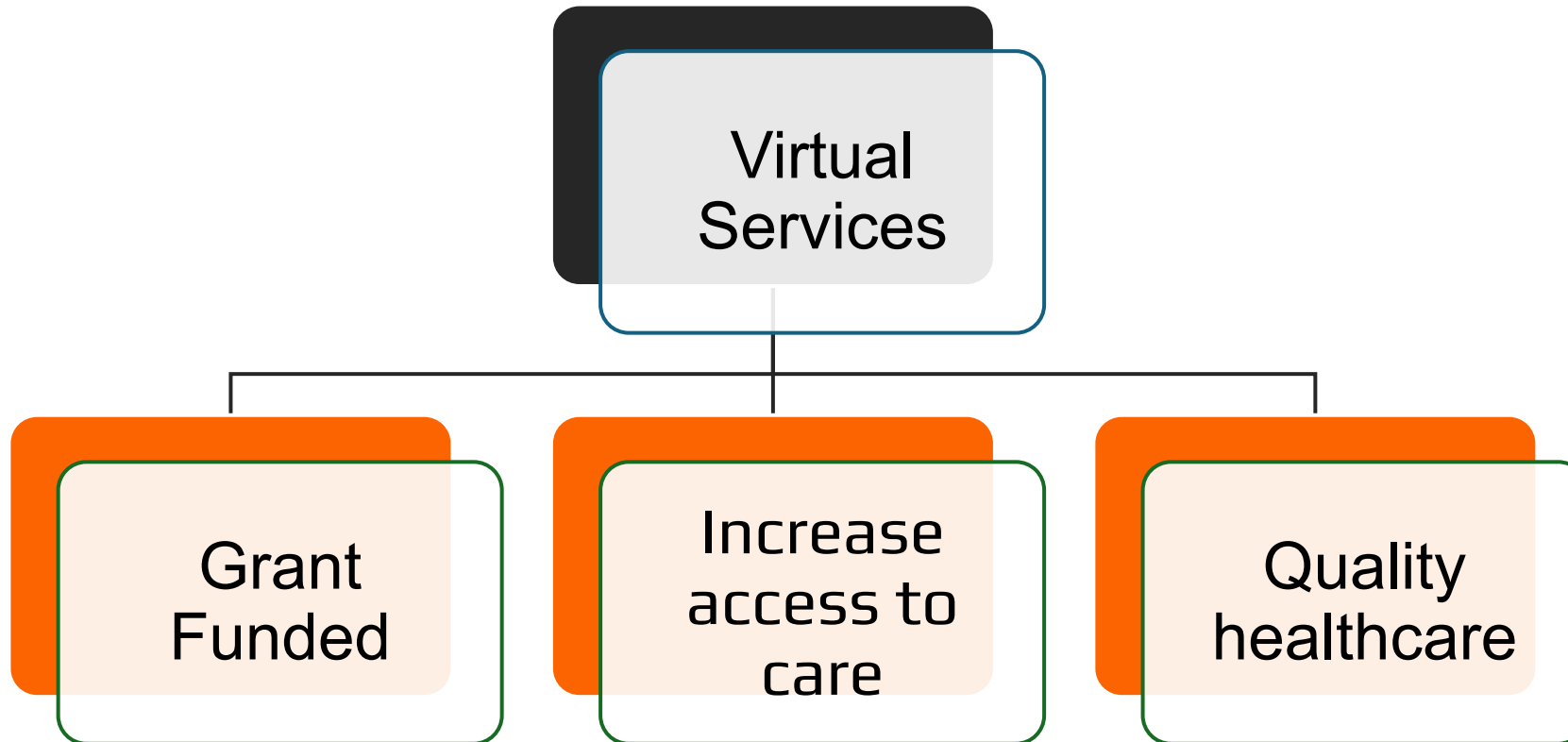
**Mobile
Health**

**Digital
Health**



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OSU Virtual Care Solution



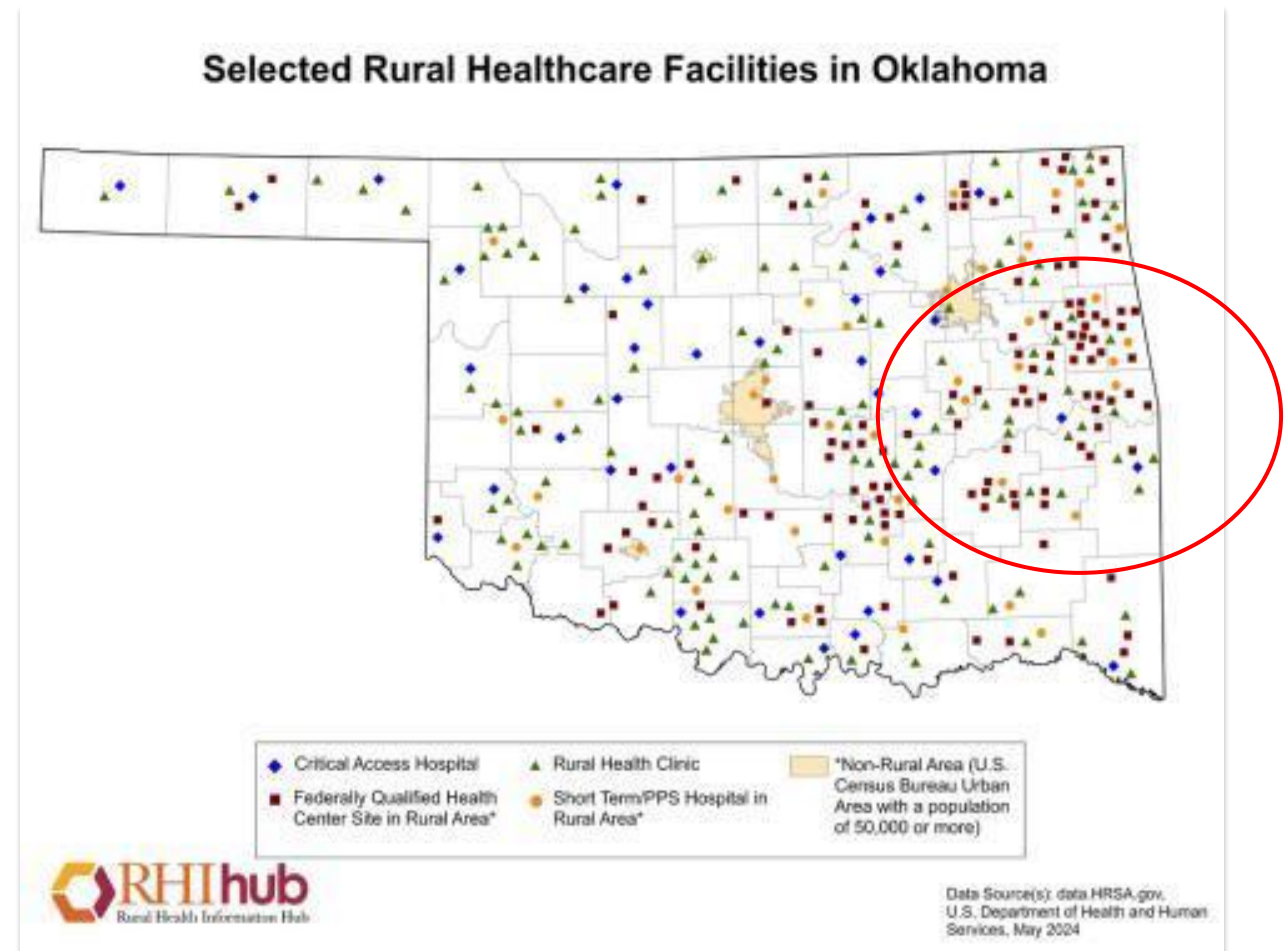
Access to care is limited



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Rural Counties:

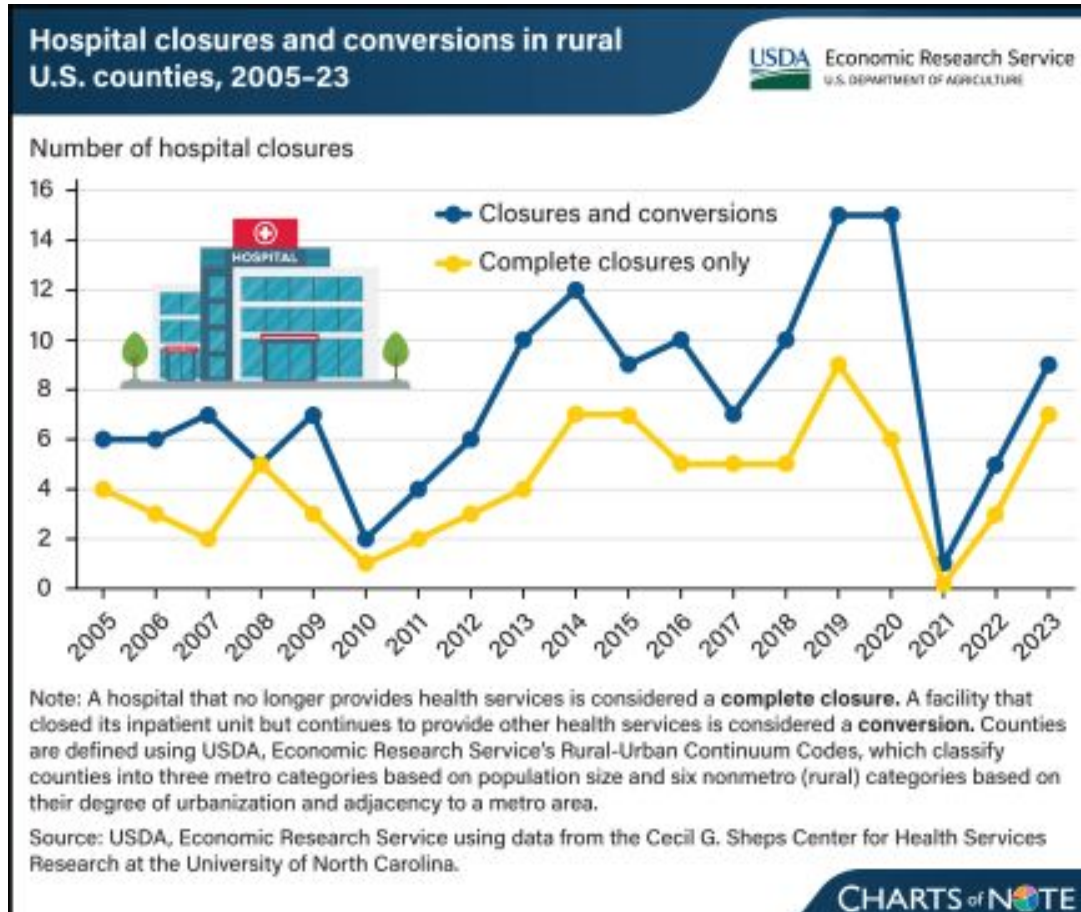
- Rural Health Clinic
- Critical Access Hospital
- Federally Qualified Health Center
- Short Term Hospital



Hospital Closures



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- Hospital Closures continue to be on the rise with 10 hospitals closed already in 2025, 1 in Oklahoma this year.
- 4 Rural Emergency Hospitals (REH) in Oklahoma (Hobart, Buffalo, Perry, Blackwell).
- One county in Oklahoma that does not currently have a licensed physician.

Goal with Virtual Care Services | **MEDICINE**



Increase access to healthcare in schools, underserved communities, and critical access hospitals



Allow more patients to stay in critical access hospitals



Increase specialty care services to these hospitals



Support communities that need assistance.

Telehealth Adoption



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Financial Performance Indicators

- Persistent telehealth use leads to higher operating margins
 - *0.95% to 3.89%*
- Direct association between telehealth adoption and financial performance.
- Hospitals that elected not to adopt telehealth have lower operating margins
 - *-7.06% to -1.29%*







Proven Difference



Total Visits

-  Mobile Clinics – 55 visits
-  Virtual School Health – 65 visits
-  Virtual Psych ER Consults - 40
-  Virtual School Therapy – 20 sessions
-  Hospitalist Consults – 295 visits

Upcoming Expansion

-  Inpatient Psych Consults
-  OB/GYN Virtual Health
-  Virtual Pulmonology
-  Virtual Cardiac Telemetry

School-Based Virtual Quick Care | MEDICINE

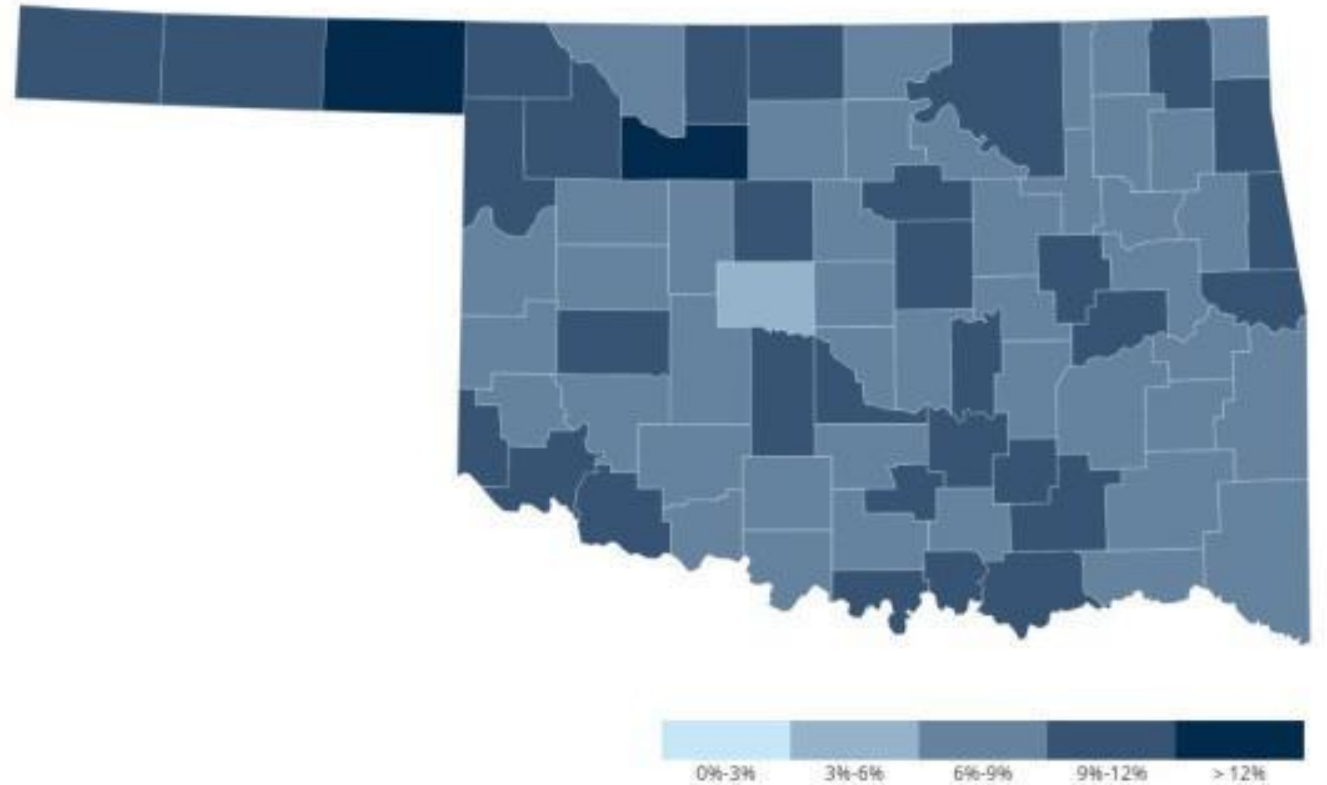
- Supporting schools to decrease absenteeism
- Concentrating on rural underserved schools across Oklahoma



Uninsured 18 and Under



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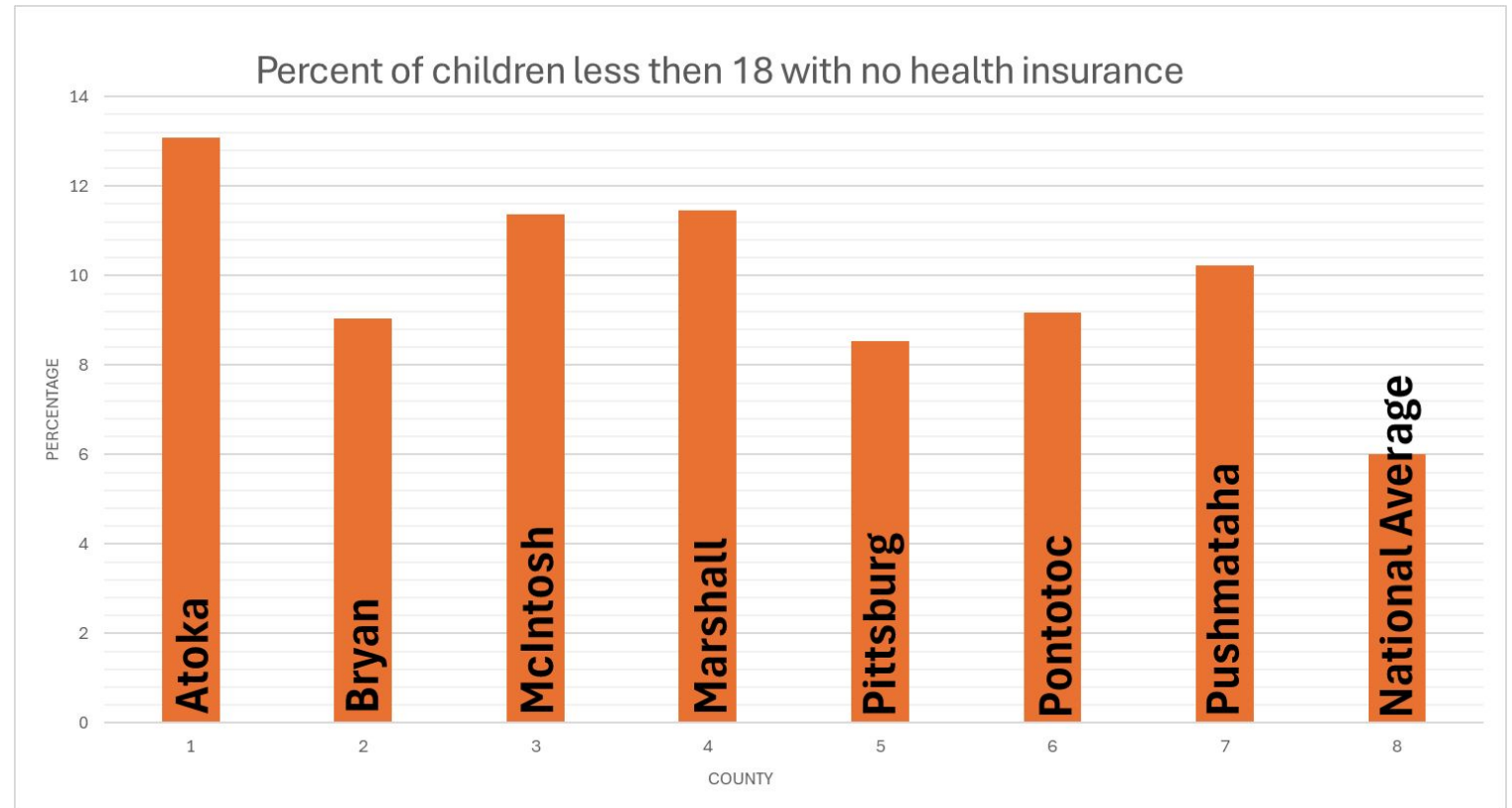


Source: [US Census Small Area Health Insurance Estimates, 2008-2022](#).



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**Percent of
uninsured
children
within our
program**



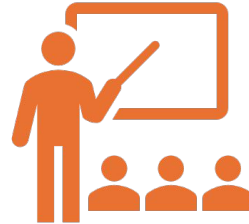


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MORE THAN PROVIDING ACCESS



Partnership:
Assisting with staff training
on professional development
days



Showing students, they can
become doctors and discussing
education



Blue Coat to White Coat



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Easy to use

Quick access

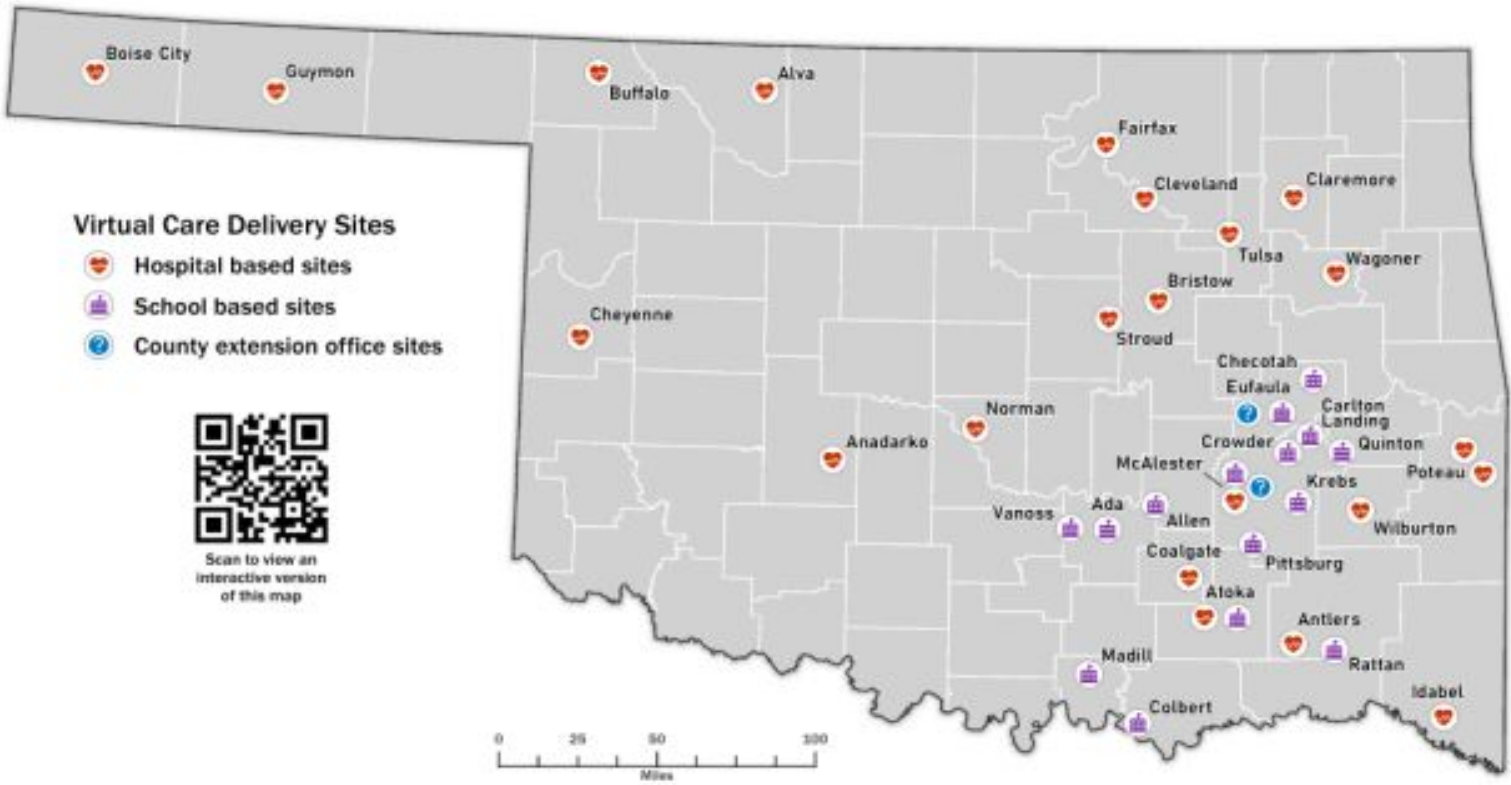
Hassle-free cleaning

Works by allowing us to join
visit

Parent can join the visit

The Technology

OSU Medicine Virtual Care Partner Sites
January 2025



Scan to view an
interactive version
of this map

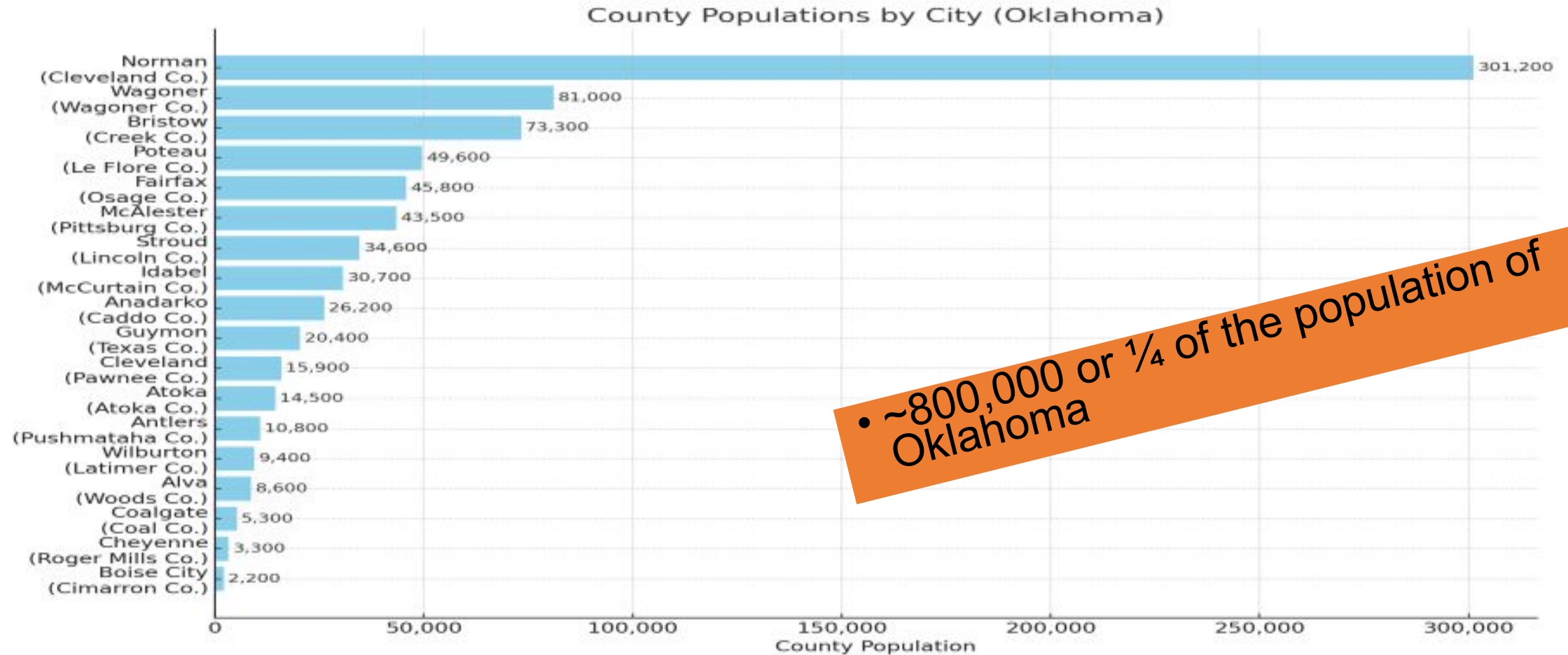
Data Source: OSU Medicine Virtual Care (2025)

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CENTER FOR
RURAL HEALTH
OSU Center for Health Sciences

Total population of Patients MEDICINE





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School Site Visits



Congressional Visit



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Hospital Site Visit



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Virtual Mobile Van



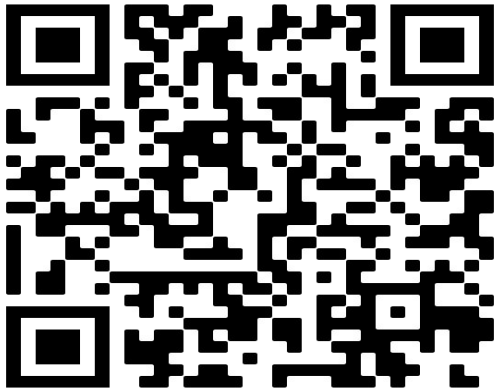
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Questions?



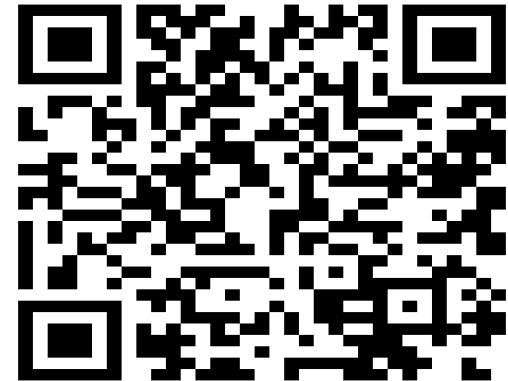
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OSU Medicine Virtual Care



References

- Greene, J. (2023, September 21). Most telehealth users say they are interested in using it again. Kaiser Permanente Division of Research. <https://divisionofresearch.kaiserpermanente.org/telehealth-users/>
- Ginsburg, G. S., Picard, R. W., & Friend, S. H. (2024). Key issues as wearable digital health technologies enter Clinical Care. *New England Journal of Medicine*, 390(12), 1118–1127. <https://doi.org/10.1056/nejmra2307160>
- Shaver, J. (2022). The state of telehealth before and after the COVID-19 pandemic. *Primary Care: Clinics in Office Practice*, 49(4), 517–530. <https://doi.org/10.1016/j.pop.2022.04.002>
- *Telehealth policy changes after the COVID-19 public health emergency*. telehealth.hhs.gov. (n.d.-a). <https://telehealth.hhs.gov/providers/telehealth-policy/policy-changes-after-the-covid-19-public-health-emergency#:~:text=Rec ent%20legislation%20authorized%20an%20extension,emergency%20through%20December%2031%2C%202024.>
- Telehealth Resource Center: Guides & Reports. American Medical Association. <https://www.ama-assn.org/practice-management/digital/telehealth-resource-center-guides-reports>
- What patients like - and dislike - about telemedicine. *Harvard Business Review*. (2020, December 8). <https://hbr.org/2020/12/what-patients-like-and-dislike-about-telemedicine>
- <https://www.ers.usda.gov/data-products/charts-of-note/chart-detail?chartId=110927>
- Karim, Saleema A. PhD; Bogulski, Cari A. PhD; Tilford, J. Mick PhD; Hayes, Corey J. PharmD, PhD; Eswaran, Hari PhD. Financial Performance of Hospital Telehealth Adopters, Nonadopters, and Switchers: A Rural-Urban Comparison. *Journal of Healthcare Management* 70(2):p 93-107, March/April 2025. | DOI: 10.1097/JHM-D-24-00026