

ACS Cancer Conference 2025

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Improving Cancer Care in the Rural Setting

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American College of Surgeons

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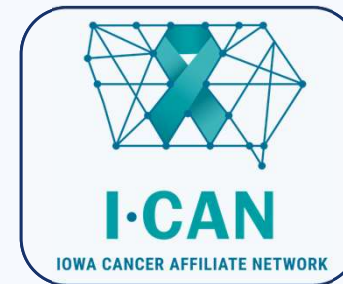
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Professor, Epidemiology



Director and Principal Investigator



Principal Investigator



President, Board of Directors



Co-Leader, Cancer Epidemiology & Population Science Program



Member, Iowa Cancer Control Leadership Team

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US Cancer Mortality Rates by Rurality



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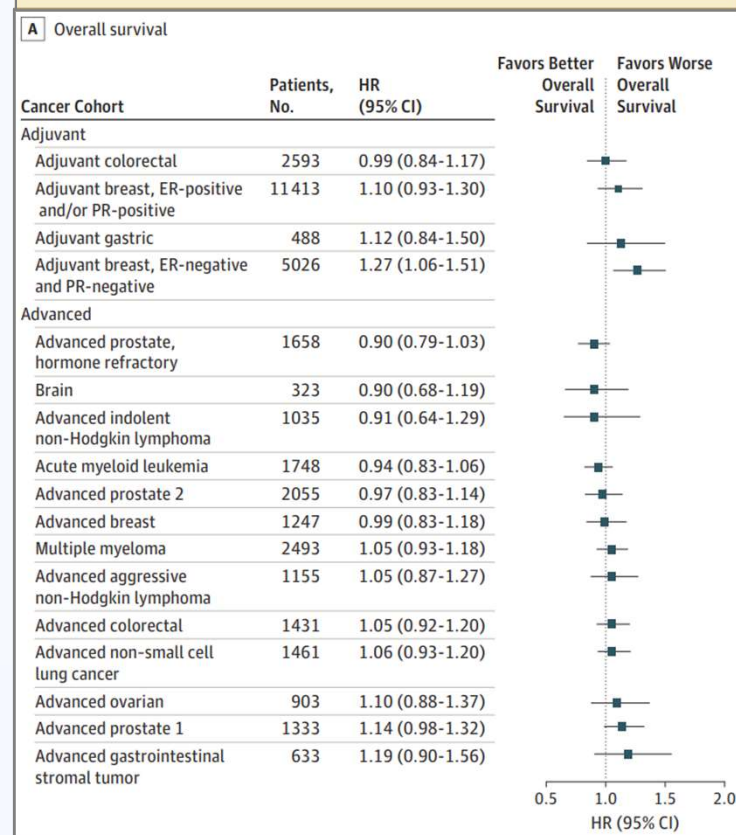
Geographic Distribution and Survival Outcomes for Rural Patients With Cancer Treated in Clinical Trials.

Unger JM^{1,2}, Moseley A^{1,2}, Symington B³, Chavez-MacGregor M⁴, Ramsey SD², Hershman DL⁵.

“Rural and urban patients with uniform access to cancer care through participation in a SWOG clinical trial had similar outcomes.

This finding suggests that improving access to uniform treatment strategies patients with cancer may help resolve the disparity in cancer outcomes between rural and urban patients.”

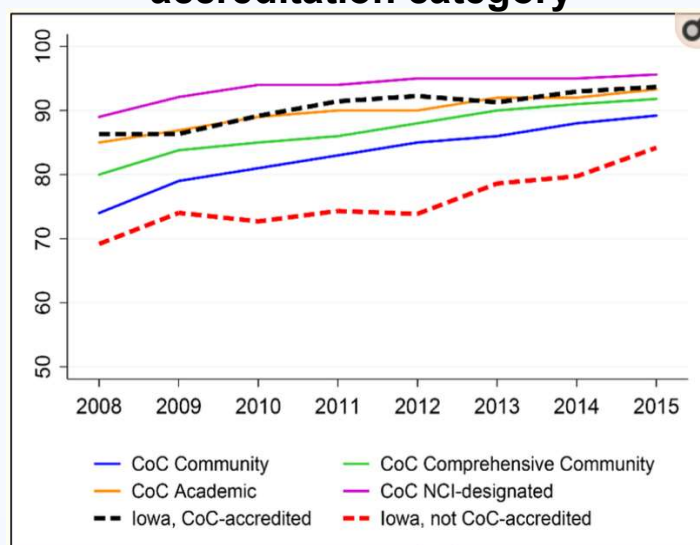
Forest Plot Showing the Association of Rural Residence and Survival Outcomes from Cox Regression Analyses



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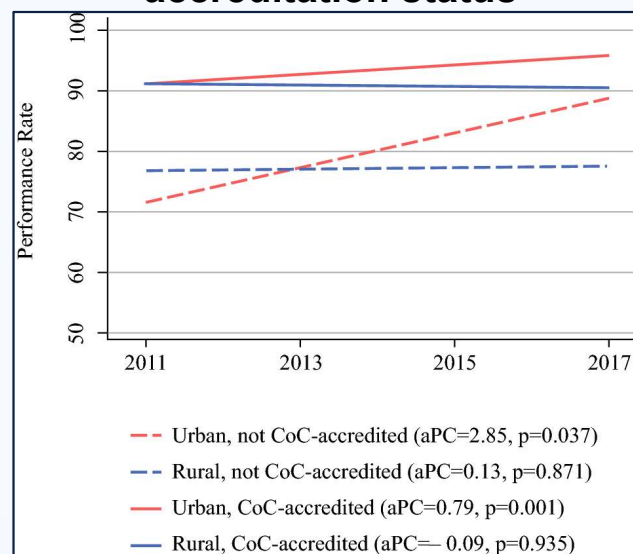
Compliance with CoC Measures is Worse in Non-CoC Hospitals

Percent of colon cases compliant with lymph node measure by CoC accreditation category



Shulman et al. 2019. Compliance with Cancer Quality Measures Over Time and Their Association with Survival Outcomes: The CoC's Experience with the Quality Measure Requiring >12 Regional Lymph Nodes to be Removed and Analyzed with Colon Cancer Resections.

Percent of colon cases compliant with lymph node measure by hospital rurality and CoC accreditation status



Schroeder, M.C., Gao, X., Lizarraga, I. *et al.* The Impact of Commission on Cancer Accreditation Status, Hospital Rurality and Hospital Size on Quality Measure Performance Rates. *Ann Surg Oncol* 29, 2527–2536 (2022). <https://doi.org/10.1245/s10434-021-11304-3>

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Challenges to providing care in the rural setting

Hospitals

Financial constraints of operating in low volume, high fixed cost setting

Workforce shortages

Aging, less healthy patient population

Unfavorable payor mix

No infrastructure for data collection and quality monitoring

Providers

Limited primary care

Lack of subspecialty providers and services

Fragmentation of care

Need for patient navigation

Limited access to clinical trials

Wide scope of practice with limited resources for continuing education

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Holmes et al, J Rural Health, 2017
Charlton et al, Oncology 2015



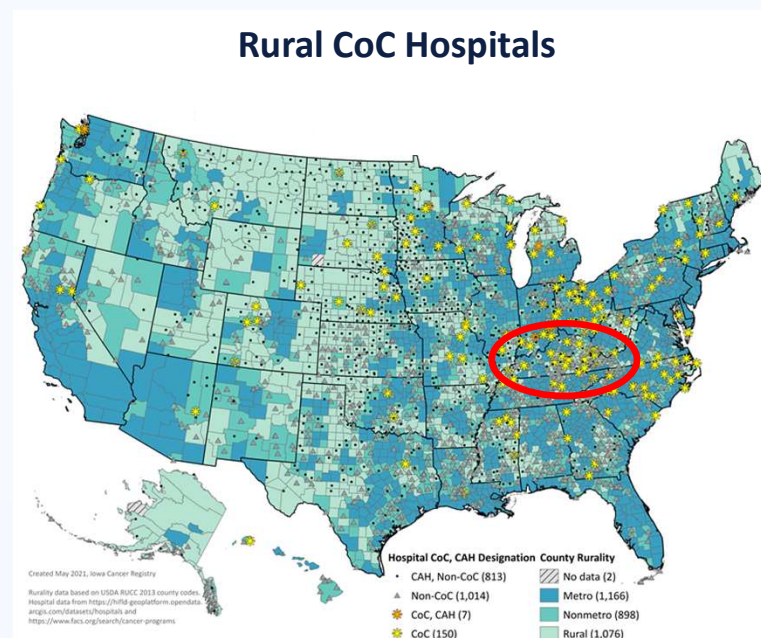
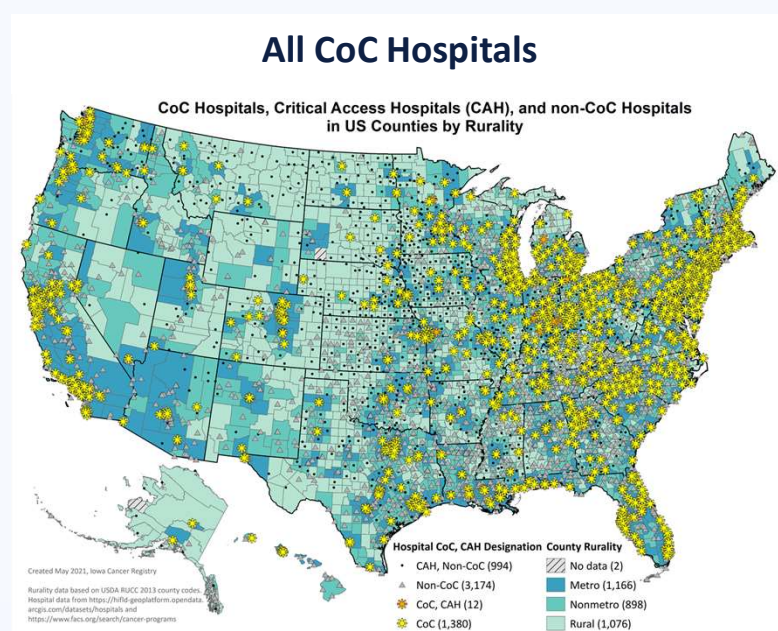
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Rural comprehensive cancer care: Qualitative analysis of current challenges and opportunities

Sydney Evans MPH, Aaron T. Seaman PhD, Erin C. Johnson PhD, Jacklyn M. Engelbart MD, Xiang Gao MD MPH, Praveen Vikas MD, MBBS, Sneha Phadke MD, DO, [Mary C. Schroeder PhD](#), Ingrid M. Lizarraga MBBS, Mary E. Charlton PhD [See fewer authors](#)

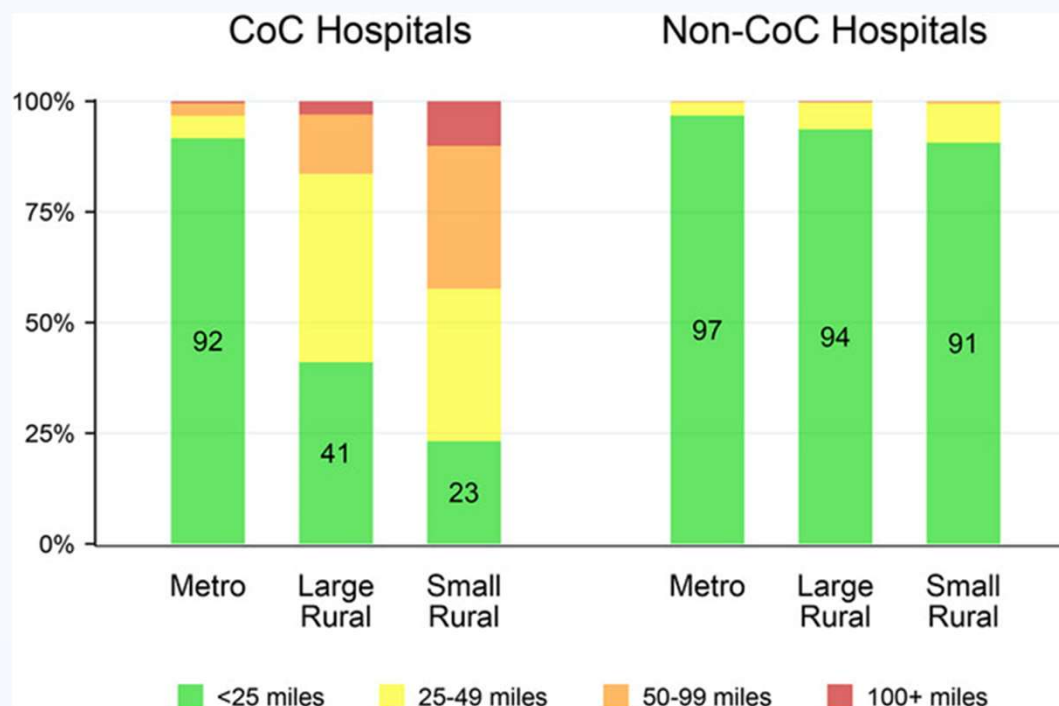
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Rural urban differences in Commission on Cancer (CoC) accreditation



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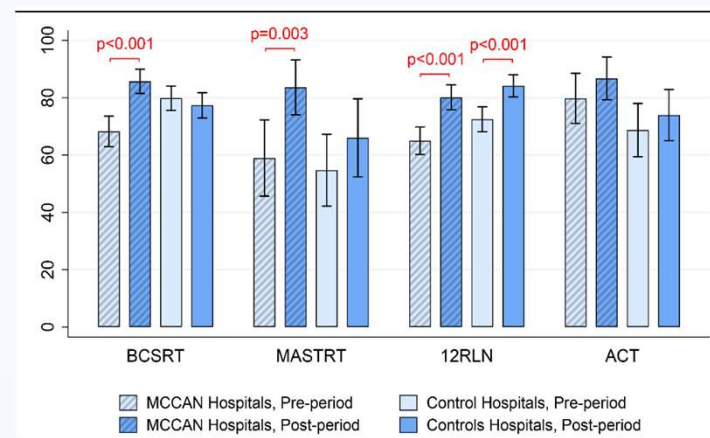
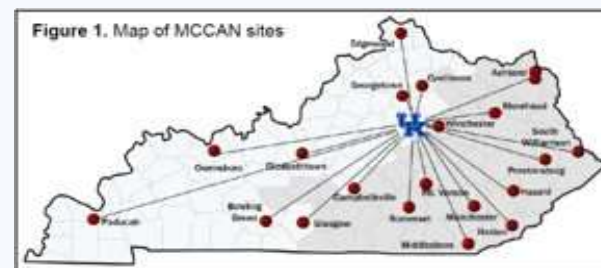
Geographic distance to Commission on Cancer-accredited and nonaccredited hospitals in the United States



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Improving Rural Cancer Care: Network Model

- Since 2006, Markey has extended their resources across Kentucky through a **collaborative network of hospitals**
- MCCAN assists hospitals in achieving the CoC standards through:
 - Tailored programs and resources
 - Supporting data collection
 - Consultative expertise
 - Guidance and templates
 - QI assistance
 - Maintaining accreditation



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Effectiveness and implementation of a health system intervention to improve quality of cancer care for rural, underserved patients



I·CAN

IOWA CANCER AFFILIATE NETWORK

Objectives:

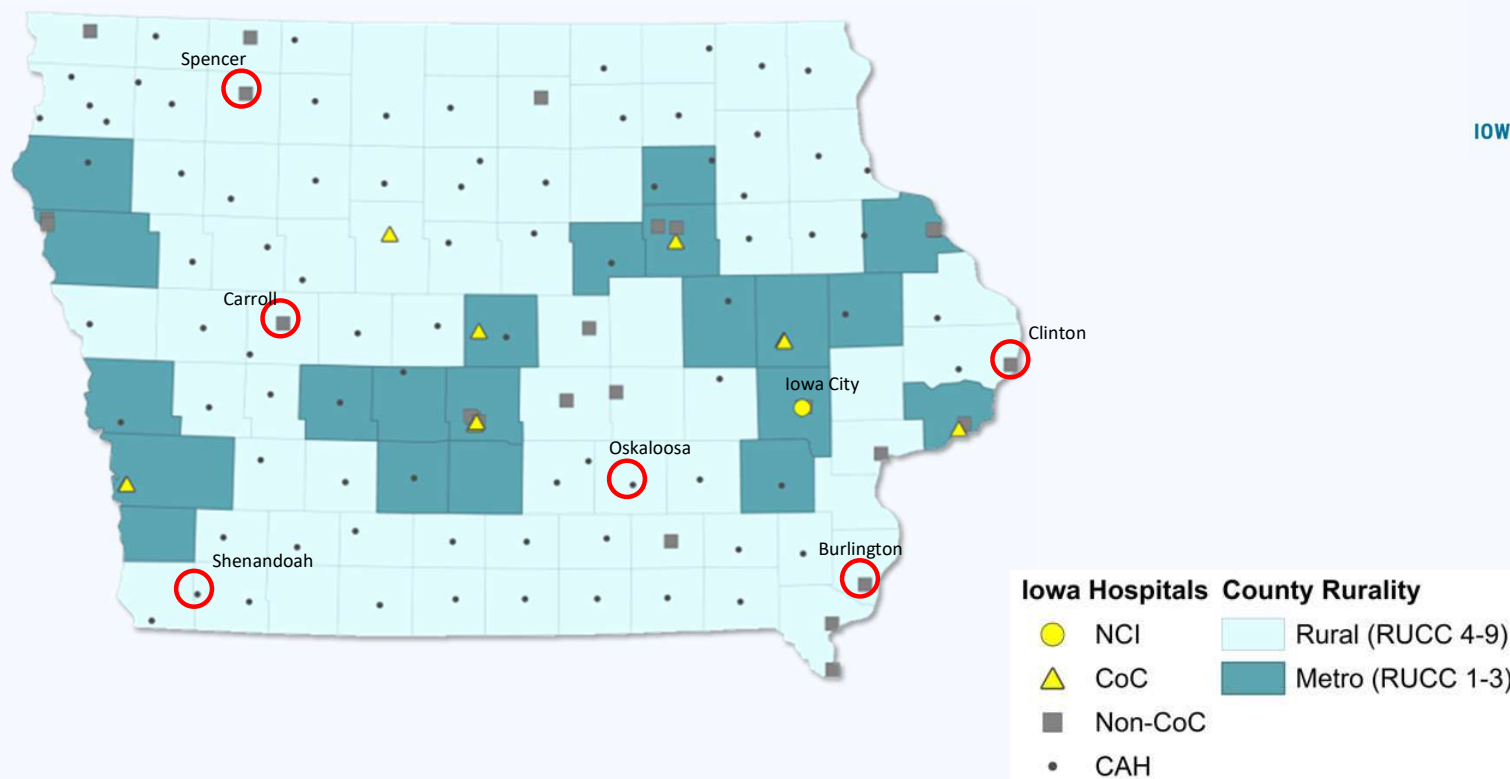
1. Determine the core functions (what makes the intervention effective) of the MCCAN model, and document the specific strategies or activities that may be customized to Iowa and are needed to carry out the core functions
2. Implement a collaborative network adapted for Iowa to make achievement of the CoC standards more feasible for rural community hospitals
3. Measure progress towards achievement of CoC standards and impact on quality measures of cancer care

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I-CAN Hospitals



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I-CAN Hospital Characteristics

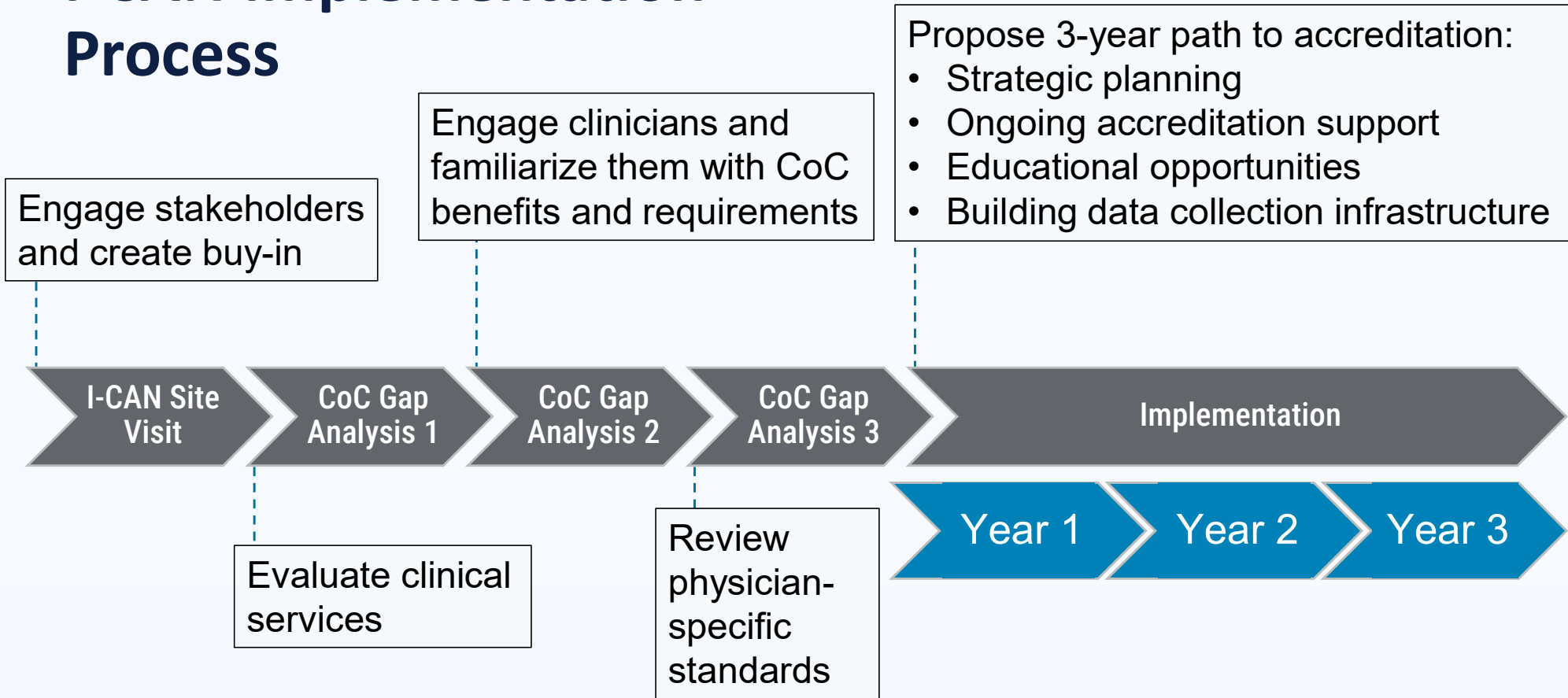
Hospital	# New Cancer Cases/Year*	Bed Size	# Medical Oncologists	# Radiation Oncologists	# General Surgeons
1	499	307	1	1	4
2	191	107	1	1	2
3	205	90	2	1	3
4	314	99	1	1	5
5	142	25	1	0	3
6	100	25	1	1	1

* Average of annual analytic cases 2015-2019



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I-CAN Implementation Process



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Gap Analysis Findings – Key Challenges



Data collection



Staff shortages



**Access to services:
genetics,
palliative care,
survivorship,
etc.**



**Access to clinical
trials**

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I-CAN Interventions

Semprini et al, Learn Health Syst. 2024



Data collection and analysis

Iowa Cancer registry support, site licenses, cancer site reports

Networking

Annual meeting, virtual workshops

Accreditation support

Regular meetings, website+resources, templates, strategic planning

Educational webinars

Bimonthly content

Training and mentoring

Coordinator training, clinical training

Quality improvement

Data and methodologic support

Access to expertise/resources

Facilitate connections with NCI designated cancer centers

Access to clinical trials

Help disseminate information about available trials & expedite enrollment for eligible patients

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Protected: I-CAN Cancer Resource Center



Cancer Resource Center

Provided by the Iowa Cancer Affiliate Network

Below you will find resources to support your cancer center in providing and expanding cancer services, and achieving and maintaining Commission on Cancer (CoC) Accreditation Standards. These resources are provided in as part of a collaboration between the Iowa Cancer Affiliate Network (Iowa) and the Markey Cancer Center Affiliate Network (Kentucky). Additional resources have been provided directly from the CoC.

I-CAN Webinars

- [I-CAN Supportive Care Services Webinar Series: The How and Why of Hereditary Cancer Genetic Testing](#)
- [I-CAN Supportive Care Services Webinar Series: Assessing and Managing Malnutrition in Adult Outpatient Oncology Patients](#)
- [I-CAN Supportive Care Services Webinar Series: Assessing and Managing Malnutrition in Adult Outpatient Oncology Patients](#)
- [I-CAN Supportive Care Services Webinar Series: What patient's need to know – \(sexual health and cancer care\)](#)
- [I-CAN Supportive Care Services Webinar Series: Physical Activity in Cancer Survivorship: The importance of health behaviors for health promotion and risk reduction](#)

▼ CHAPTER 6 - DATA SURVEILLANCE & SYSTEMS

- + Standard 6.1 - Cancer Registry Quality Control
- + Standard 6.4 - Rapid Cancer Reporting System - Data Submission
- + Standard 6.5 - Follow-Up of Patients

▼ CHAPTER 7 - QUALITY IMPROVEMENT

- + Standard 7.1 - Accountability and Quality Improvement Measures
- Standard 7.2 - Monitoring Concordance with Evidence-Based Guidelines

I-CAN Resources

- [Standard Summary 7.2](#)
- [ICAN Reporting Template for Committee 2020 Standards](#)
- [ICAN-CC Reporting Template for 7.2](#)

CoC PRQ Resources

- [Monitoring Concordance with Evidence Based Guidelines Template Standard 7.2](#)

- + Standard 7.3 - Quality Improvement Initiative
- + Standard 7.4 - Cancer Program Goal

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Progress Towards Key Standards

Cancer Program
Leadership



Tumor Board



Data Collection



Clinical Services

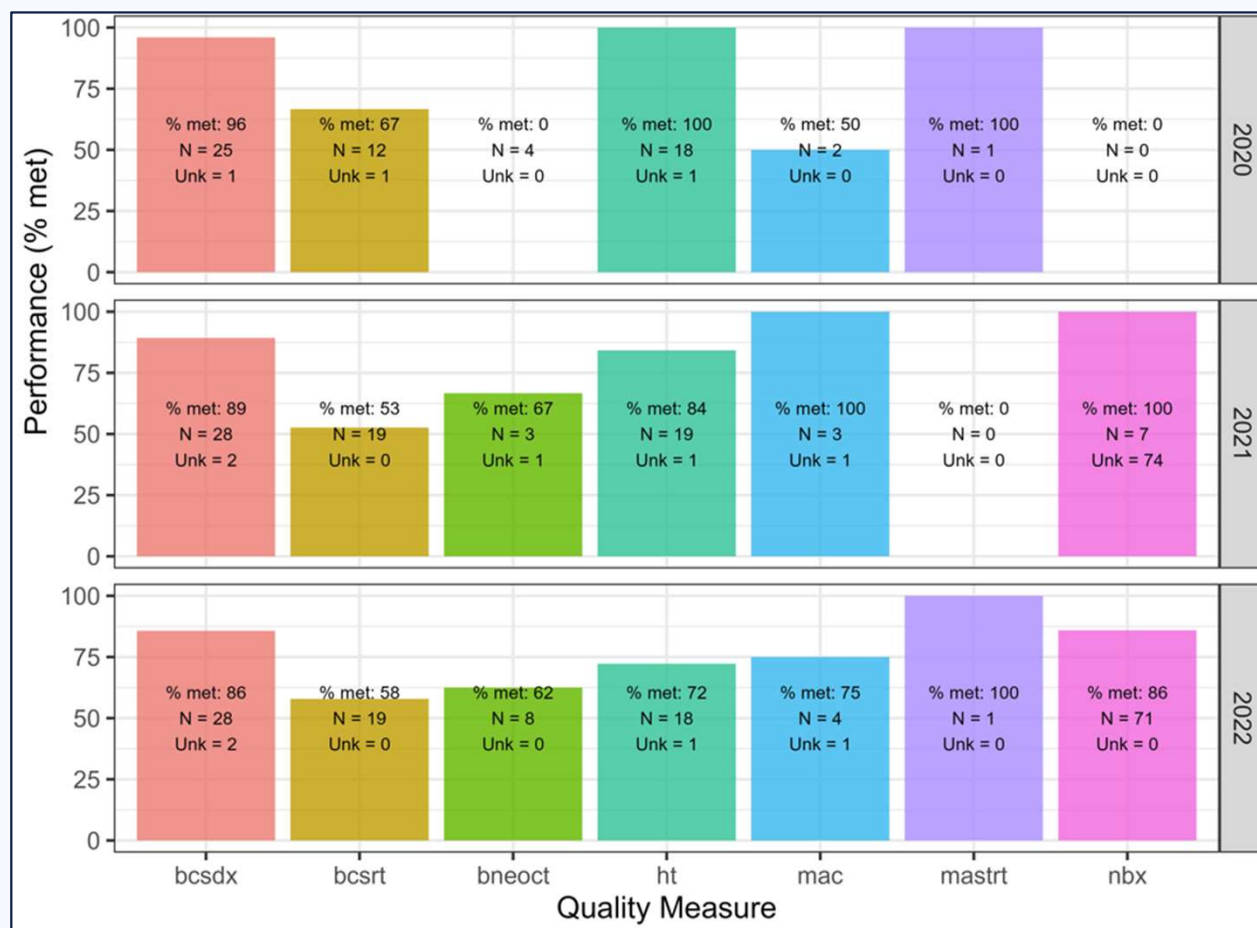


Survivorship



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Data-Driven Quality Improvement



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What We've Learned

- Relationship building is fundamental to creating trust and effecting change
- Success requires both senior leadership and physician buy in
- Size is not predictive of progress
- Extending resources from an academic cancer center requires additional infrastructure
- Even with external facilitation, achieving the CoC standards are very challenging for these hospitals
- Using the CoC standards as a framework to improve the quality and comprehensiveness of cancer care has resulted in meaningful change in cancer care delivery

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Commission on Cancer Rural Accreditation Track

- Adaptation of existing standards informed by our findings from I-CAN hospitals
- Tailored to needs and resources of rural hospitals
- Takes into account the smaller staff and the multiple hats they wear
- Allows gradual ramp-up to accreditation

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