

# Delivering Cancer Care in Underserved Rural Environments

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THE UNIVERSITY OF KANSAS  
CANCER CENTER



# Challenges When Delivering Cancer Care in Rural Communities

**Disclosures: None**

# Challenges When Delivering Cancer Care in Rural Communities

- Geographical Barriers
- Healthcare Infrastructure
- Socioeconomic Factors
- Health Care Access and Awareness
- Psychosocial Support
- Cancer Prevention/ Screenings

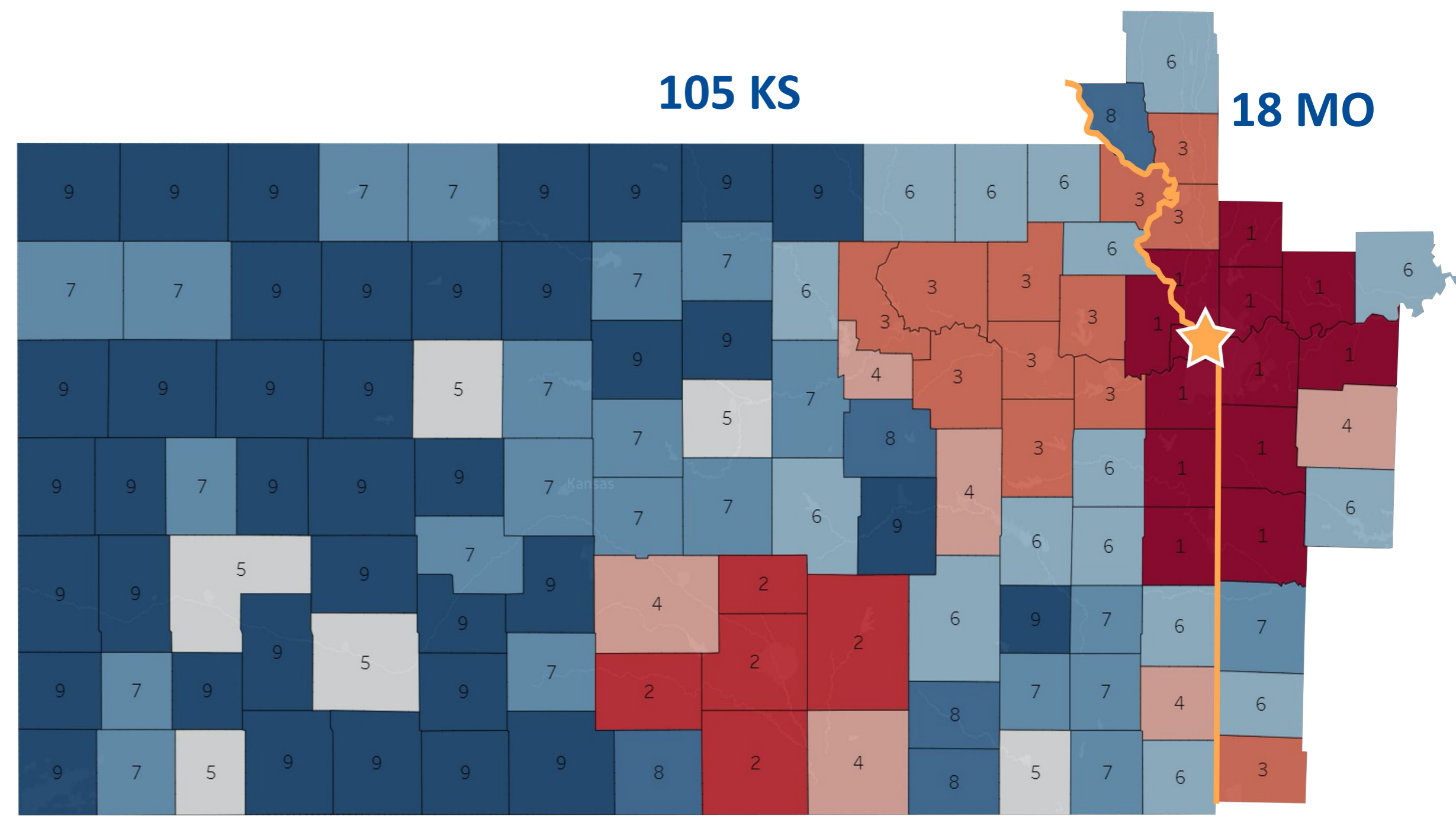
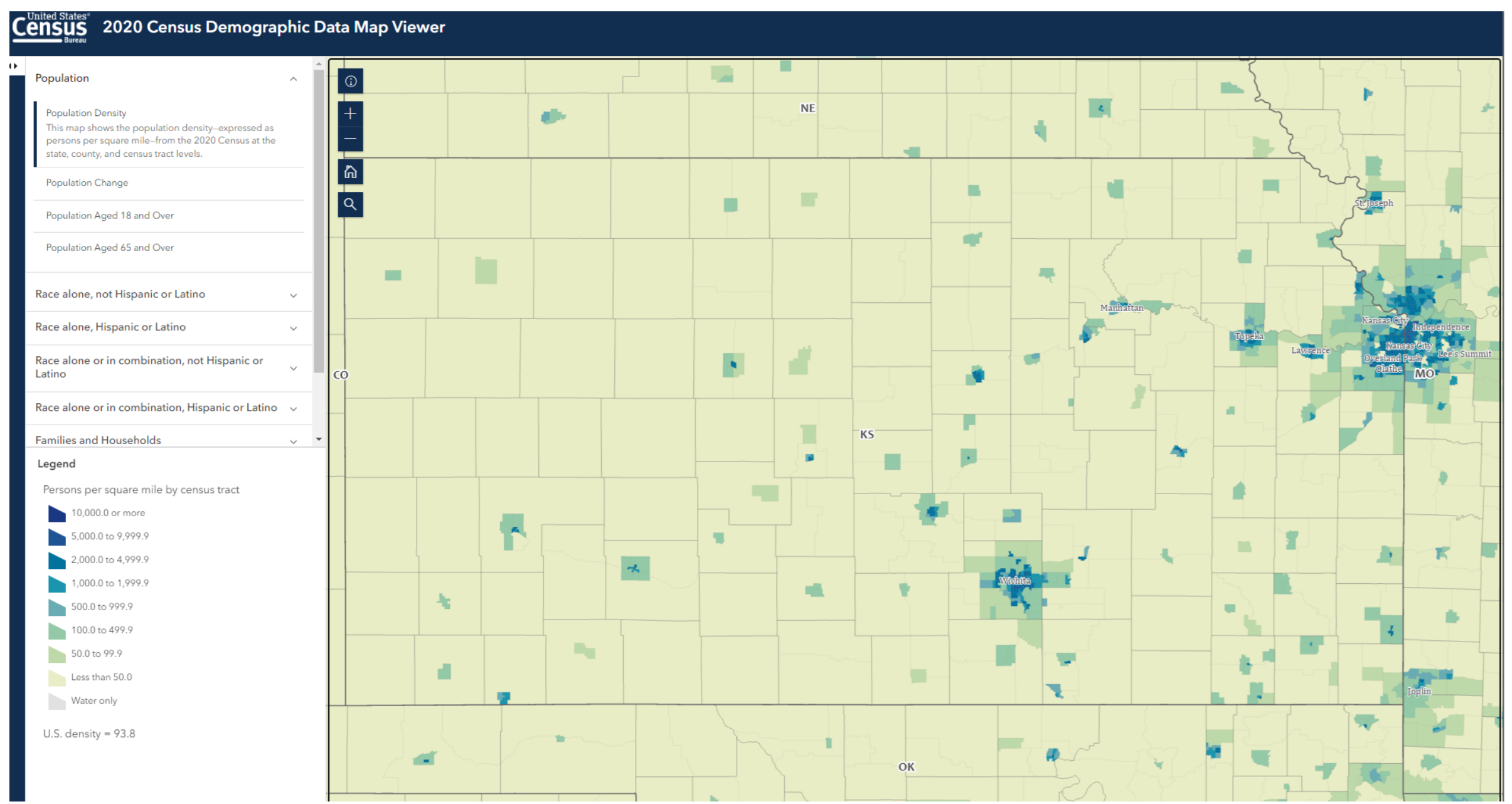
Offer some strategies to manage these challenges...



...disclaimer...

# Challenges When Delivering Cancer Care in Rural Communities

## Kansas Population Density— Geographical Barriers



### Rural Urban Continuum Code (RUCC 2013)



Metro Counties = 30

Rural Counties = 93

# Challenges When Delivering Cancer Care in Rural Communities

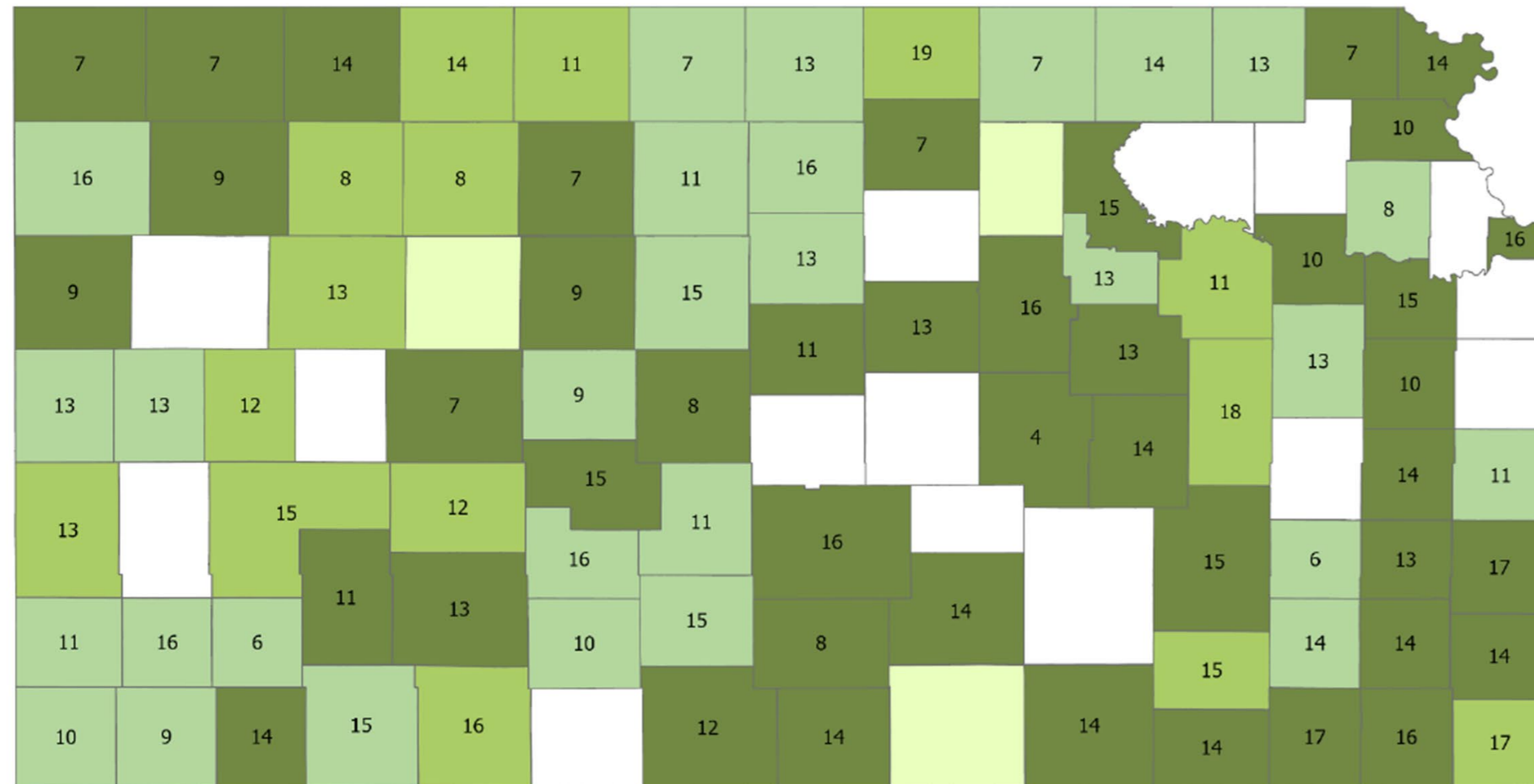


- Medical Staff
  - Medical Oncologists
  - Advanced Practice Practitioners
  - Oncology Nurses
- Infusion Center
  - Diagnostic and Laboratory Services
  - Lab
  - Imaging
- Patient Navigation
- Case Managers
- Palliative Care/ Symptom Management
- *Clinical Trials* Research Program
- Multidisciplinary Care: Radiation and Surgical Oncology
- Genetic Counseling and Testing
- Support Services
  - Social Workers/ Nutritionists/Rehabilitation Services
- Telemedicine and Remote Monitoring
- Administrative Support
  - Billing/ Insurance/ Appointment Scheduling
- Patient Education and Survivorship Programs

# Challenges When Delivering Cancer Care in Rural Communities

## Healthcare Infrastructure

Primary Care HPSA Designation Status by County



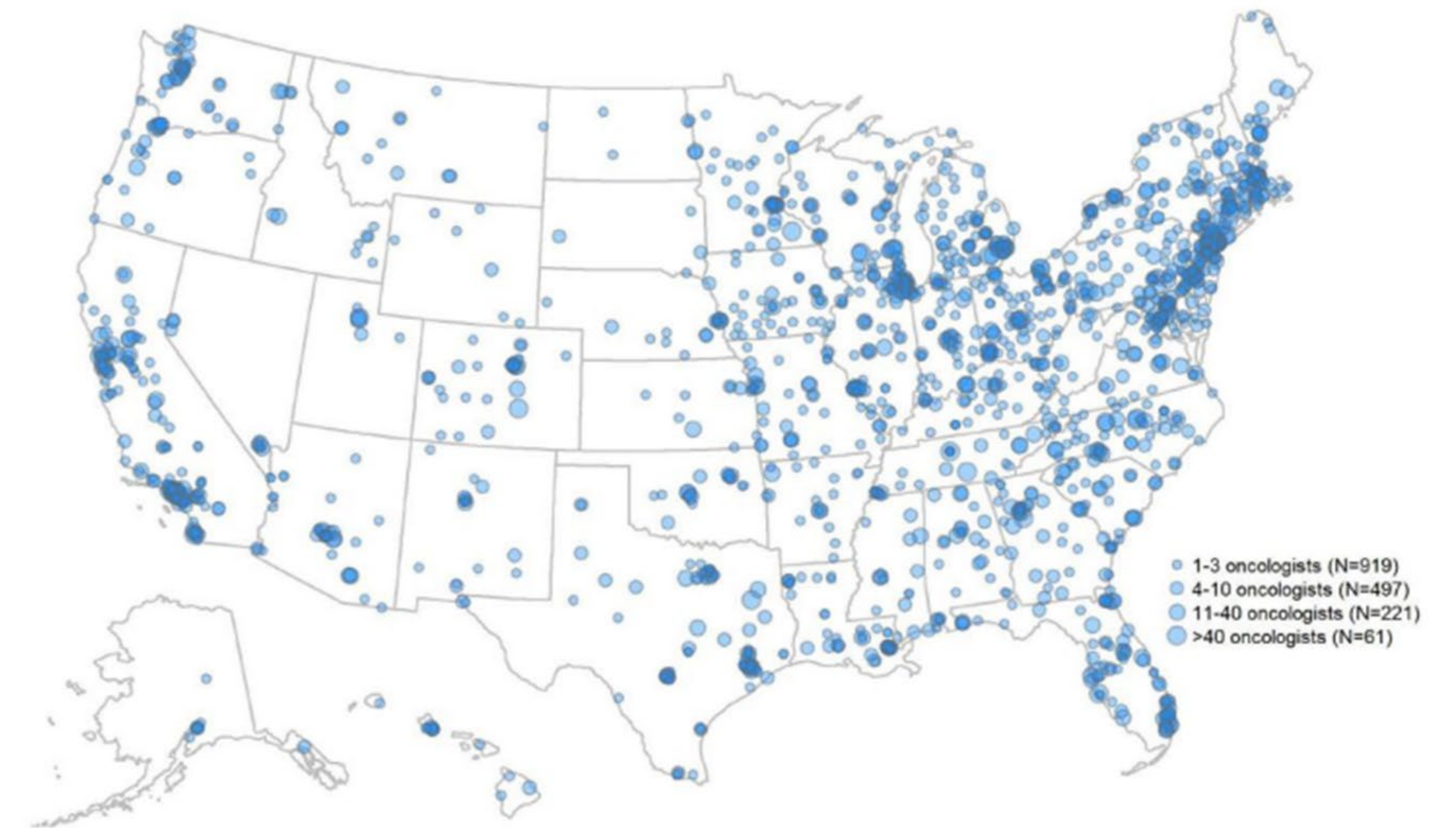
**Primary Care**

- Not Eligible for HPSA Designation (15)
- Previously Withdrawn and Under Review (3)
- Proposed For Withdrawal (29)
- Proposed For Withdrawal and Under Review (15)
- Designated (43)

HPSAs last updated on March 31, 2023

## Key Trends in Tracking Supply of and Demand for Oncologists

Figure 7. Size and Distribution of Oncology Practices<sup>1,2</sup>

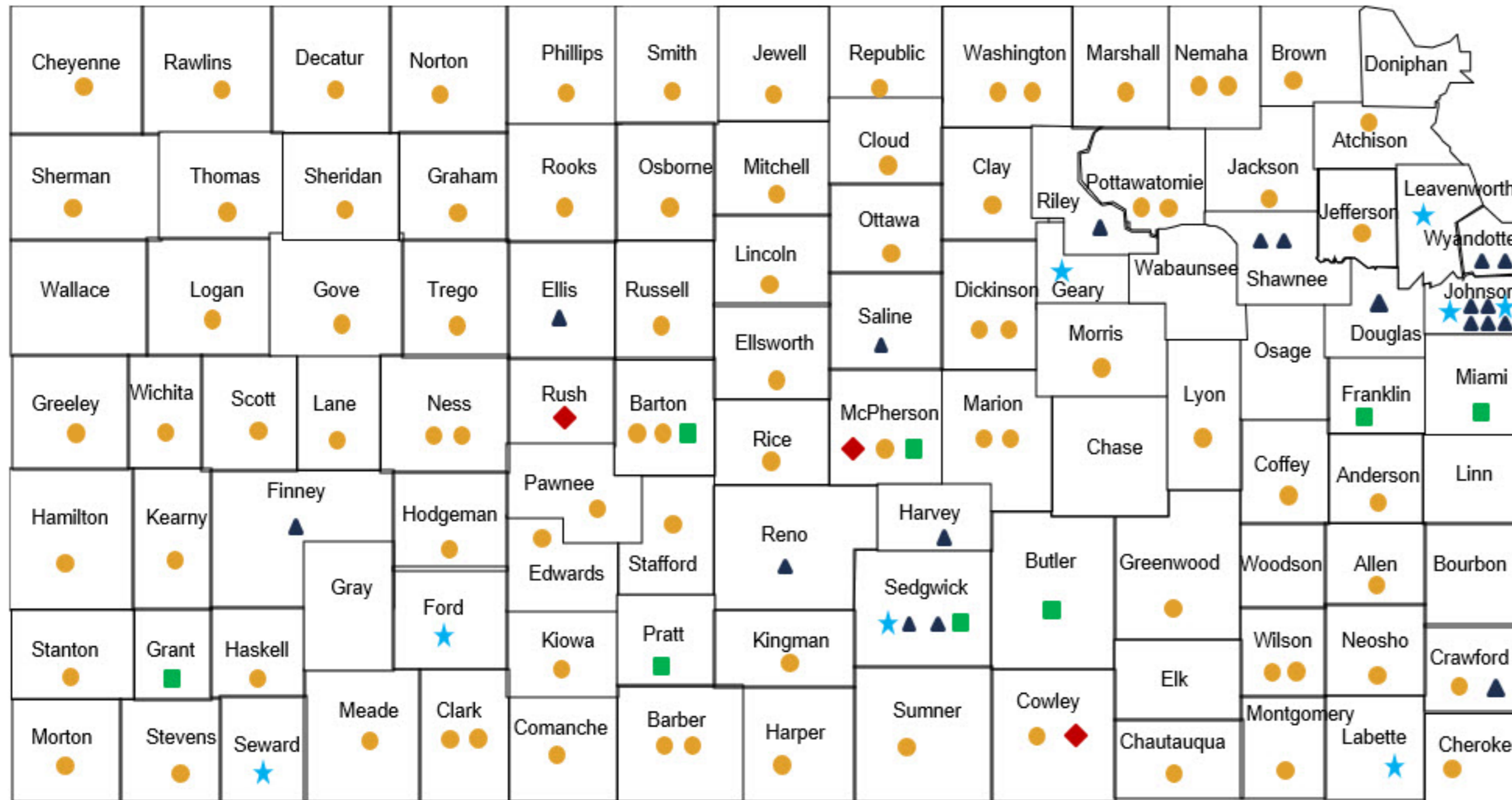


Source: CMS Physician Compare (April 2020 update), U.S. Census Bureau Gazetteer Files (2019 update)

1 Points represent each of 1,698 practices in the US associated with at least one hematologist, hematologist/oncologist, or medical oncologist (primary specialty designation) in CMS Physician Compare. For practices with more than one oncologist practice location, the location with the most oncologists (and the most clinicians when tied) is displayed. Size of practice represents the number of hematologists and/or medical oncologists associated with that practice (not restricted to those practicing at the main site).

2 Geographic shapefiles were accessed from [census.gov/geographies/reference-files/time-series/geo/gazetteer-files.html](https://www.census.gov/geographies/reference-files/time-series/geo/gazetteer-files.html). Colors were determined by quintiles of the data.

# Healthcare Infrastructure: Hospitals in Kansas\*



Community Hospital Acute Licensed Bed Size

- 25 and under    ★ 50-99
- 26-49            ▲ 100 and over
- ◆ Rural Emergency Hospital

## Hospitals in Kansas:

- 105 counties
- 121 community hospitals
  - 78 counties with one hospital
  - 10 without any hospital
  - 17 have more than one hospital/more populated areas
- Staffing challenges:
- Kansas is facing a nursing shortage
  - Ks Dept of Labor projects the state will need 18,000 registered nurses by 2026
- \*63% at risk of closure

\* <https://kansasreflector.com/2023/12/12/kansas-unrivaled-rural-hospital-crisis-58-at-risk-of-closing-82-lost-money-on-patient-care/>

# Challenges When Delivering Cancer Care in Rural Communities

## Socioeconomic Factors

- Financial Constraints

Out of pocket expenses

Inability to work\*

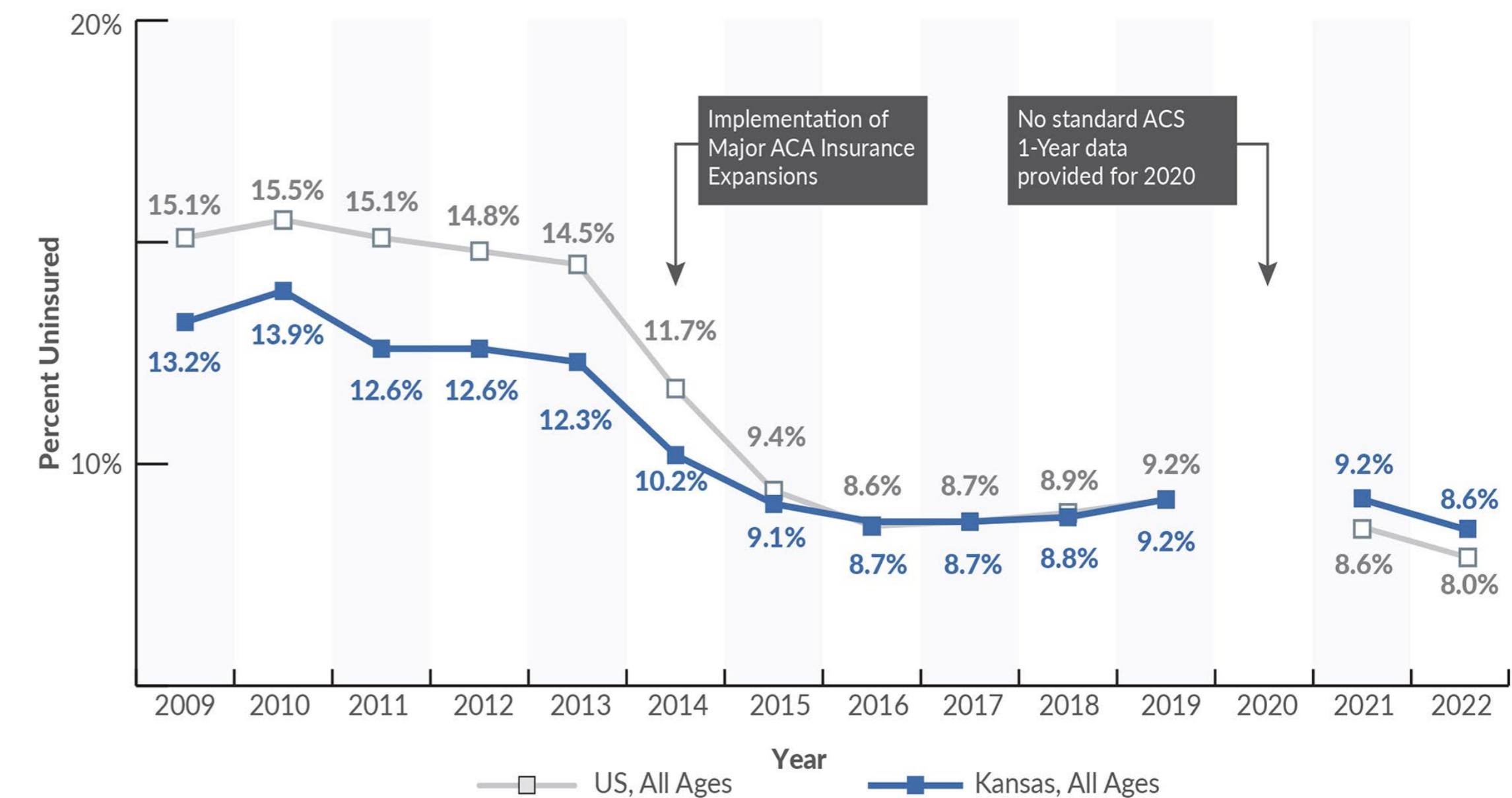
- 2022 Insurance Coverage\*\*

Uninsured rate: 8.6%

Racial and ethnic disparities exist

Kansas has not expanded Medicaid

Uninsured Rates for Kansas and the United States, 2009-2022



Note: Due to the COVID-19 pandemic's effect on federal survey data collection, the U.S. Census Bureau did not provide standard ACS 1-Year data for 2020.  
Source: Kansas Health Institute analysis of data from the U.S. Census Bureau American Community Survey 1-year Estimates, Table S2701, 2009-2019 and 2021-2022.

\*Mudaranthakam DP, Nollen N, Wick J, et. al. Evaluating Work Impairment as a Source of Financial Toxicity in Cancer Healthcare and Negative Impacts on Health Status. Cancer Res Commun. 2023 Jul 5;3(7):1166-1172. doi: 10.1158/2767-9764.CRC-23-0038. PMID: 37415746; PMCID: PMC10321355.

\*\*<https://www.khi.org/articles/kansas-uninsured-rate-improves-but-remains-higher-than-u-s-rate>



# Challenges When Delivering Cancer Care in Rural Communities

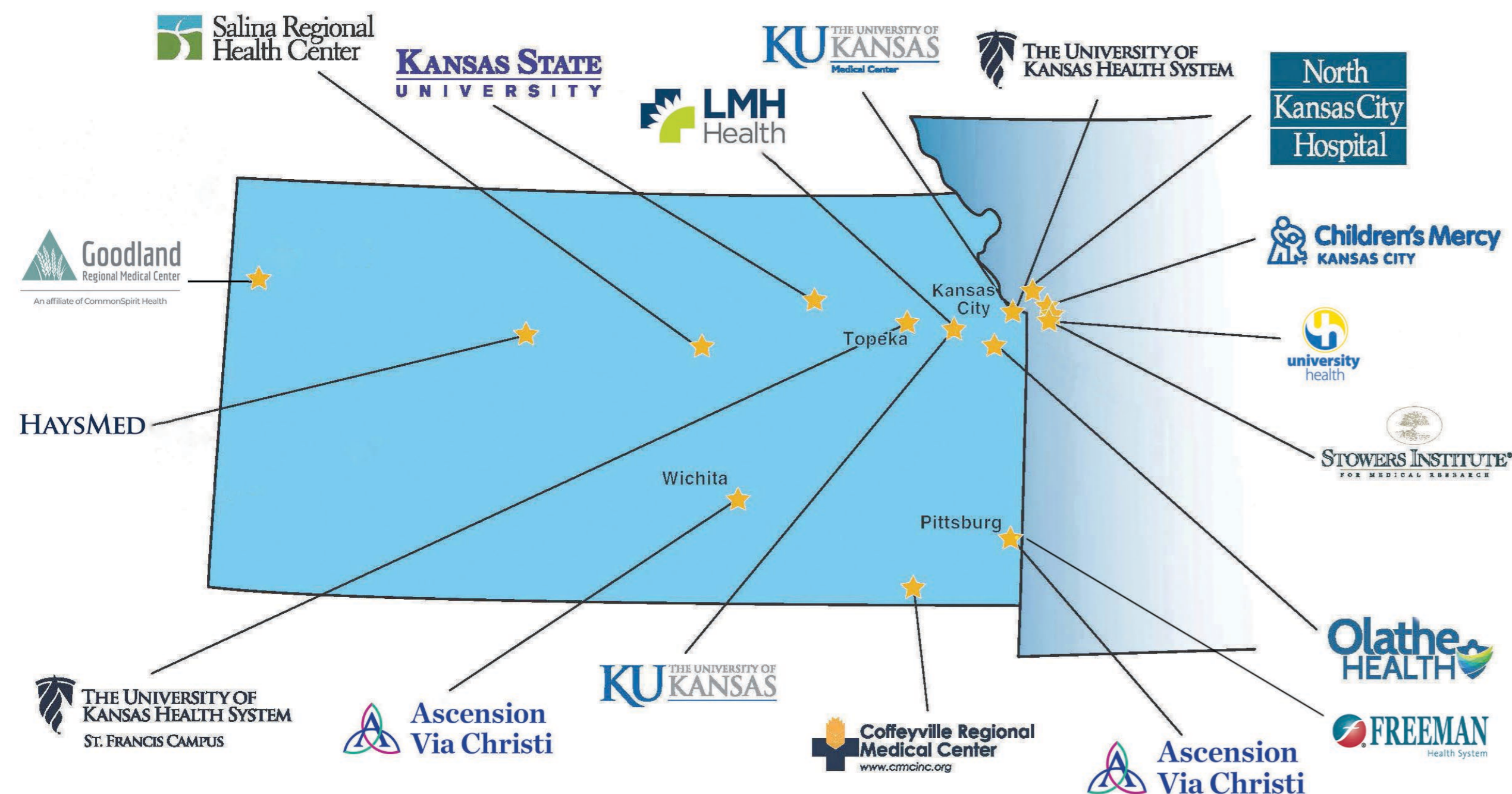
## Health Care Access and Awareness:

- Health Literacy: Challenges with lower levels of health literacy and awareness about cancer prevention, symptoms, available treatments can delay diagnosis and treatment
- Telecommunication Challenges: Limited availability of reliable internet and telecommunication services can hinder access to information and telemedicine care

## Psychosocial Support:

- Isolation: Rural patients may experience social isolation due to geographic distances from support networks and community resources
- Psychological Impact: Dealing with a cancer diagnosis and treatment in an isolated environment can contribute to stress and anxiety

# MCA Masonic Cancer Alliance Network



- **Member-based network**
  - Community Hospitals
  - Clinical Trials Sites
  - Urban Academic Hospitals
  - Academic Hospital
- **Promote community of practice among cancer centers**
- **Enhance research collaborations and access to clinical trials**
- **Expand patient resources**
- **Medical Director: Gary Doolittle**
- **Executive Director: Hope Krebill**

# MCA Partnerships with Local Healthcare Providers

## Harnessing Technology to Expand Access to Care and Services

### Telemedicine

- Physicians
- Advanced Practice Providers

Social Worker Conference Calls

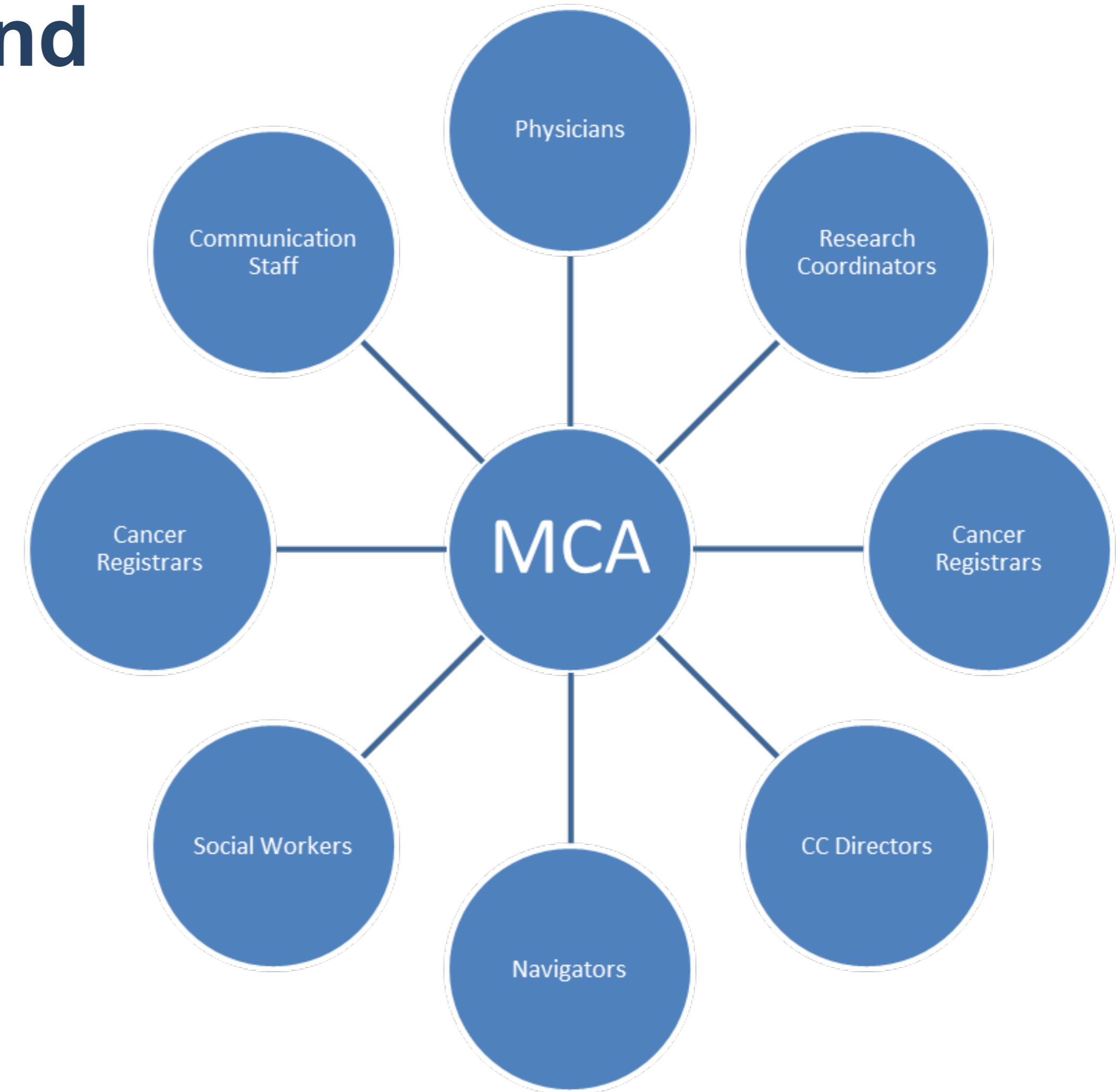
Patient Navigation Conference Calls

Cancer Registrar Calls

Annual Meeting

Rural Financial Navigator

Research Nurse Conference Calls



# Geographical Barrier: Harnessing Telemedicine for Patient Care

## Physician and Advanced Practitioner Support

- Subspecialty Consultation
  - Multiple disciplines
- Second Opinions
- Clinical Trial Participation
- Follow up Care after Discharge from KUMC
- Genetics Counselor Evaluation
- Palliative Care/ Hospice Care/ Caregiver Support\*

\*Doolittle GC, Nelson EL, Spaulding AO, et.al. TeleHospice: A Community-Engaged Model for Utilizing Mobile Tablets to Enhance Rural Hospice Care. *Am J Hosp Palliat Care*. 2019 Sep;36(9):795-800



# Telemedicine is not new...



... and tele-oncology in 2024



Doolittle GC, Allen A. Practising oncology via telemedicine.  
*J Telemed Telecare*. 1997;3(2):63-70.

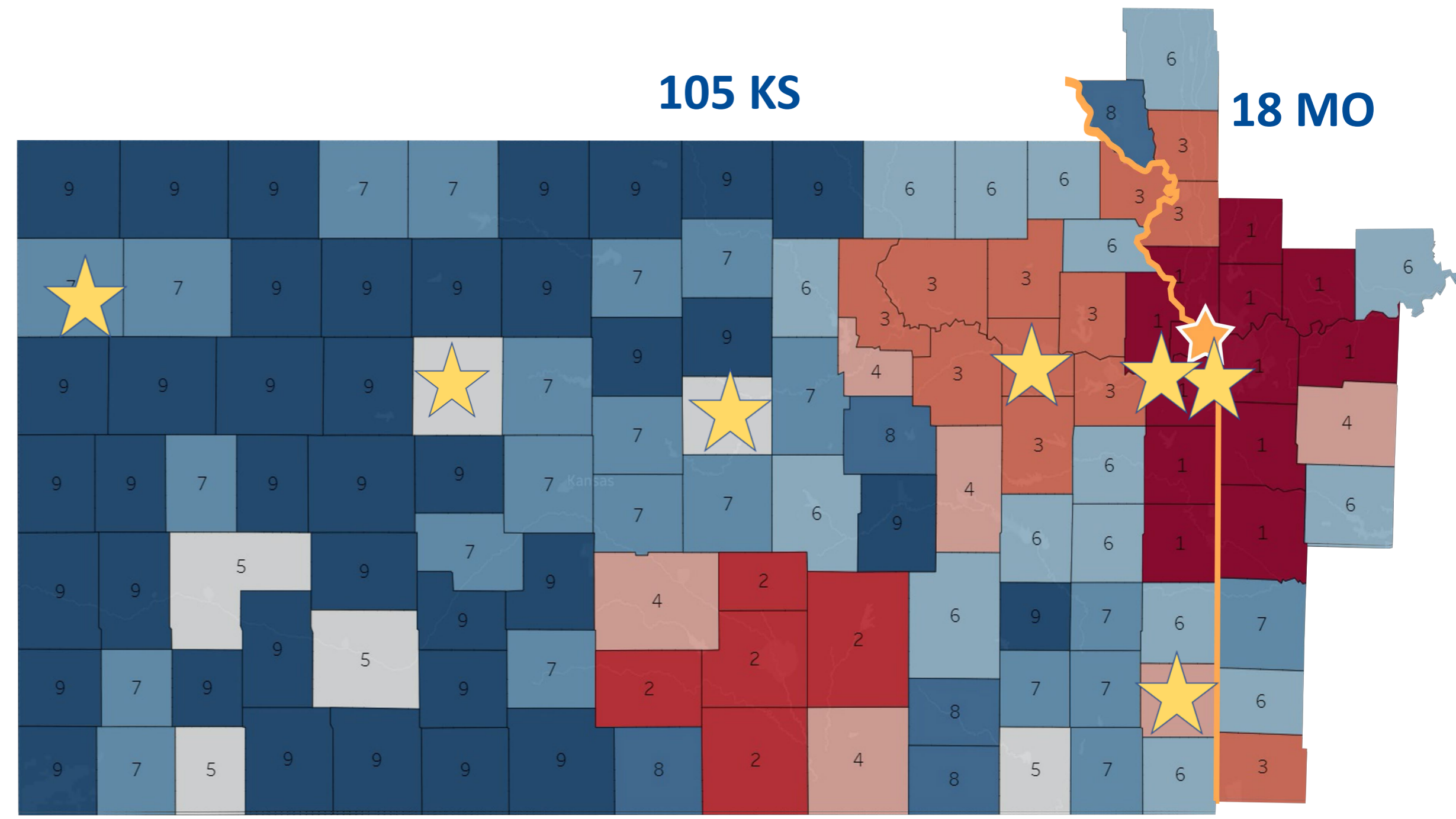
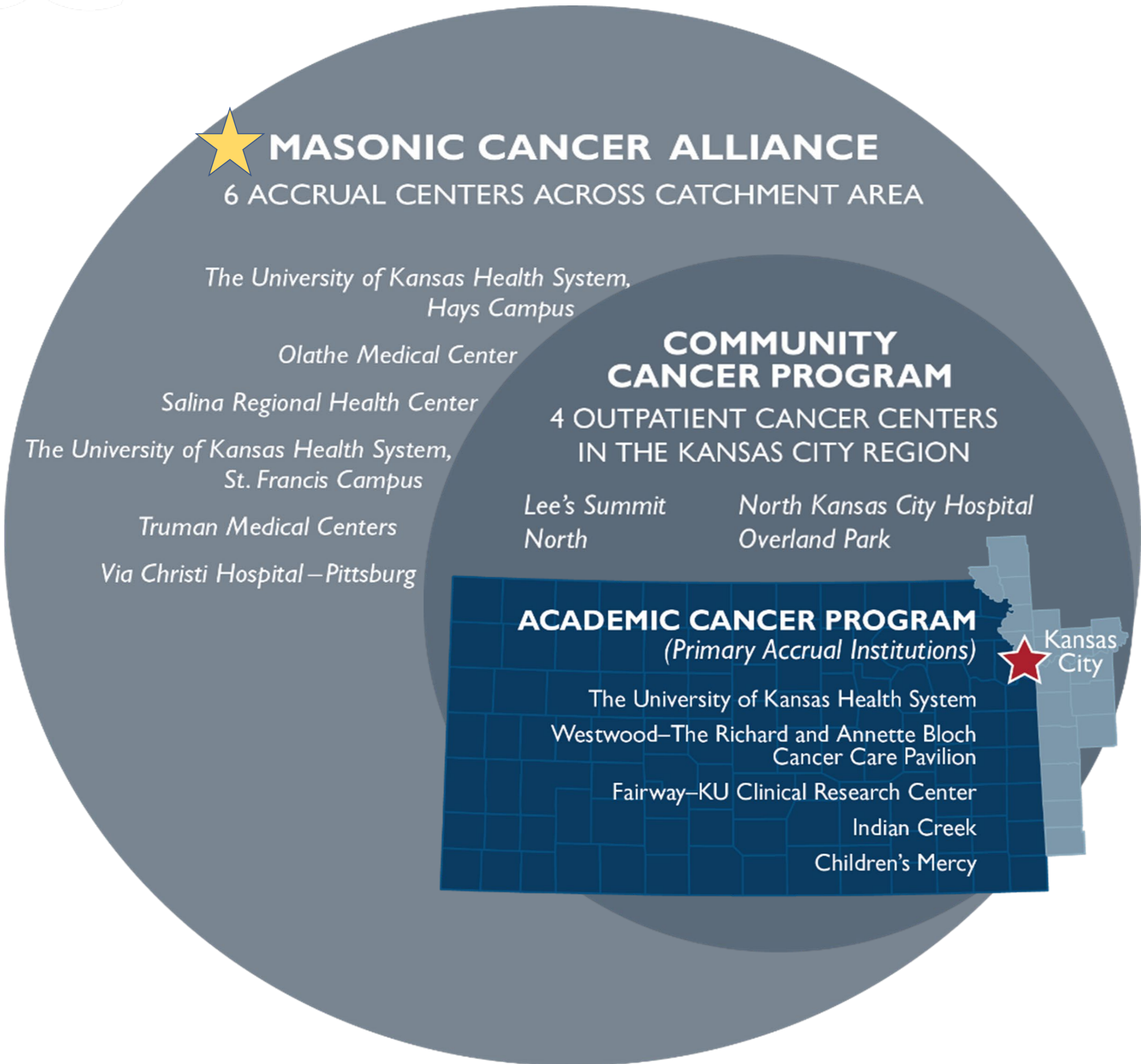
# KUCC-MCA Rural MU NCORP: Clinical Trials



## Extend Research to Community and Health Care Organizations:

- Treatment Clinical Trials
- Population Health Studies
- MCA-sponsored Studies
- Pharma studies

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**Rural Urban Continuum Code (RUCC 2013)**



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# Decentralized Clinical Trials Infrastructure

## MCA Regulatory Support

- Institutional Review Board for MCA studies
- Conflict of Interest review
- Creation of consent
- Communication of all study changes
- Submission of AE documents

## MCA Quality Assurance

- Review of eligibility for all potential participants
- Ongoing *monitoring of data*
- Review of lab and pharmacy for trial feasibility

## Staff Training

- Monthly research nurse meetings
- Monthly investigator meetings
- Electronic communication of available studies
- Human Subjects research training

## MCA Member Clinical Trials Staff Requirement

- Research Coordinator (.5 FTE)
- Designated Pharmacist
- Program Administrator (.25 FTE)
- Physician Investigator
- Oncology-trained nurses\*

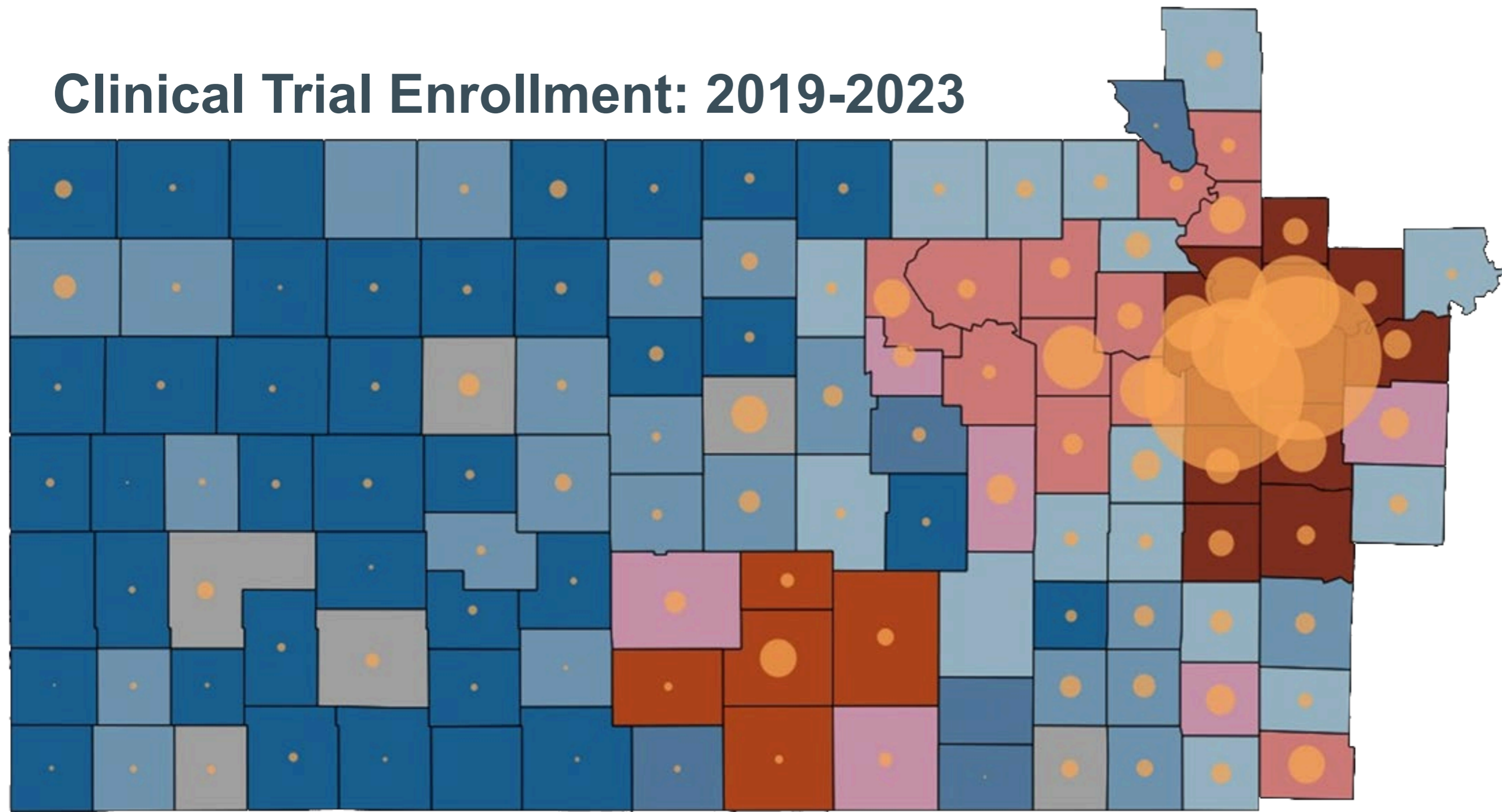
## MCA Member Administrator Role

- Facilitate agreements
- Assure research costs are only billed to research budget
- Facilitate FWA
- Assure correction of deficiencies



# Clinical Trial Access for Rural Patients

## Clinical Trial Enrollment: 2019-2023



Individuals from **117** of the **123** counties in our catchment area participated in Oncology research.

- **KUCC-MCA NCORP:** The only rural minority and underserved designated National Cancer Institute's Community Oncology Research Program
- **CATCH-UP.2020:** NCI Supplement to create access to underserved populations to early phase ETCTN trials. Greater than 50% of enrollments at KUCC represented underserved communities.
  - KUCC was the top accruer in the country.

# Healthcare Infrastructure:

## **Provider Shortage**

Physician/ Nursing/ Advanced Practice Practitioners

*Rural Track* Curricula in place for all disciplines

Telemedicine Training\*

Support those that are in practice now

## **Hospital Support**

Medicaid expansion\*\*

Educational tools for patients

Programs to improve health literacy

## **Dealing with the Uninsured/ Under-insured**

Financial Navigation

Medicaid Expansion

[\\*https://www.aamc.org/data-reports/report/telehealth-competencies](https://www.aamc.org/data-reports/report/telehealth-competencies)

[\\*\\*https://kansasreflector.com/2023/12/12/kansas-unrivaled-rural-hospital-crisis-58-at-risk-of-closing-82-lost-money-on-patient-care](https://kansasreflector.com/2023/12/12/kansas-unrivaled-rural-hospital-crisis-58-at-risk-of-closing-82-lost-money-on-patient-care)

# MCA Professional Education & Support

## ■ Professional Education

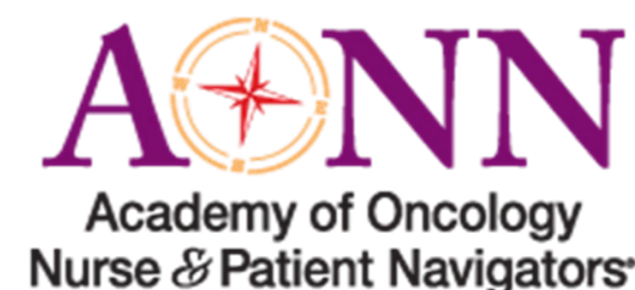
- Continuing Education, virtually or in person
- Weekly EduMail with list of educational opportunities

## ■ Technical Assistance:

- Connect to resources
- Emerging models of navigation and survivorship
- Program development

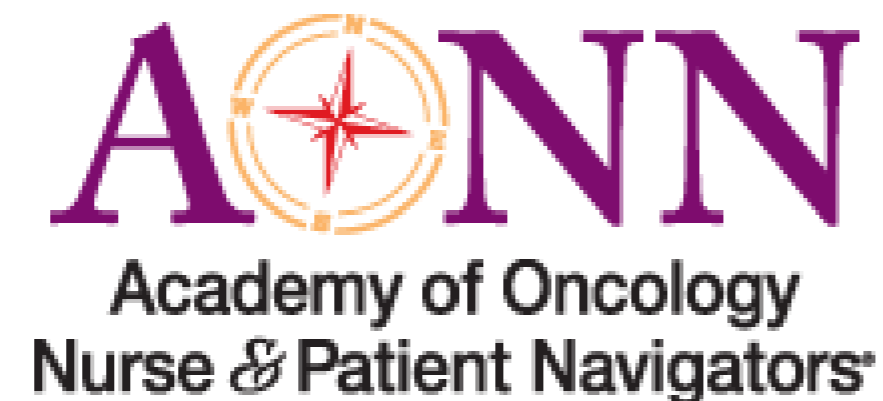
## ■ Networking

- Discipline Specific Listservs
- Discipline Specific Networking calls



# MCA Patient Navigation Support

- Technical Assistance:
  - Connect to resources
  - Emerging models of navigation and survivorship
  - Program development
- Patient Navigation Listserv
- AONN+ Membership
- 4-state Rural Virtual AONN Network



**Kyla Alsman, BSN, RN**  
Survivorship Transition  
Clinic Navigator



**Chavely Conde**  
Navigation Program  
Manager

# MCA Financial Navigation

## Financial Navigation

- Insurance optimization
- Premium assistance
- Understand out-of-pocket expenses and insurance coverage and what insurance plan covers
- Help patients set up payment plans
- Look for ways to save money on treatment
- optimize insurance coverage
- Access health care services
- Screen for financial distress
- Connect with resources/ co-pay assistance foundations

## Weekly Financial Navigation Calls

## Program Development Assistance

Coordination of education on financial navigation topics and resources

Stephanie Sherode, LMSW  
Financial Navigator  
Masonic Cancer Alliance



<https://www.cancer.gov/publications/dictionaries/cancer-terms/def/financial-navigator>

# MCA Psychosocial Program Support

- Group Programs on Zoom
  - Smoking Cessation
  - Survivorship Programs
- One-time Programs for Patients and Healthcare Providers
- Oncology Social Worker and Patient Navigator Listservs
- Karin Denes-Collar



# Mobile Screening Vehicle



# Masonic Cancer Alliance Team



Ashley Adorante  
Outreach



Kyla Alsman  
Navigation



Christi Baron  
Clinical Research



Ellie Brent  
KPPEPR



Karin Denes-Collar  
Assoc. Dir. /  
Psychosocial Svcs.



Chavely Conde  
Navigation



Lizbeth De Jesus  
Comm. Health



Gary Doolittle, MD  
Medical Director



Brooke Groneman  
Outreach



Roy Jensen, MD  
CEO



Hope Krebill  
Executive Director



Jen McAllaster, MD  
Assoc. Med. Dir.



Traci McCarty  
Professional Ed.



Lety Sarmiento  
Admin. Assistant



Stephanie Sherode  
Financial Nav.



Ashley Spaulding  
Exec. Communications



Karla Van Goethem  
Data Administration



Andrea Watson  
Clinical Research



Angela Williams  
Comm. Health



Tonia Yelder  
PIVOT



# What is on the horizon? Virtual Practice?

## Virtual Cancer Practice...

- Provider Team
- Clinical Trials Team
  - Medical Oncologists
  - Consultative Oncologists
    - Surgical
    - Radiation
- Palliative Care Physician Team
- Support Services
- Administrative Support
- Patient Education and Survivorship Programs
- Genetic Counseling



- Rural Cancer Team Medical Staff
  - Primary Care Physicians
  - Advanced Practice Practitioners
  - Oncology Nurses
- Infusion Center
  - Diagnostic and Laboratory Services
  - Lab
  - Imaging
- Patient Navigation
- Case Managers
- Multidisciplinary Care: Radiation and Surgical Oncology
- Support Services
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# Questions?



