

# What is ACCORDS?

Adult and Child Center for Outcomes Research and Delivery Science

ACCORDS is a 'one-stop shop' for pragmatic research:

- A multi-disciplinary, collaborative research environment to catalyze innovative and impactful research
- Strong methodological cores and programs, led by national experts
- Consultations & team-building for grant proposals
- Mentorship, training & support for junior faculty
- Extensive educational offerings, both locally and nationally



# ACCORDS Upcoming Events

January 11, 2023 Ed 2 North 1107	<b>Hot Topics in Mixed Methods and Qualitative Research</b> <i>Presented by: Danielle Varda, PhD</i> (Vision Network Labs)
January 23, 2023 Ed 2 North 1103	<b>Methods and Challenges in Conducting Health Equity Research</b> <i>Presented by: Danielle Beatty Moody, PhD</i> (UMBC)
January 25, 2023 *Virtual	<b>ACCORDS/CCTSI Community Engagement Forum</b> Pathways to Sustainability and Community Empowerment
February 1, 2023 Ed 2 North 1107	<b>Hot Topics in Mixed Methods and Qualitative Research</b> <i>Presented by: Jeffrey Robinson, PhD</i> (Portland State University)
June 5-6, 2023 10:00 -3:00 PM MT	<b>COPRH Con 2023</b> <b>Reassessing the Evidence:</b> What is Needed for Real World Research and Practice Registration opens January 2023

\*all times 12-1pm MT unless otherwise noted



# Methods and Challenges in Conducting Health Equity Research

## 2022-2023 Seminar Series

### **Basketball, Bloodlines, Bourbon, and Burley:** Community-Engaged Research to Change the Lung Cancer Landscape in Kentucky



Presented by:

**Jamie Studts, PhD**



# Basketball, Bloodlines, Bourbon, and Burley: Community-Engaged Research to Change the Lung Cancer Landscape in Kentucky

**Jamie L. Studts, PhD**

Professor of Medical Oncology

Scientific Director of Behavioral Oncology

Co-Leader of Cancer Prevention and Control

Co-Director of Population Health Shared Resource

Member, Thoracic Oncology Research Initiative





# Faculty Disclosure/Transparency

## ▪ Potential Perceived Conflicts of Interest

- Provide consultation to J&J on an effort to increase engagement with lung cancer screening in novel settings.
- Serve on an Advisory Board for the Lung Ambition Alliance, which is supported by AstraZeneca.
- Provide consultation to Genentech regarding implementation of lung cancer screening.
- Member of the Scientific Leadership Council for the GO2 for Lung Cancer.
- Research funding from the National Cancer Institute, the American Cancer Society, the Bristol Myers Squibb Foundation, and the Centers for Disease Control and Prevention.

## ■ **Incidence Trends**

- “From 2009 to 2018, the (lung cancer incidence) rate decreased by 2.8% per year in men and by 1.4% per year in women.”

## ■ **Mortality Trends**

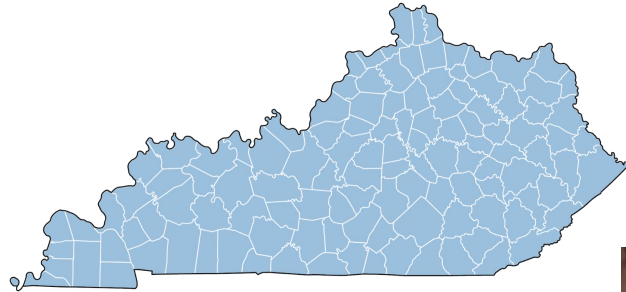
- “Lung cancer mortality rates have declined by 56% since 1990 in men and by 32% since 2002 in women.”
- “...from 2015 to 2019, the rate decreased by about 5% per year in men and 4% per year in women.”

## ■ **Survival**

- “The 5-year relative survival rate for lung cancer is 22% overall (18% for men and 25% for women); 26% for NSCLC; and 7% for SCLC.”



# Kentucky

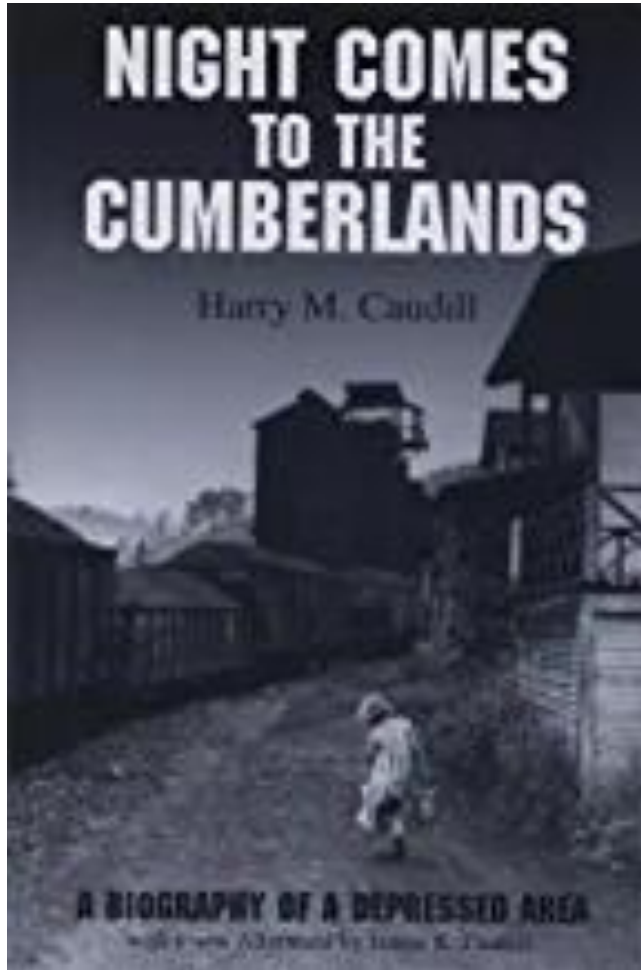


# Also Kentucky





# Can-tuck-ee or Kain-tuck-ee?



+ UH



# Kentucky is among the Top 5 worst states for:



All site cancer incidence and mortality



Lung Cancer incidence and mortality



Colorectal cancer incidence and mortality



Oral cancer incidence and mortality



Kidney cancer incidence and mortality



Cervical cancer incidence



Brain cancer incidence



Melanoma mortality



Leukemia mortality



Non-Hodgkin lymphoma mortality



Adults who currently smoke



Adults with no physical activity



Youth obesity



New Hepatitis C infections



People living in poverty



Adults without a bachelor's degree



# Lung Cancer Epidemiology – Setting the Table

- Lung cancer **incidence** rate

■ USA	65.8 (men)	50.8 (women)
■ Colorado	43.1 (men)	38.5 (women)
■ <b>Kentucky:</b>	<b>104.6 (men)</b>	<b>76.9 (women)</b>

- Lung cancer **mortality** rate

■ USA:	44.5 (men)	30.7 (women)
■ Colorado	28.2 (men)	23.1 (women)
■ <b>Kentucky:</b>	<b>71.3 (men)</b>	<b>47.0 (women)</b>

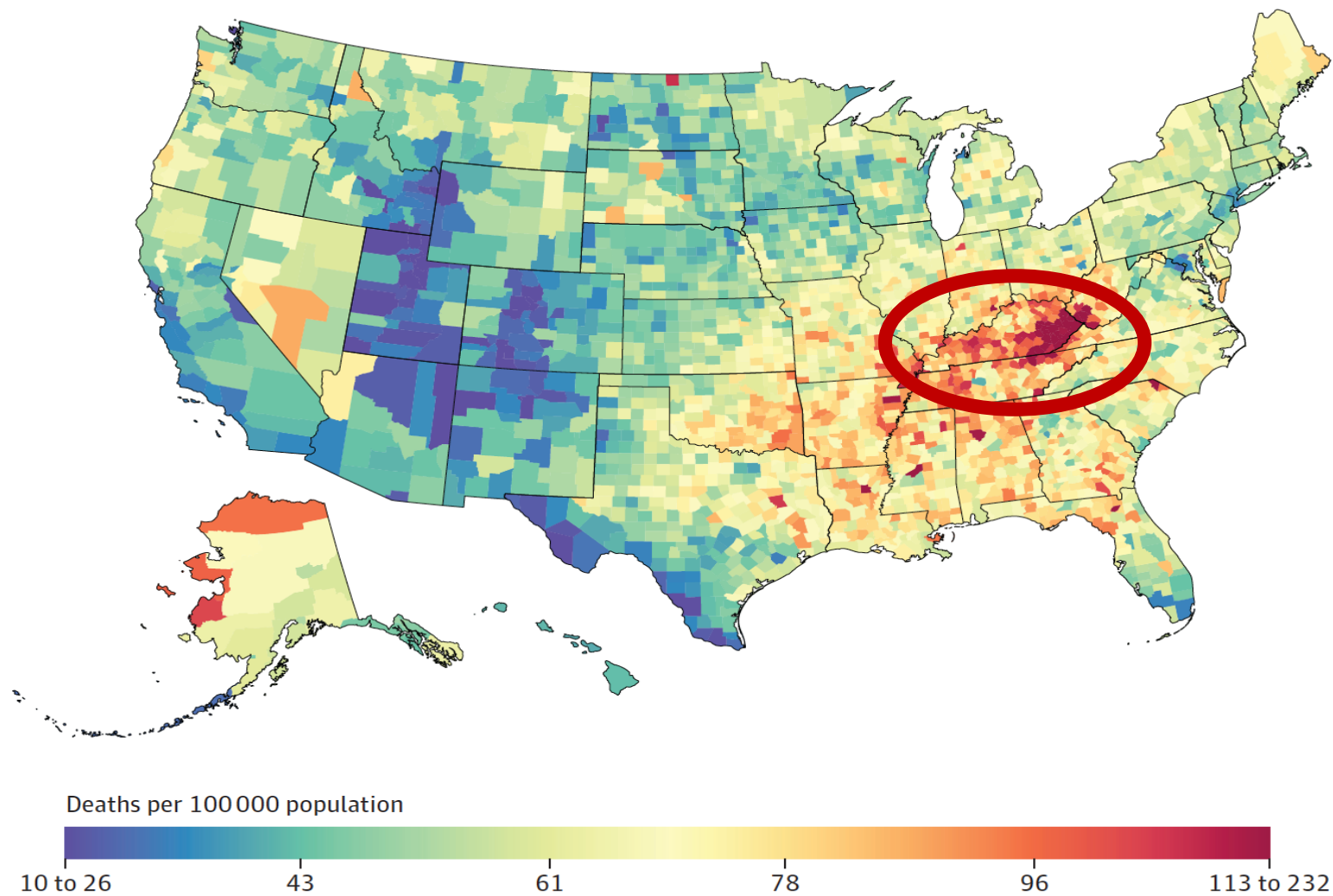
- Adult **smoking rate** (2020)

■ USA	12.5%
■ Colorado	14.5%
■ <b>Kentucky</b>	<b>23.5%</b>



Figure 2. County-Level Mortality From Tracheal, Bronchus, and Lung Cancer

A Age-standardized mortality rate from tracheal, bronchus, and lung cancer, both sexes, 2014

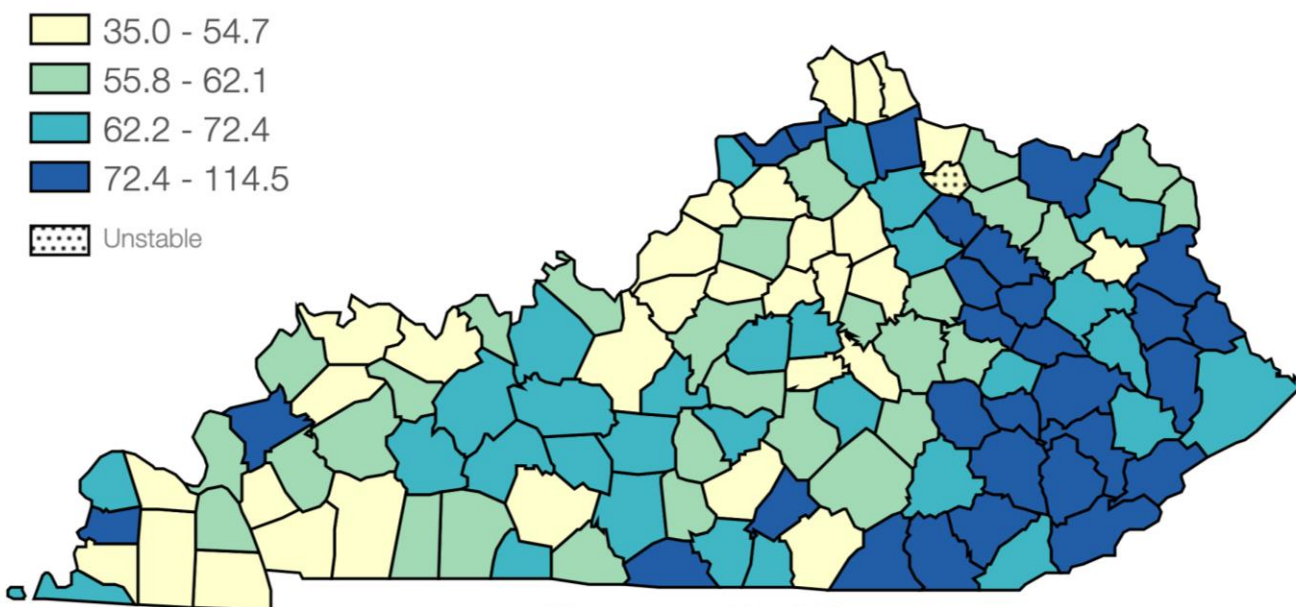




***The lung  
cancer burden  
is not equally  
distributed  
across  
Kentucky.***

Age-Adjusted Cancer Mortality Rates in Kentucky  
Lung and Bronchus, 2015 - 2019  
By County  
Age-Adjusted to the 2000 U.S. Standard Million Population

Kentucky Rate: 56.9 / per 100,000



All rates per 100,000.  
Data accessed December 18, 2022. Based on data released July 2021. Data for 2009-2018 is preliminary.  
© 2022 Kentucky Cancer Registry.

# The Commonwealth's Cancer

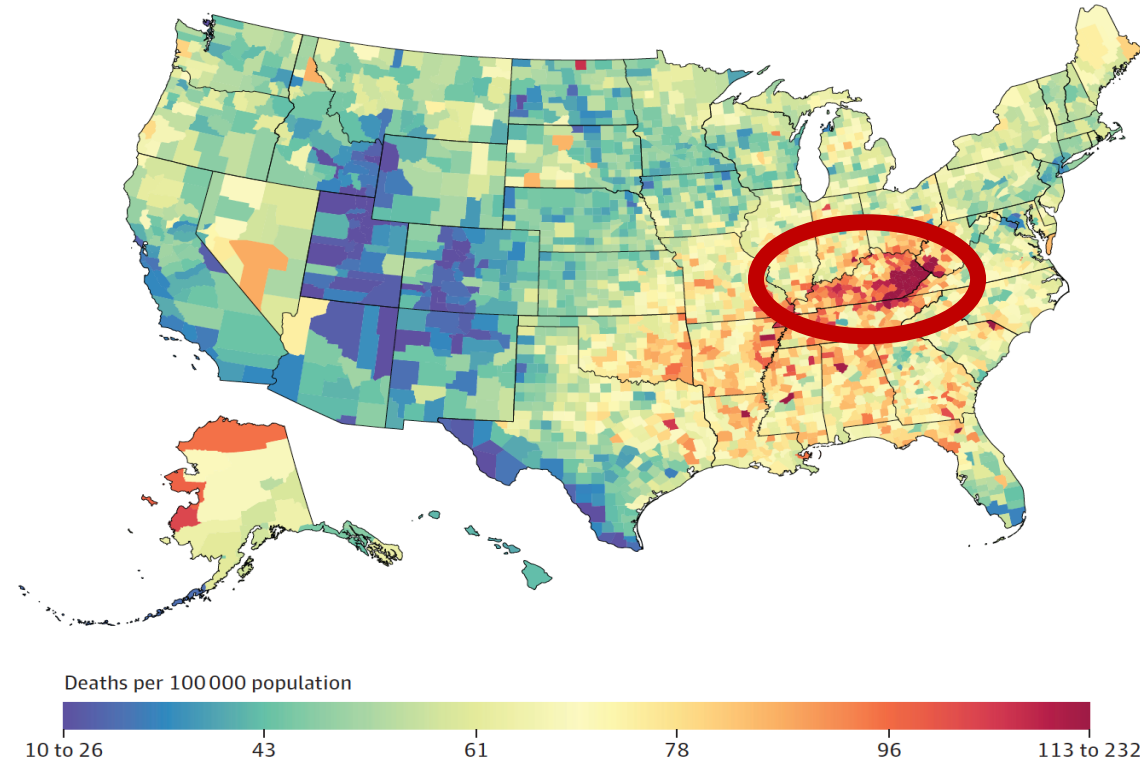


#1  
in Adolescent  
Smoking

#1  
in Lung Cancer  
Mortality

Figure 2. County-Level Mortality From Tracheal, Bronchus, and Lung Cancer

A Age-standardized mortality rate from tracheal, bronchus, and lung cancer, both sexes, 2014

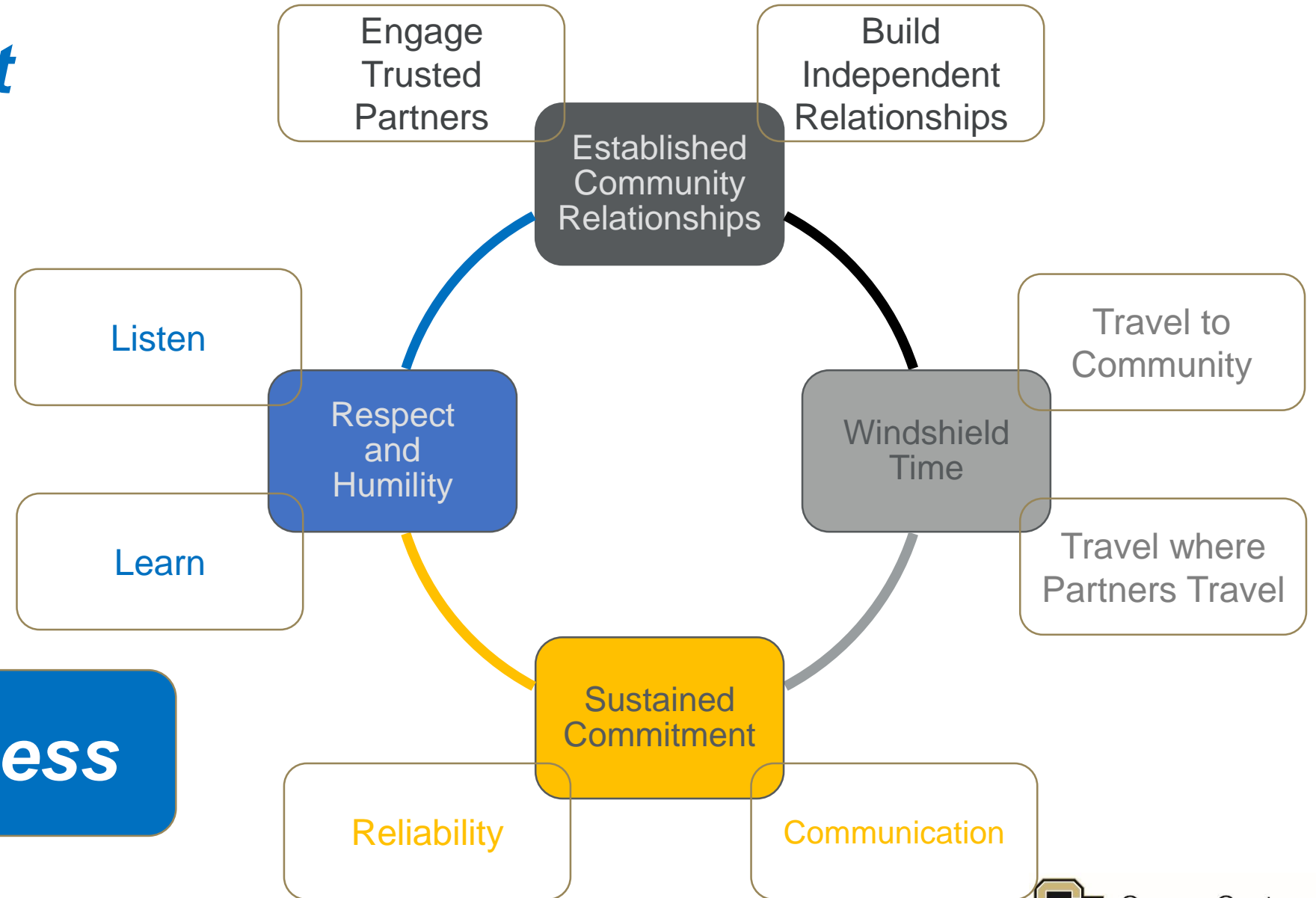


#1  
in Adult  
Smoking

#1  
in Lung Cancer  
Incidence



# The Colonel's **Not-So-Secret** Recipe for Community Engaged Research in Kentucky.



***trustworthiness***

# The Story of the Kentucky LEADS Collaborative

---

Jamie L. Studts, PhD

Timothy Wm. Mullett, MD, MBA

Jennifer Knight, DrPH



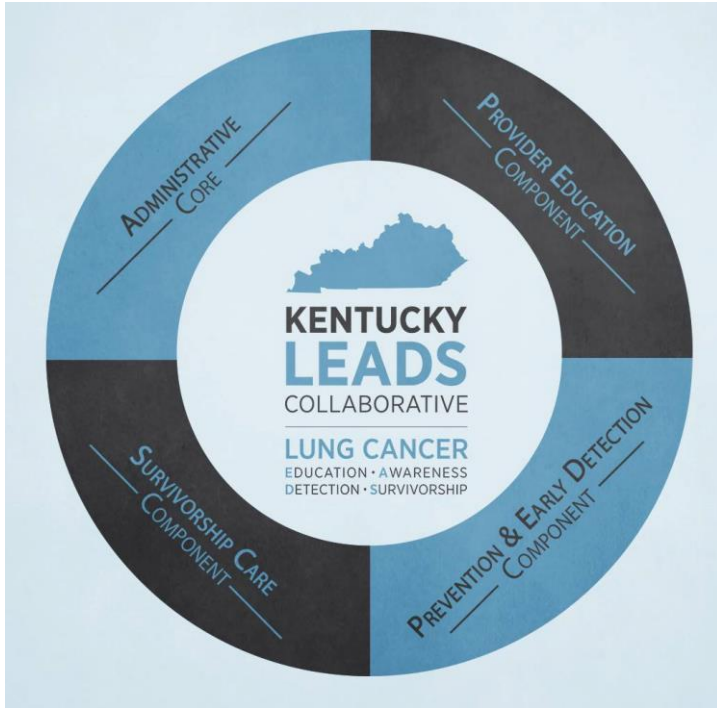
**KENTUCKY**  
**LEADS**  
COLLABORATIVE™

---

**LUNG CANCER**  
EDUCATION • AWARENESS  
DETECTION • SURVIVORSHIP



# The Kentucky LEADS Collaborative



- *Administrative Core*
- Project 1: *Provider Education*
- Project 2: *Survivorship Care*
- Project 3: *Prevention & Early Detection*



# The Kentucky LEADS Collaborative

- **Community-Engaged**
  - 14 unique implementation sites throughout KY
  - Over 100 additional community partners & organizations
  - Integration of community and medical advisory boards
- **Interdisciplinary**
  - Oncology, nursing, social work, palliative care, education, public health, communication, advocacy, psychology
- **Multi-Level**
  - Health Systems/Lung Cancer Screening Programs
  - Healthcare clinicians
  - Individuals diagnosed with lung cancer and caregivers

*“Dedicated to reducing the burden of lung cancer in Kentucky and beyond through development, evaluation, and dissemination of novel, community-based interventions to promote provider education, survivorship care, and prevention and early detection regarding lung cancer.”*



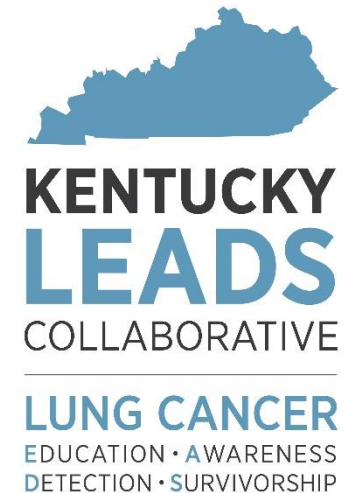
Bristol-Myers Squibb  
Foundation



**KENTUCKY**  
**LEADS**  
COLLABORATIVE

# Kentucky LEADS Collaborative

## Component 1: Provider Education



# *The Great Kentucky Lung Cancer Screening Road Show*



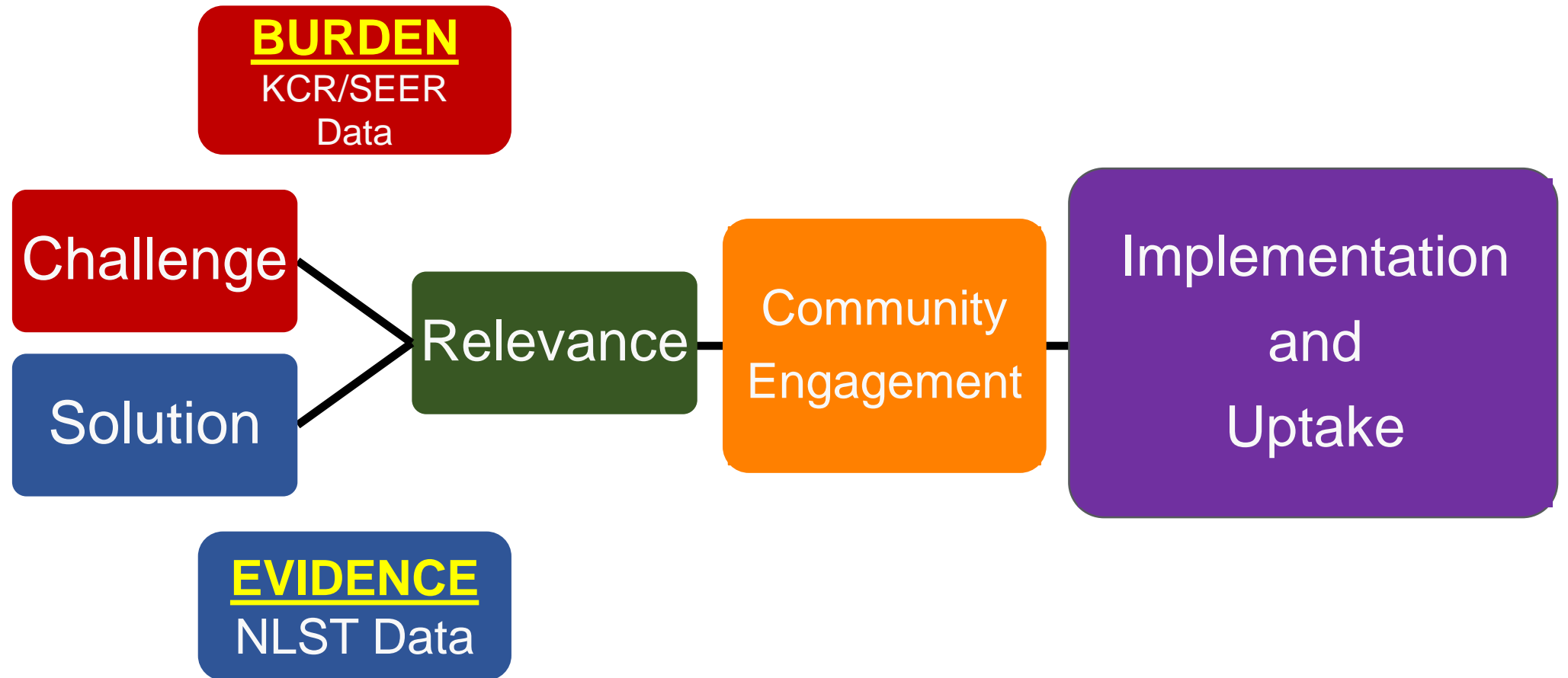
Bi-Directional Sharing of  
Cancer-Related  
Concerns, Perspectives,  
and DATA!



Annual Meetings  
(District Cancer Councils)



# Approach to the District Cancer Council Meetings



# The Kentucky Lung Cancer Screening Road Show (2013-2014)

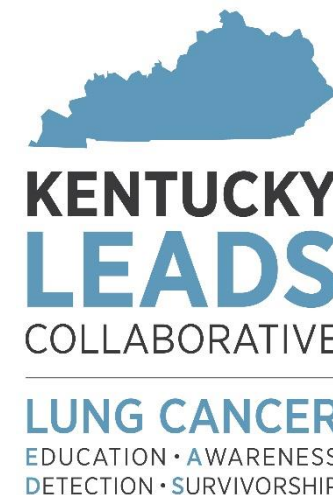


- *Directly* reached hundreds of clinicians and engaged community members throughout the state
- *Indirectly* reached thousands of clinicians and community members through media coverage (e.g., tv, radio, newspaper)
- Conclusions/Accomplishments
  - 1) Tremendous engagement/attendance throughout the state
  - 2) Significant interest in screening among clinicians and community
  - 3) Pockets of apprehension, concerns, skepticism, and frank stigma
  - 4) Recognition that extensive additional efforts would be needed

# *Provider Education Efforts*

## ■ Four Educational Offerings:

- 1) Academic Detailing (January, 2016)
- 2) Large Group Presentations (February, 2016)
- 3) Online Training Course (April, 2016)
- 4) Webinars (March, 2017)

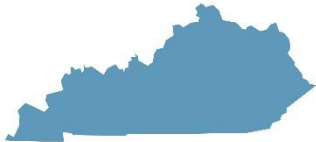


# REACH: Primary Care Clinicians and Staff

Intervention	PCPs Educated	Non-PCPs Educated
Academic Detailing	985	922
Large Group Presentation	254	285
Online Courses	79	34
Webinar	85	32
<b>TOTAL</b>	<b>1,403</b>	<b>1,273</b>

Educational Efforts

Establishing Social Norms



**KENTUCKY LEADS**

COLLABORATIVE

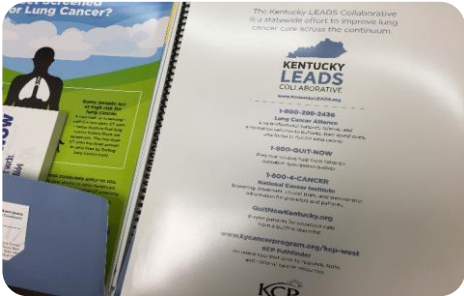
**LUNG CANCER**

EDUCATION • AWARENESS  
DETECTION • SURVIVORSHIP



James Graham  
Brown Cancer Center

Provider Type	Total Educated
MD/DO	631
NP	511
PA	101



University of Colorado  
Anschutz Medical Campus



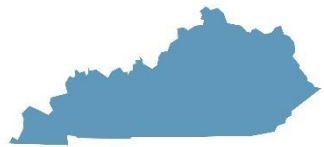
Cancer Center  
NCI-DESIGNATED CANCER CENTER



# Kentucky LEADS Collaborative

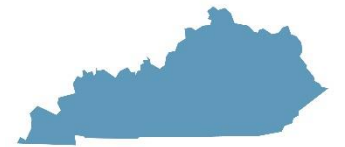
## Component 2:

## Lung Cancer Survivorship



**KENTUCKY  
LEADS**  
COLLABORATIVE

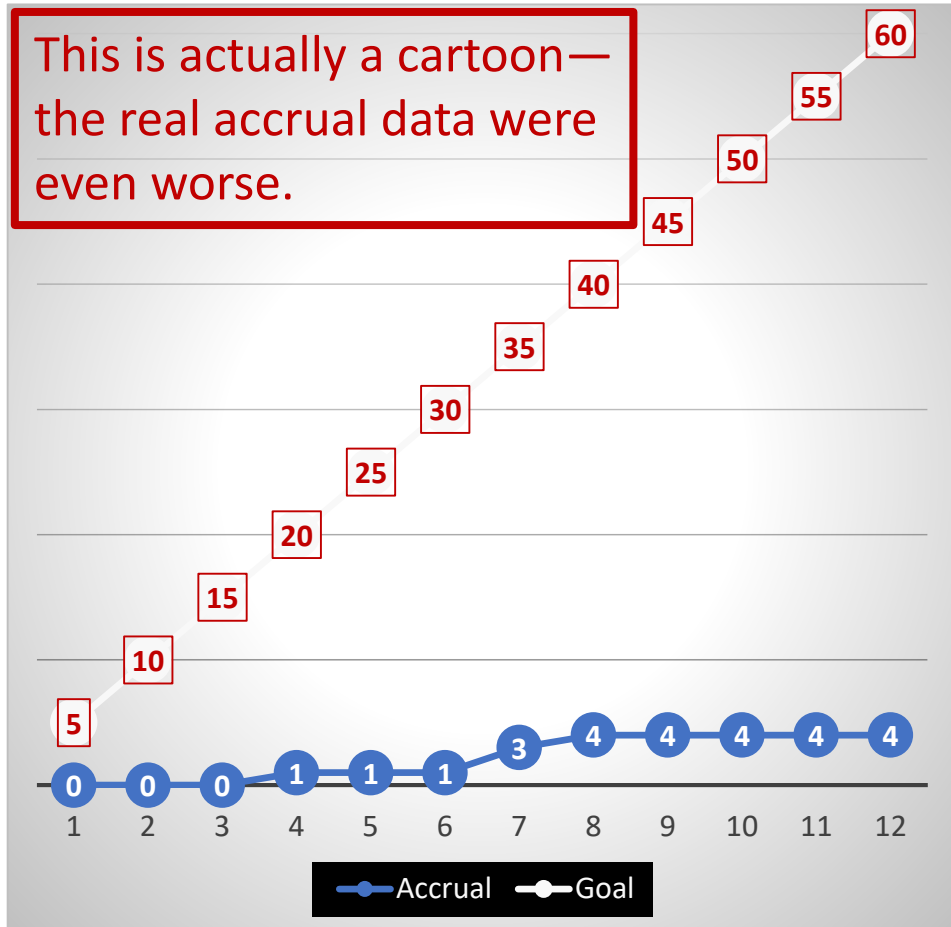
**LUNG CANCER**  
EDUCATION • AWARENESS  
DETECTION • SURVIVORSHIP



**KENTUCKY  
LEADS**  
COLLABORATIVE

**LUNG CANCER**  
EDUCATION • AWARENESS  
DETECTION • SURVIVORSHIP

# *What level of interest do individuals with lung cancer have in psychosocial programs?*

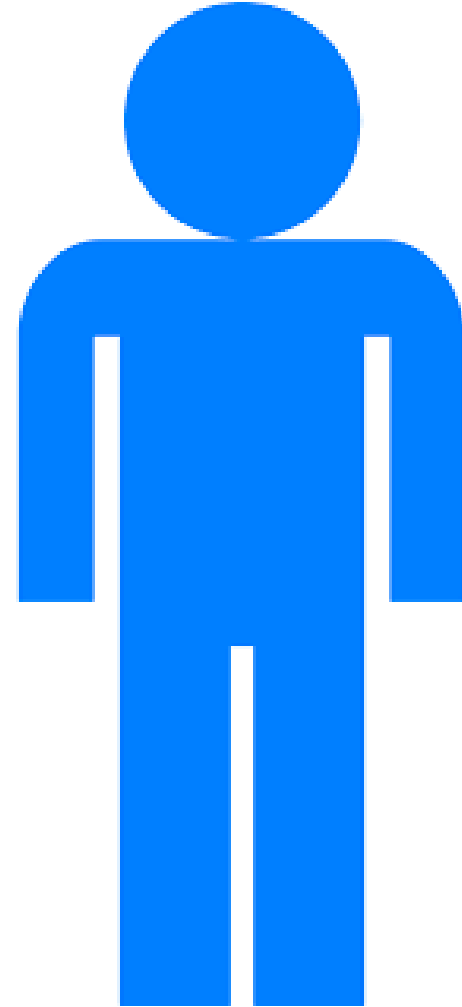


- ❖ Funded Randomized Clinical Trial for Lung Cancer Survivors, comparing supportive-expressive therapy (SET) and mindfulness-based stress reduction (MBSR). [circa 2001]
- ❖ Transitioned to a cross-sectional survey to generate some data addressing the psychosocial experience of lung cancer.

# *Who is the average lung cancer survivor?*

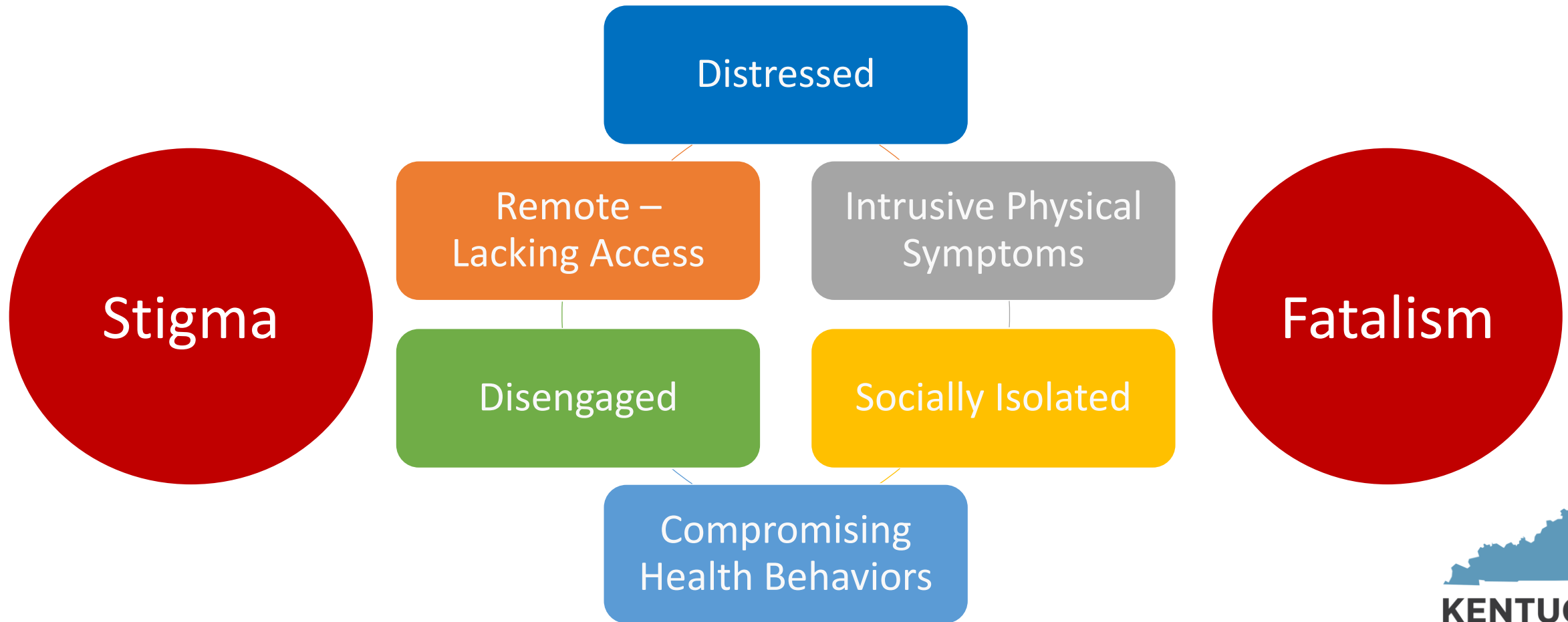
- Male
- 70 years of age or older
- Substantial tobacco use history
- Likely to have military experience
- Multiple comorbidities
- May reside in a rural area
- May have economic constraints

*Person-Centered Approach*



Does this fit with our understanding of an individual who seeks a psychosocial survivorship interventions?

# ***What is the experience of lung cancer survivors?***





# *Implementing Solutions to Improving Individual-Level Access to Services*



**KENTUCKY**  
**LEADS**  
COLLABORATIVE

**LUNG CANCER**  
EDUCATION • AWARENESS  
DETECTION • SURVIVORSHIP

Design for Efficacy?

Design for Dissemination?

Design for Acceptability!

Design for Adoption! (accessibility)



**KENTUCKY**  
**LEADS**  
COLLABORATIVE

# ***Development Process for the **Kentucky LEADS** Collaborative Lung Cancer Survivorship Care Program***

---

- 1) Convened an interdisciplinary team of clinicians, researchers, and advocates
- 2) Agreed to challenge assumptions/conventions regarding survivorship care
- 3) Reviewed literature and discussed practice knowledge base
- 4) Leveraged input from a diverse **Community Advisory Board**
- 5) Proposed and adopted fundamental principles and an approach that might enhance intervention acceptability
- 6) Selected module topics based on symptom burden and challenges
- 7) Designed clinician-participant engagement to be partnering and collaborative rather than educational
- 8) Integrated participant preferences into intervention delivery

# *Person or Patient-Centered Care Principles*

- Partnering/Supportive Counseling Style



- Rogerian/Motivational Interviewing
- Coping with/Addressing stigma concerns
- Empathy over education

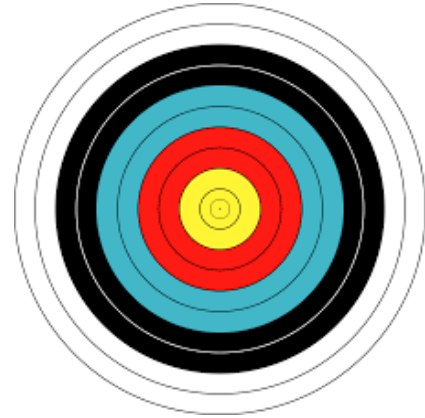
- Shared Decision Making (SDM)



- Adaptable (targeted and tailored content) that follows from Baseline Assessment and patient preferences
- Effort to maximize survivor acceptability of the intervention

# Precision Lung Cancer Survivorship

- The Kentucky LEADS Collaborative Lung Cancer Survivorship Care Program is a *Precision Medicine* approach to Survivorship.
  - By design, the intervention *targets* the most prevalent and distress symptoms and challenges associated with a lung cancer diagnosis.
  - By integrating patient preferences, the intervention is *tailored* to the unique needs of the survivor, the preferred delivery method, and the desired level of involvement of the social support network.



*Modular Approach to Intervention Delivery – The Power to Choose*



# ***The Kentucky LEADS Collaborative Lung Cancer Survivorship Care Program***

**Content  
Modules**

**Intervention  
Domains**

**Formative  
Resources**

**Conceptual  
Foundation**

# ***What additional strategies were employed to enhance intervention acceptability?***

---

- 1) Participants controlled their **intervention content** (menu).
- 2) Participants chose the **order of the intervention content**.
- 3) Participants chose whether or not to **include a caregiver**.
- 4) Participants chose the **delivery platform**. (in-person/phone)
- 5) Participants chose the **frequency/duration** of contact.

# *What efforts were made to achieve intervention accessibility and methodologic feasibility?*

---

- 1) Trained local as opposed to centralized interventionists.
- 2) Sites choose the interventionists**/survivorship care specialists.
- 3) Develop/evaluate a sustainable (web-based) training platform.
- 4) Support flexible delivery (e.g., in-person, telephone, telehealth).
- 5) Create a digital learning community to support intervention.
- 6) Provide technical assistance for sustainable delivery.

# So, did it work?

---



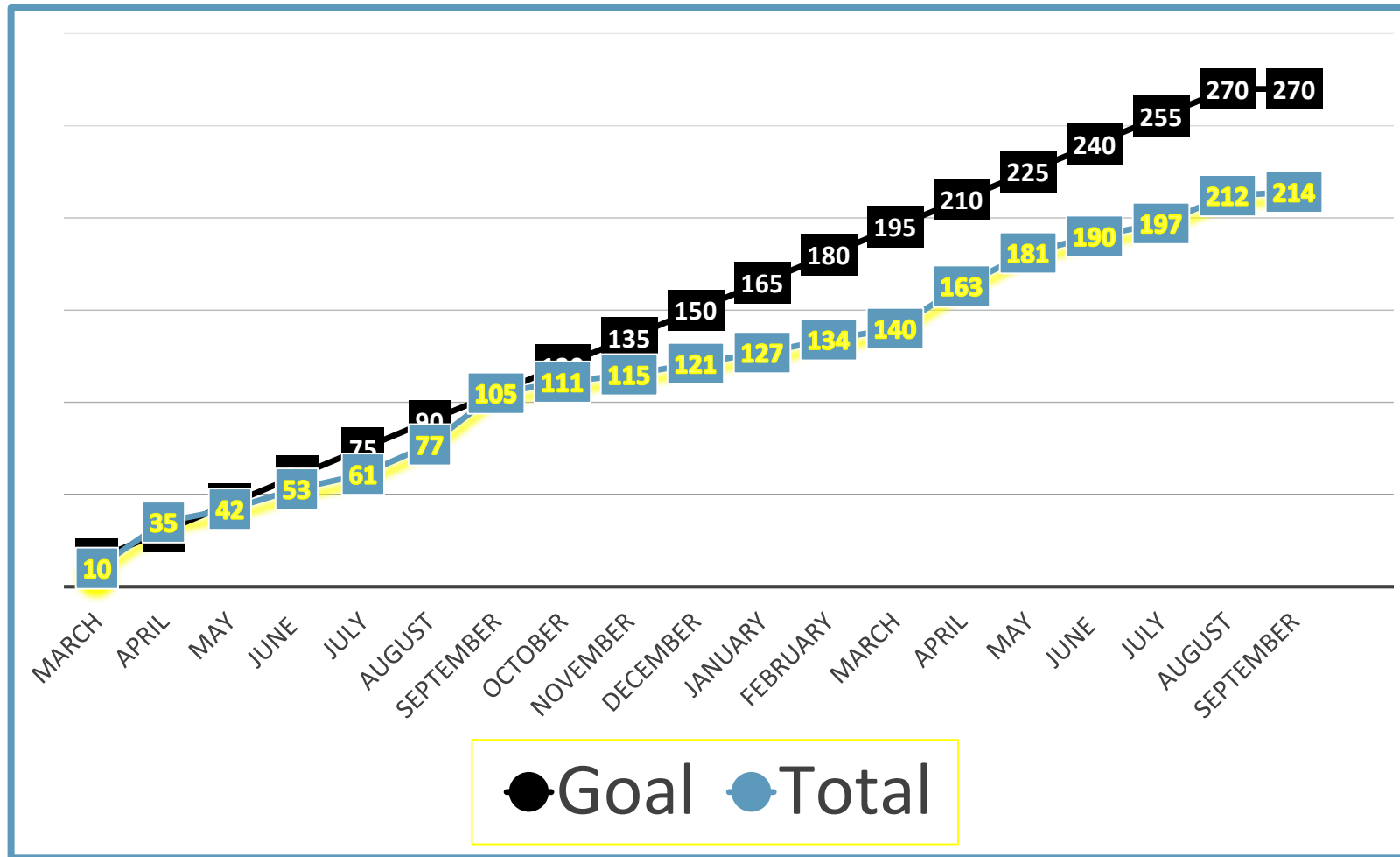
**KENTUCKY**  
**LEADS**  
COLLABORATIVE

---

**LUNG CANCER**  
EDUCATION • AWARENESS  
DETECTION • SURVIVORSHIP



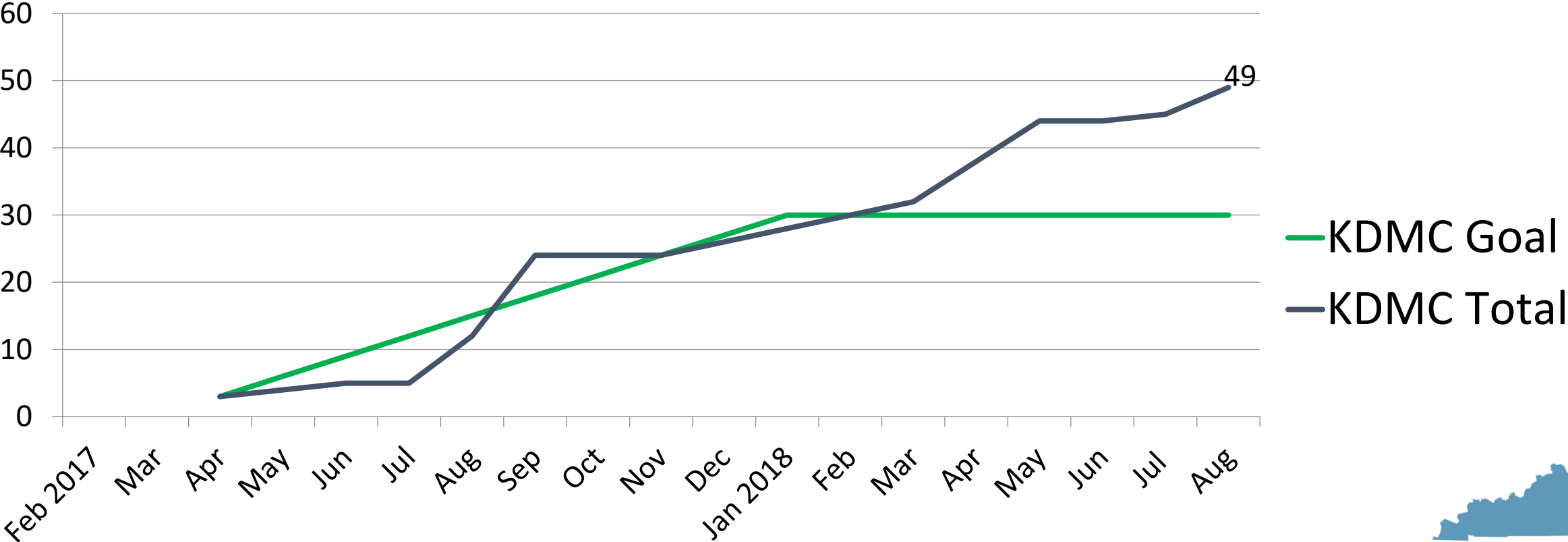
# *The intervention acceptability signal was very encouraging!*



- The trial was launched at 9 of the 10 planned sites.
- Accrual was uneven with some sites exceeding accrual expectations and others delayed in accrual.

# Site Accrual Tracking – King’s Daughters Medical Center

2017-2018



Open to enrollment April 19, 2017  
No accrual pause.

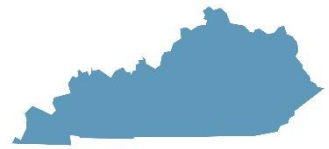
# **SUMMARY: The Kentucky LEADS Collaborative Lung Cancer Survivorship Care Program**

- 1) *Very encouraging results with regard to intervention acceptability.*** (accrual of survivors, caregivers, and support from clinicians)
- 2) *Support for methodological feasibility.*** (not discussed, but we collected complete data from approximately 50% of accrued participants (this was the goal, accounting for expected mortality).
- 3) *Data analysis examining preliminary efficacy data is ongoing.*** (datasets are being cleaned and coded).
- 4) *Training program for clinicians was impactful and well-received.*** (improving self-efficacy and empathy within lung cancer survivorship).
- 5) *Move forward with a proposed randomized controlled trial, including an evaluation of cost-effectiveness.***

# Kentucky LEADS Collaborative

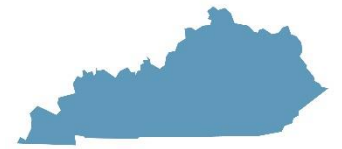
## Component 3:

## Prevention and Early Detection



**KENTUCKY  
LEADS**  
COLLABORATIVE

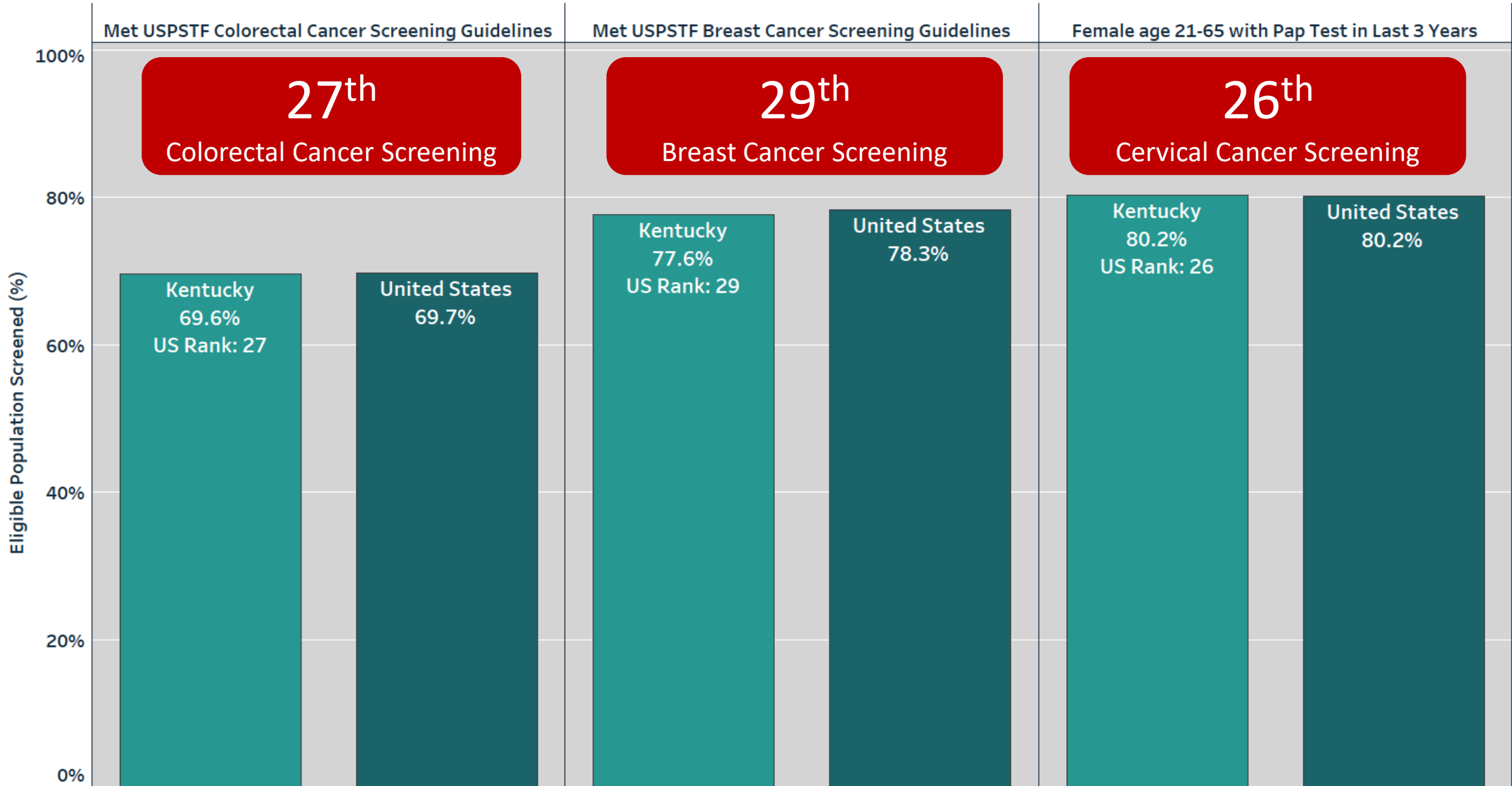
**LUNG CANCER**  
EDUCATION • AWARENESS  
DETECTION • SURVIVORSHIP



**KENTUCKY  
LEADS**  
COLLABORATIVE

**LUNG CANCER**  
EDUCATION • AWARENESS  
DETECTION • SURVIVORSHIP

## Screening Rate Comparison, KY vs US (BRFSS, 2018)





# There have been noteworthy concerns regarding quality implementation of lung cancer screening.

## Lung Cancer Screening With Low-Dose Computed Tomography In the United States—2010 to 2015

Lung cancer is the most preventable and leading cause of cancer deaths in the United States, with about 155 870 deaths each year.<sup>1</sup> In December 2013, the United States Preventive Services Task Force (USPSTF) recommended annual screening for lung cancer with low-dose computed tomography (LDCT) for asymptomatic persons aged 55

## CHEST<sup>®</sup> JOURNAL

ORIGINAL RESEARCH | ARTICLES IN PRESS

### Shared Decision Making for Lung Cancer Screening: How Well are we “Sharing”?

Shawn P.E. Nishi, MD, <sup>1</sup> Lisa M. Lowenstein, PhD, MPH, <sup>2</sup> Tilo R. Mendoza, PhD, <sup>3</sup> Karen Sepucha, PhD, <sup>4</sup> Jiangong Niu, PhD, MS, <sup>5</sup> Robert J. Volk, PhD, <sup>6</sup> Show all authors

Published: February 05, 2021 • DOI: <https://doi.org/10.1016/j.chest.2021.01.041>

American Journal of Preventive Medicine

RESEARCH ARTICLE

## Evaluating Shared Decision Making for Lung Cancer Screening

Alison T. Brannan, PhD, MPH, <sup>1</sup> Tori L. Maitz, PhD, MPH, <sup>2</sup> Marjorie Margolis, MSPH, <sup>3</sup> Jennifer Eiston Lafata, PhD, <sup>4</sup> Shynah James, MPH, <sup>5</sup> Mathan B. Yu, DPH, MPH, <sup>6</sup> Daniel S. Roudsari, MD, MPH, <sup>7</sup> Show all authors

**IMPORTANCE:** The US Preventive Services Task Force recommends that shared decision making (SDM) involving a thorough discussion of benefits and harms should occur between clinicians and patients before initiating lung cancer screening (LCS) with low-dose computed tomography. The Centers for Medicare & Medicaid Services require an SDM visit using a decision aid as a prerequisite for LCS coverage. However, little is known about how shared

Editorial page 1205 and  
Invited Commentary  
page 1422

Author

### Lung Cancer Screening Inconsistent With U.S. Preventive Services Task Force Recommendation

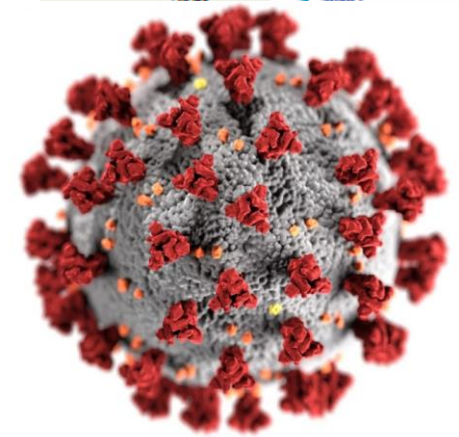
David NVM, PhD, <sup>2</sup> Ashwini Soman, M, PhD, <sup>5</sup> Simone C. Gray, PhD, <sup>6</sup> Mary C. White, ScD <sup>1</sup>

**Use of CT and Chest Radiography for Lung Cancer Screening Before and After Publication of Screening Guidelines: Intended and Unintended Uptake**  
The National Lung Screening Trial (NLST) released its main findings in 2011,<sup>1</sup> concluding that the use of low-dose computed tomography (CT) to screen for lung cancer reduced lung cancer deaths by 20% compared with chest radiography.<sup>1,2</sup> The subse-

## Comparison of Observed Harms and Expected Mortality Benefit for Persons in the Veterans Health Affairs Lung Cancer Screening Demonstration Project

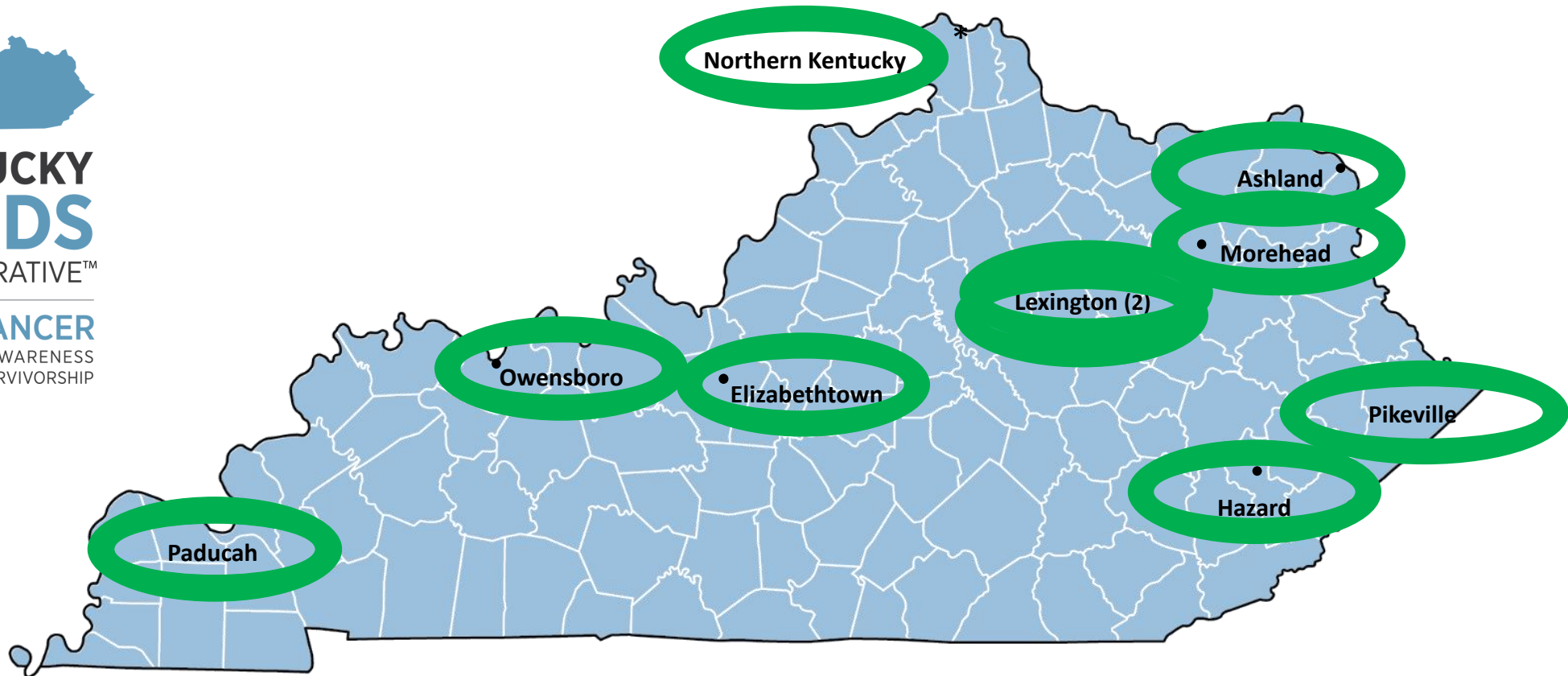
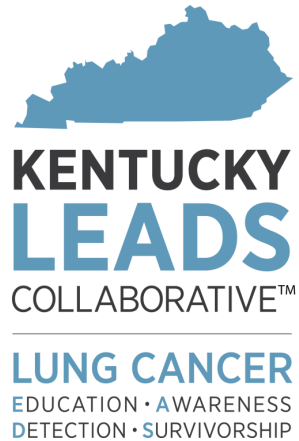
The Veterans Health Affairs (VHA) lung cancer screening (LCS) demonstration project identified a much higher false-positive rate following initial low-dose computed tomographic screening than did the National Lung Screening Trial (58.2% vs 26.3%).<sup>1,2</sup> Most false-positive results (nodules not confirmed to be lung cancer [LC] after follow-up) resulted in repeated imaging, but

Editorial page 326



In addition to supporting primary care, we need to work with LCS programs to facilitate implementation of high-quality LCS processes and smoothly translate results of the NLST and NELSON trials in routine practice.

# Prevention & Early Detection (PD) Implementation Sites



1. Baptist Health, Lexington
2. Baptist Health, Paducah
3. Hardin Memorial Hospital and Cancer Center, Elizabethtown
4. Hazard Appalachian Regional Healthcare, Hazard
5. St. Elizabeth Healthcare, Northern Kentucky

- 6) King's Daughters Medical Center, Ashland
- 7) Markey Cancer Center, Lexington
- 8) Owensboro Health, Owensboro
- 9) St. Claire Regional Medical Center, Morehead
- 10) Pikeville Medical Center, Pikeville

# QUILS System 1.0



Quality Implementation  
of Lung Cancer Screening

Assess Quality  
(QUILS Index 1.0)

Feedback System  
(QUILS Report 1.0)

Resource Portal  
(QUILS Portal 1.0)

Technical Support  
(QUILS Support 1.0)

Program Data  
Reporting

Program Policies and  
Practices Interviews

Program Domain	Item	Screening Element/Scoring	Maximum Score	Site Score
Eligibility	1	Screening Eligibility Policy	5	
Eligibility	2	Screening Frequency & Duration Policy	5	
Radiology	3	LDCT Performance	5	
Radiology	4	Lung Nodule Identification	5	
Radiology	5	Structured Results Reporting	5	
Radiology	6	Lung Nodule Management Algorithm	5	
Team	7	Interdisciplinary Clinical Team	5	
Team	8	Team Review of Radiology Results	5	
Prevention	9	Tobacco Treatment Interventions	5	
Prevention	10	Tobacco Treatment Targets	5	
Prevention	11	Second-Hand Smoke Prevention/Educ	3	
Prevention	12	Radon Prevention Education	2	
Patient	13	Shared Decision Making	5	
Patient	14	Engagement and Retention Methods	5	
Community	15	Responsible Marketing and Outreach	5	
Community	16	Provider Outreach	5	
Total		Summary Score	75	
Converted		Total Converted Summary Score	100	



- KY LEADS: Lung Cancer Screening
  - Study CME/CE Modules
  - Faculty Information
  - Pre-test
  - For Radiologists
  - For Lung Cancer Screening Program Team



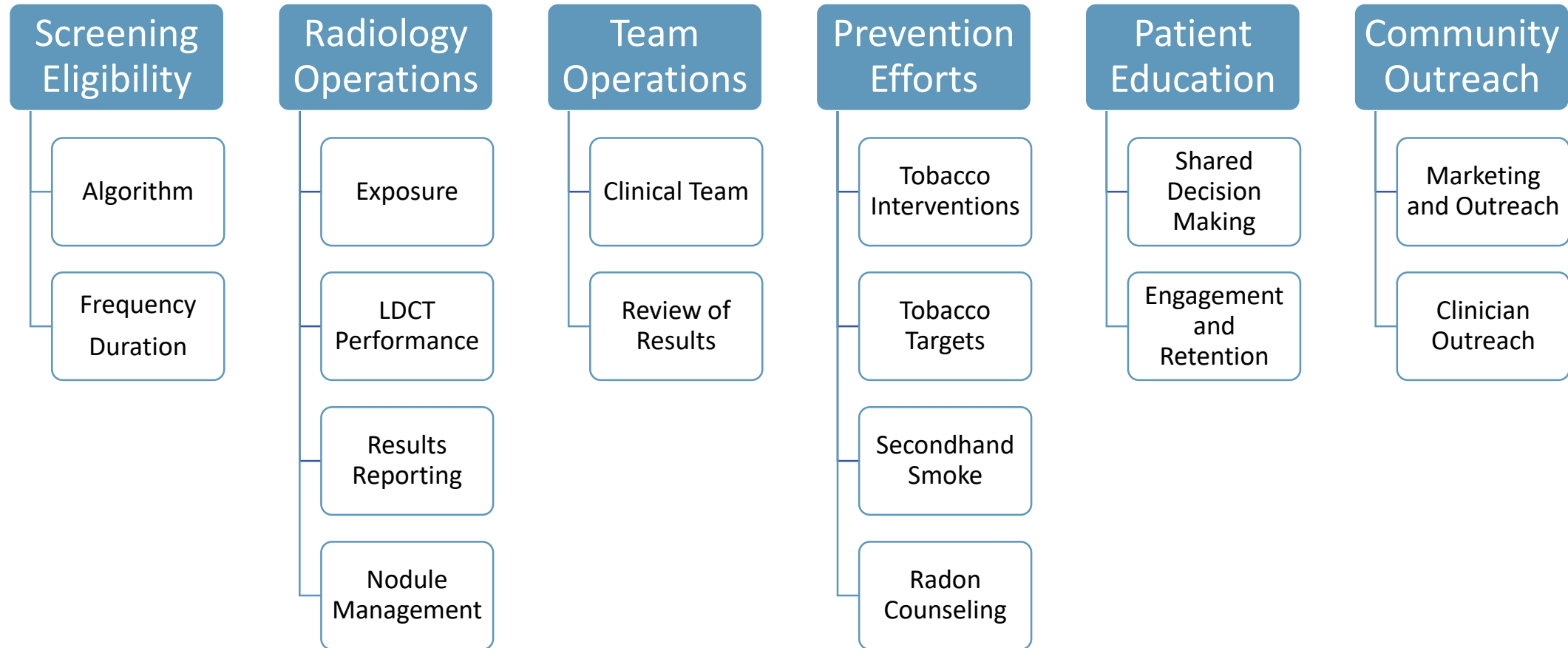
## Welcome

Welcome to the Study Resource Portal for the "KY LEADS: Implementation of Quality Lung Cancer Screening" research study.

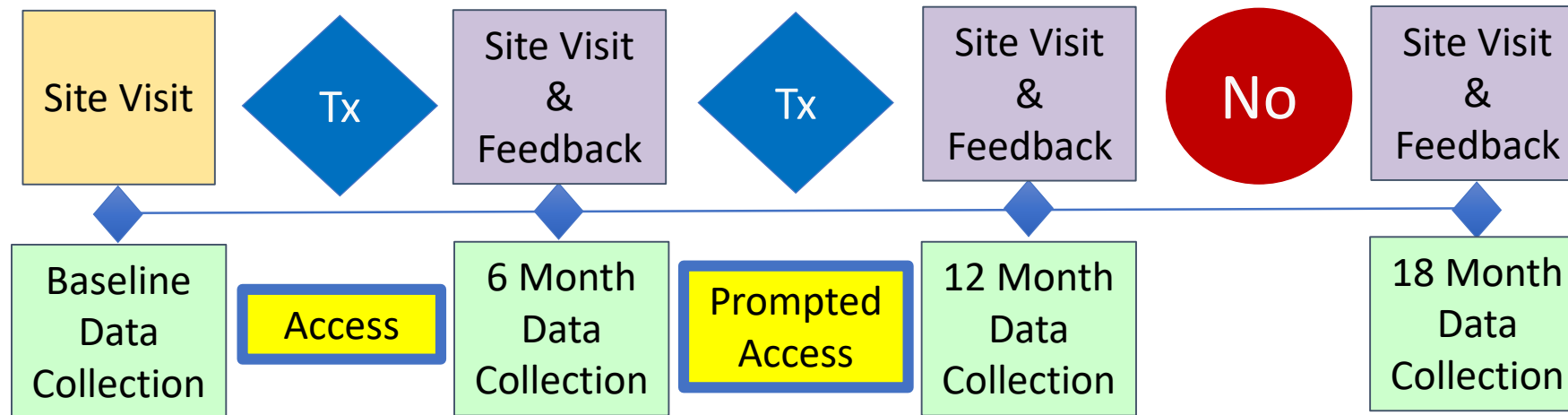
We are pleased to partner with CE Central to offer this customized portal to house our study online medical education and a toolkit that includes resources for lung cancer screening programs. The target audience of this content extends to the multidisciplinary health professionals at participating study sites who are involved in LC Screening programs and research across the state of Kentucky. These include the radiologists, pulmonologists, surgeons, patient navigators, research nurses/coordinators, referring primary care physicians and others engaged in the implementation and management of the lung cancer screening program at your institution.



# QUILS Index 1.0 Overview, Domains, and Elements



# Kentucky LEADS Collaborative Prevention & Early Detection Study Schema

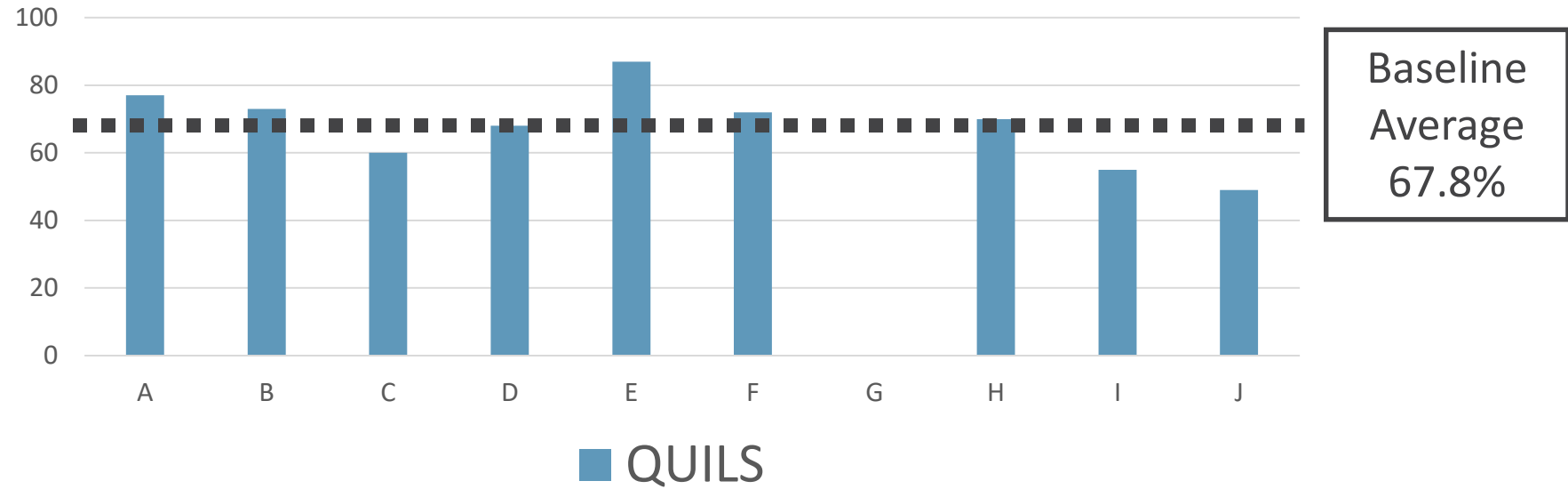


## Data Sources for Evaluation

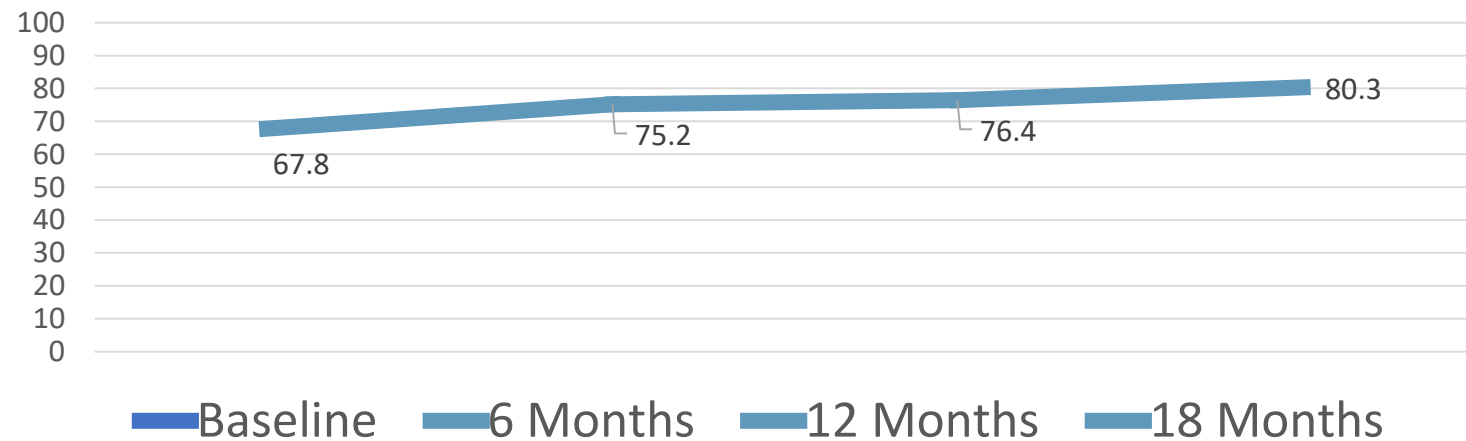
- 1) Team Member Interviews (Structured and Semi-Structured)
- 2) Program Surveys (Standardized IS Instruments)
- 3) Program Database Extraction (Enhanced Common Database)



# Overall Baseline QUILS Score (0-100)

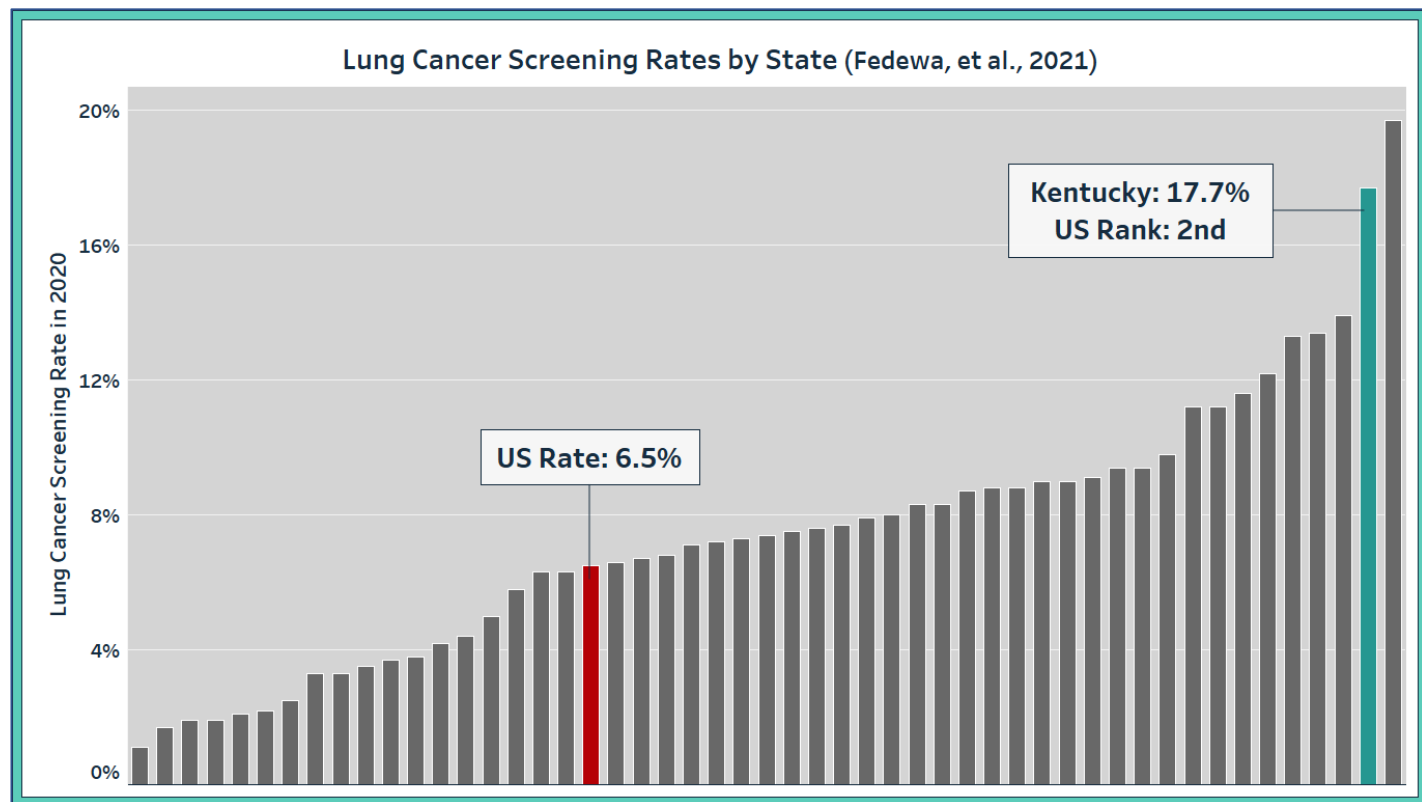


# Overall Mean QUILS Scores Over Time (0-100)

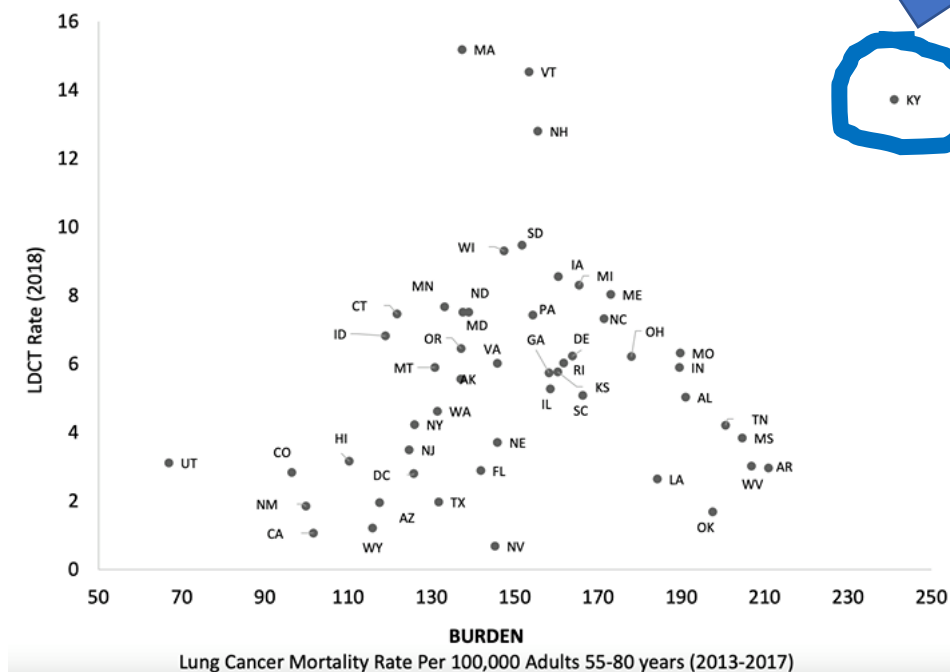


Quality Implementation  
of Lung Cancer Screening

# National Lung Cancer Screening Uptake Landscape

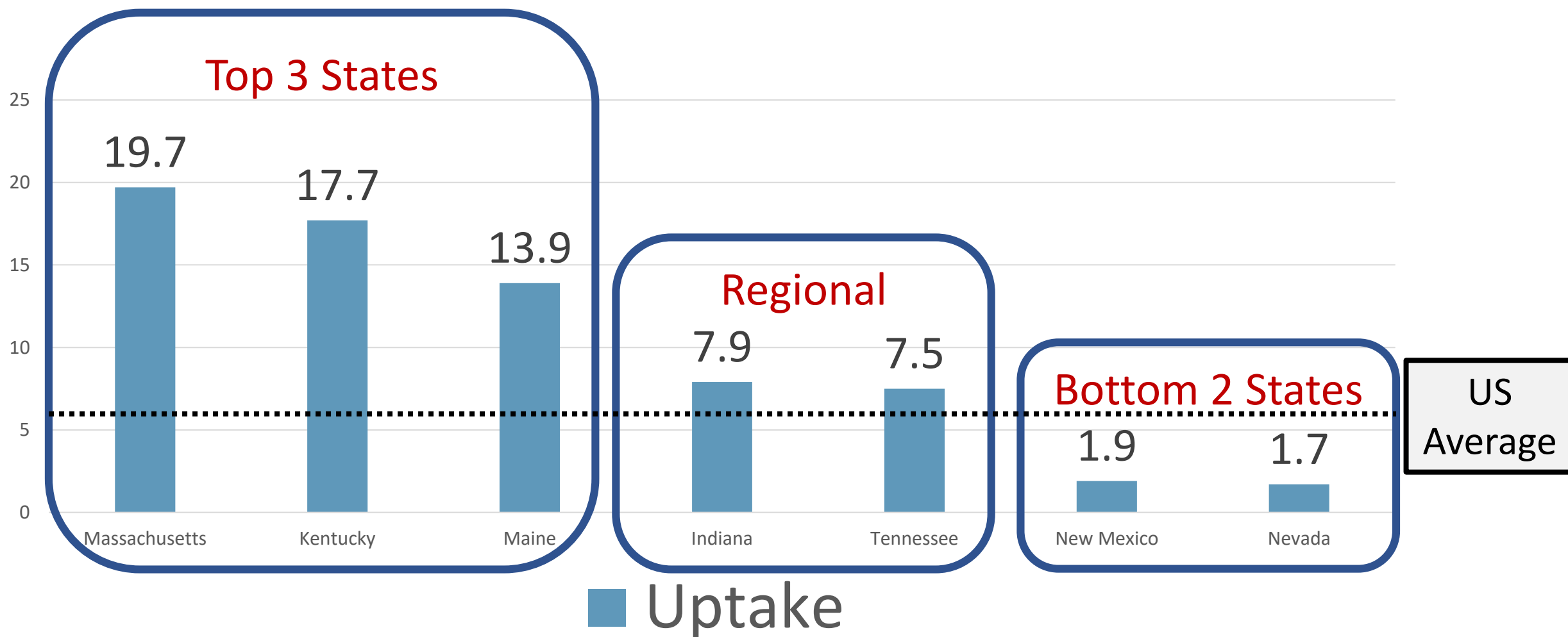


**Kentucky**—the only state with substantial lung cancer burden that is also leading statewide LCS implementation.



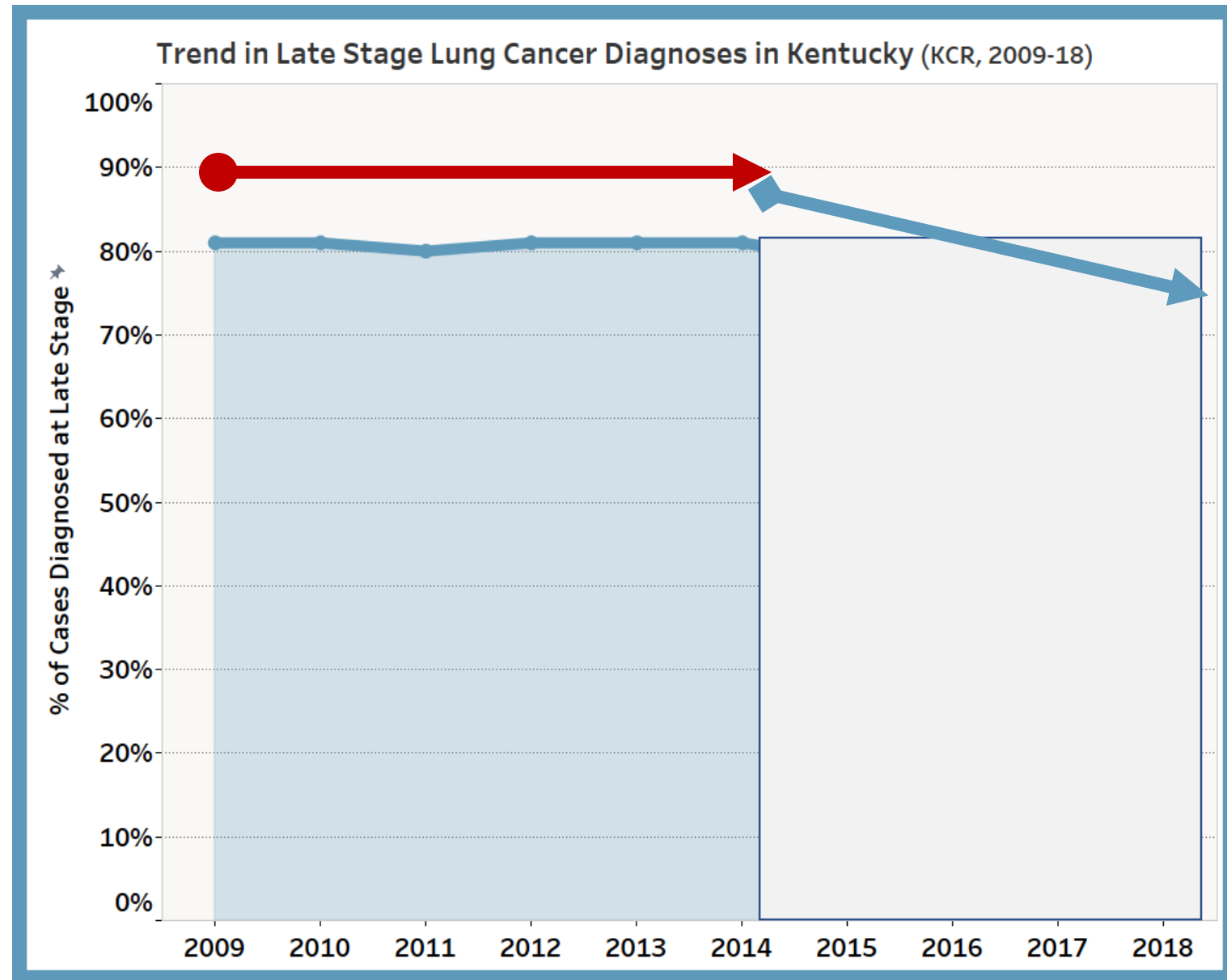
(Fedewa et al., 2021)

# Lung Cancer Screening Uptake in 2020



# Reduction in Late Stage Lung Cancer Diagnoses in Kentucky

- Stable at ~81% from 2009 through 2014
- Nearly 10% decline from 2014 to 2018!!





Bristol-Myers Squibb  
Foundation

Bristol-Myers Squibb Foundation



**Bridging Cancer Care**  
*Community Awareness, Prevention and Care*

**University of  
Kentucky**

James Graham Brown  
**Cancer Center**  
A proud member of **UK Health Care**



**LUNG CANCER  
ALLIANCE**

**GO2  
FOUNDATION  
FOR LUNG  
CANCER**



Cancer Center  
NCI-DESIGNATED COMPREHENSIVE  
CANCER CENTER



Kentucky  
**Clinical Trials Network**



**HealthCare**  
**MARKEY CANCER CENTER**  
Network

**UK HealthCare**  
Markey Cancer Center  
Research Network



**ASCO**  
AMERICAN SOCIETY OF CLINICAL ONCOLOGY



Commission  
on Cancer  
ACCREDITED PROGRAM



**NORTON  
HEALTHCARE**



**Cancer Action  
Network**  
American  
Cancer Society



College of  
Medicine



American  
Lung  
Association.



**HARDIN MEMORIAL HOSPITAL**

**KING'S  
DAUGHTERS**  
MEDICAL CENTER

*Taking Medicine Further™*



A Breath of Hope  
LUNG FOUNDATION



Maine Medical Center  
MaineHealth



**BAPTIST HEALTH**  
LEXINGTON



**KENTUCKY HEALTH  
COLLABORATIVE**  
Improving the state of healthcare.

**+PIKEVILLE  
MEDICAL CENTER**



**St. Claire Regional  
Medical Center**



**BAPTIST HEALTH**  
PADUCAH



**HealthCare**  
**MARKEY CANCER CENTER**



Appalachian Regional Healthcare



**Owensboro  
Health**



**NATIONAL  
LUNG CANCER  
ROUNDTABLE**



**KENTUCKY  
LEADS**  
COLLABORATIVE™

**LUNG CANCER**  
EDUCATION • AWARENESS  
DETECTION • SURVIVORSHIP



Quality Implementation  
of Lung Cancer Screening





# KENTUCKY LEADS

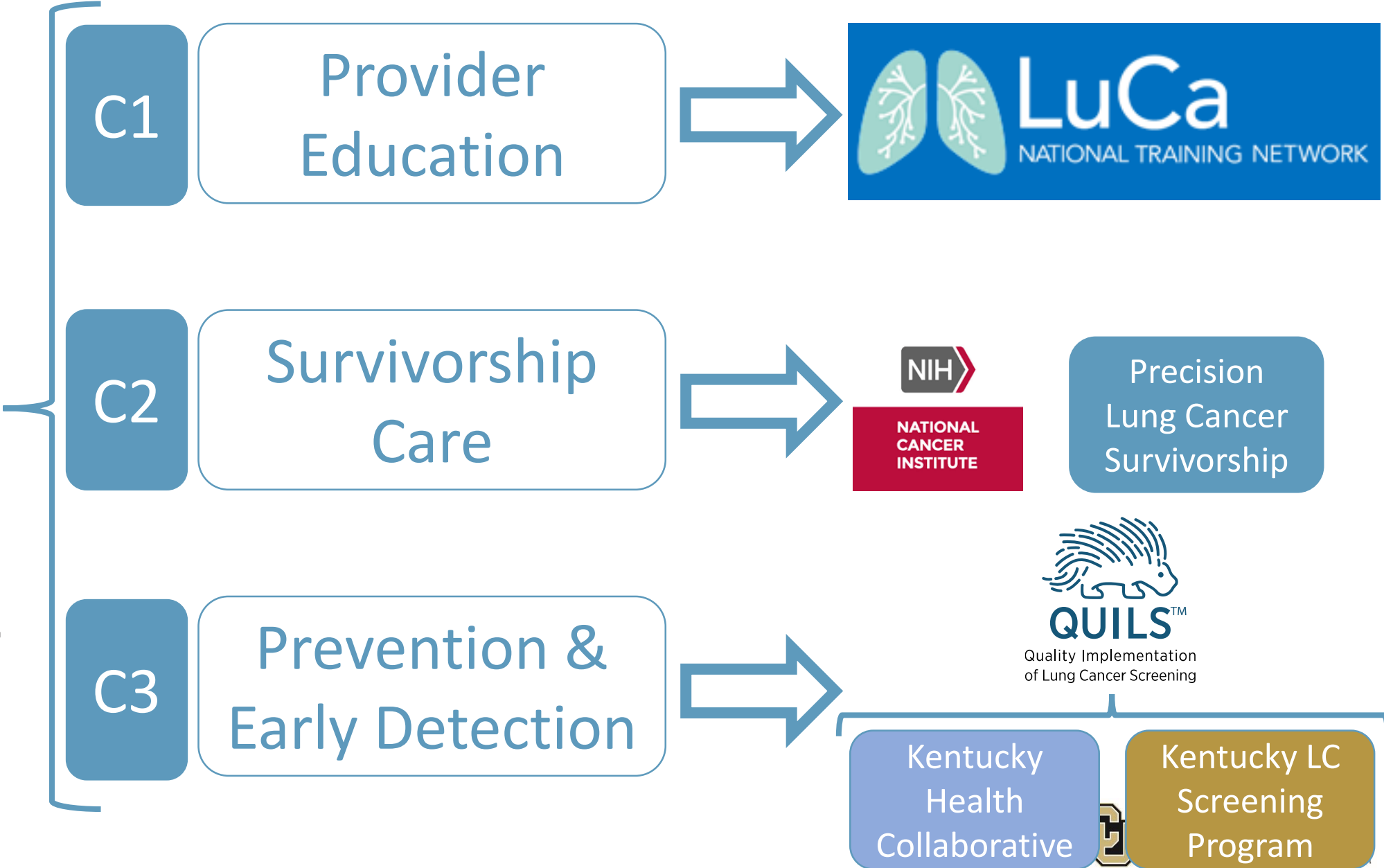
COLLABORATIVE™

## LUNG CANCER

EDUCATION • AWARENESS  
DETECTION • SURVIVORSHIP

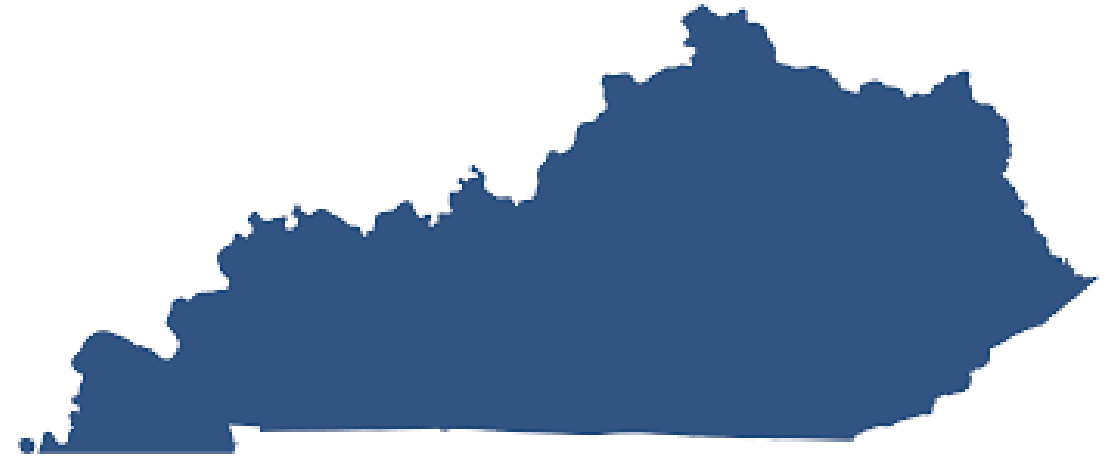
 Bristol Myers Squibb™  
Foundation

 University of Colorado  
Anschutz Medical Campus

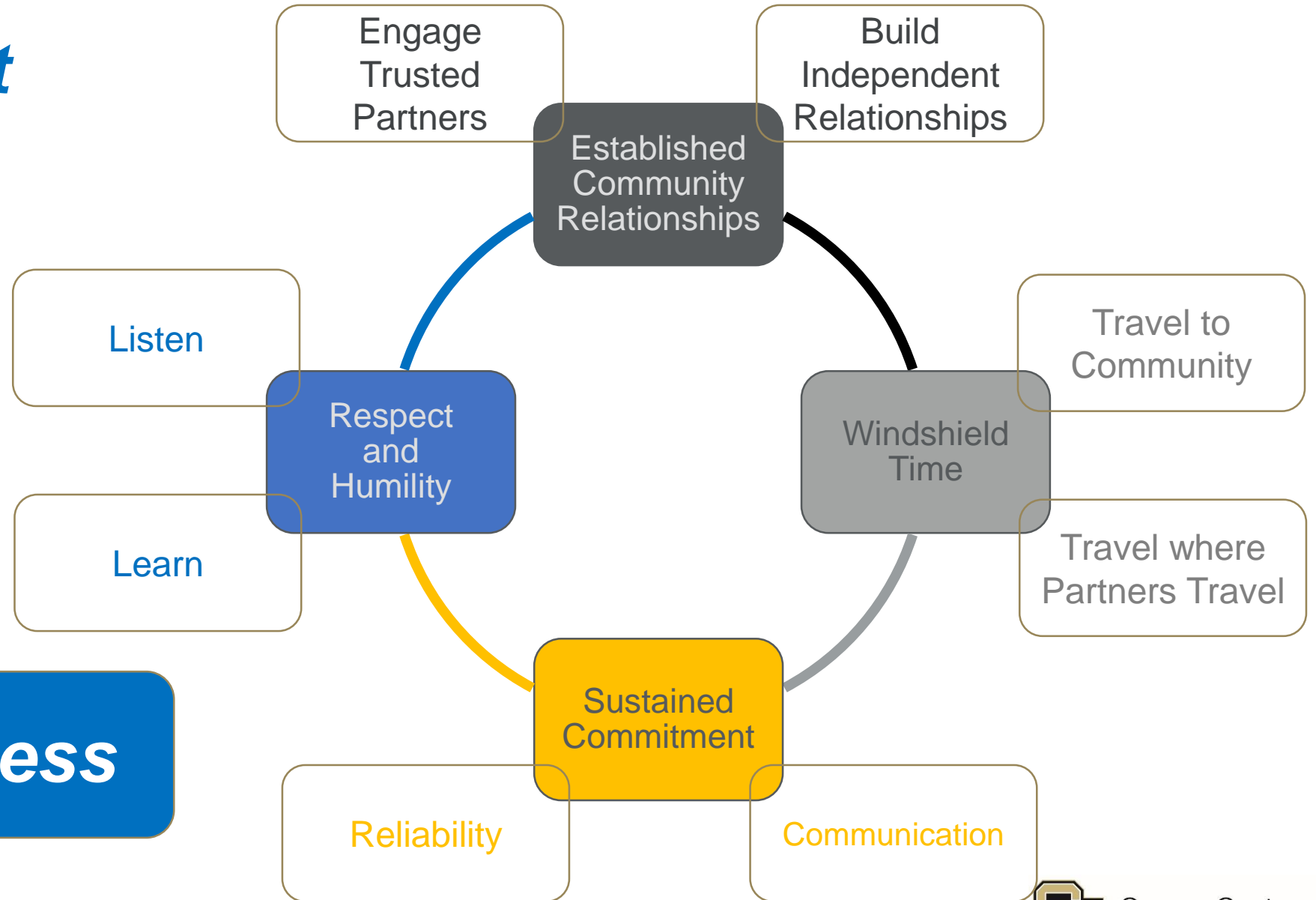


# Learning Objectives

- Discover the burden of and disparities in lung cancer in Kentucky
- Explore use of community-engaged research methods to improve cancer outcomes, reduce cancer disparities, and pursue equity in Kentucky



# The Colonel's **Not-So-Secret** Recipe for Community Engaged Research in Kentucky.



***trustworthiness***

# Summary and Conclusion

- Kentucky has suffered persistent socioeconomic hardship alongside its substantial lung cancer burden.
- Kentucky's sustained commitment to community-engaged research efforts created a unique opportunity for transformative change.
- Engaging with established partners, the *Kentucky LEADS Collaborative* developed, implemented, and evaluated a multilevel effort to reduce lung cancer in Kentucky.
- Community-engaged methods constituted the foundation and the load-bearing infrastructure for the *Collaborative* that has created the potential for

# Second Faculty Disclosure/Transparency

- I think Bourbon tastes terrible.
- I don't enjoy horse racing or horses.
- I have never smoked a single cigarette.
- I am slowly overcoming my dependence on Kentucky Basketball and allowing all of my emotions to be dictated by the outcome of the most recent game (or recruiting news if in the off-season), but until then...



C-A-T-S  
CATS  
CATS  
CATS



# The Kentucky LEADS Collaborative



Jamie L. Studts, PhD

Principal Investigator

Professor



School of Medicine

UNIVERSITY OF COLORADO  
ANSCHUTZ MEDICAL CAMPUS



University of Colorado  
Anschutz Medical Campus



Timothy Wm. Mullett, MD

Principal Investigator

Professor



Jennifer R. Knight, DrPH

Principal Investigator

Assistant Professor



Cancer Center  
NCI-DESIGNATED CANCER CENTER

# *Kentucky LEADS Collaborative*

## ■ *Component 1: Provider Education*

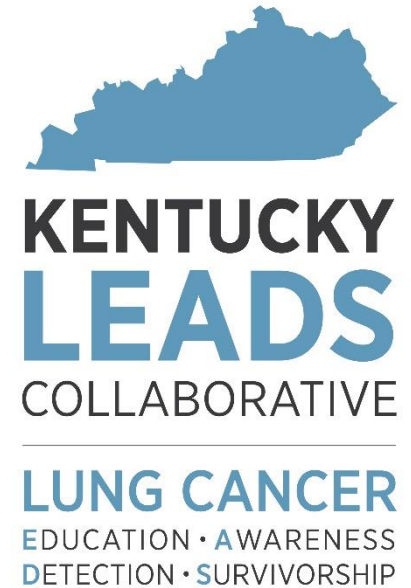
- Educate and train primary care clinicians in Kentucky regarding implementation of innovations in lung cancer prevention, control, and care.

## ■ *Component 2: Survivorship Care*

- Develop and evaluate a novel lung cancer survivorship care program for survivors and caregivers.

## ■ *Component 3: Prevention & Early Detection*

- Facilitate implementation of high quality lung cancer screening throughout Kentucky.



# *While individuals diagnosed with lung cancer in Kentucky face survivorship challenges, these are also opportunities.*

## Age-Adjusted Cancer Mortality Rates in Kentucky

Lung and Bronchus, 2015 - 2018

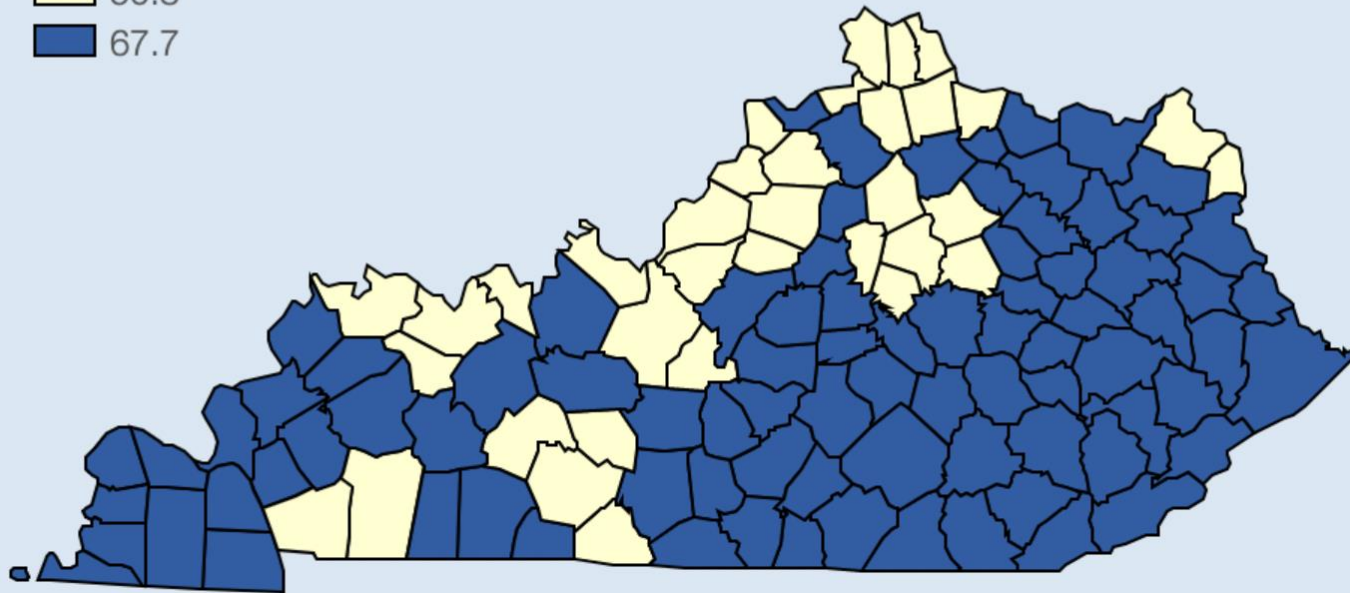
By Urban/Rural

Age-Adjusted to the 2000 U.S. Standard Million Population

Kentucky Rate: 58.2 / per 100,000

50.8

67.7



**Rural-Nonrural Inequity:**  
Significant differences in cancer incidence, mortality, and quality of life favor nonrural geographic areas and highlight the need for more focused attention on minorities.



**KENTUCKY  
LEADS**  
COLLABORATIVE



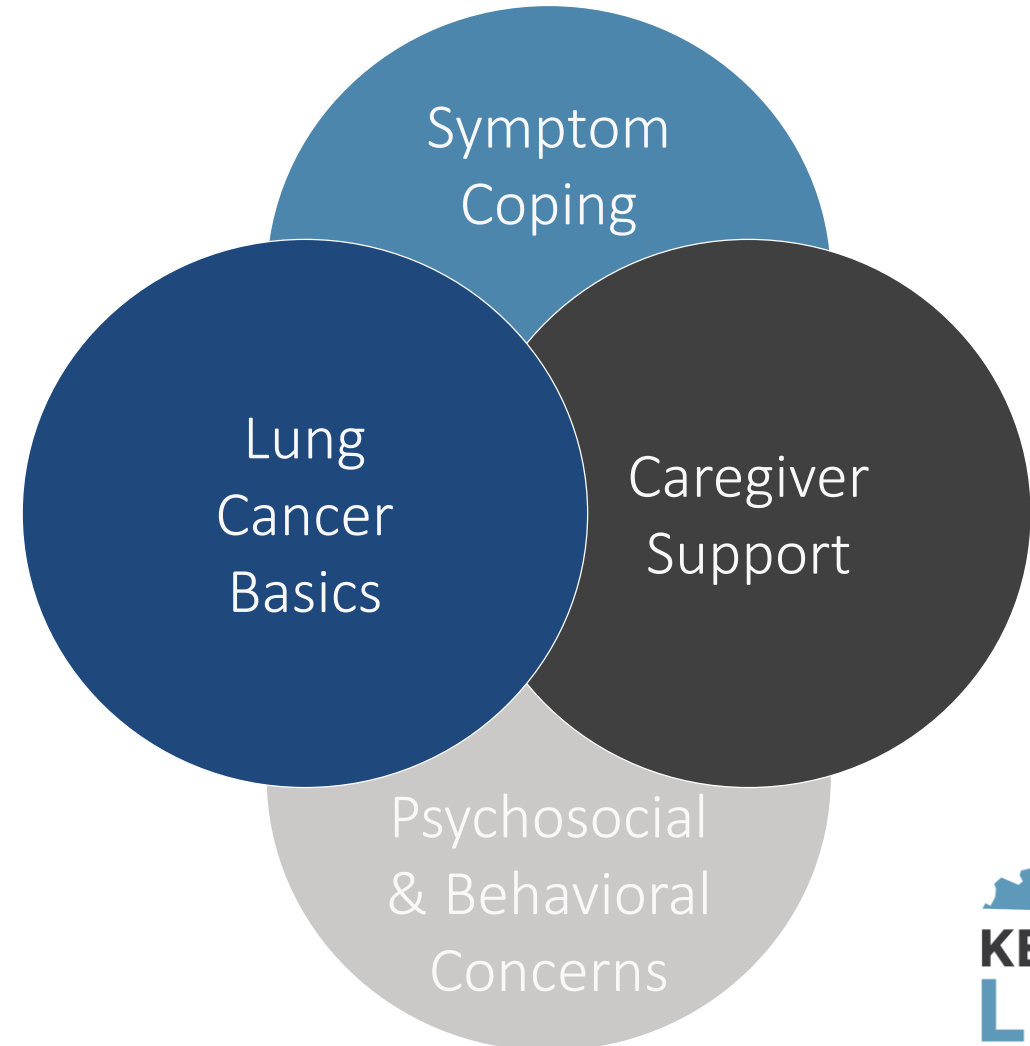
# ***Survivorship Care: Patient and Caregiver Intervention***

- **Precision Intervention:**

- Built and implemented a novel psychosocial survivorship care intervention for individuals diagnosed with lung cancer and their caregivers (10 sites, 300 participants)

- **Four Key Domains:**

- Lung Cancer Basics
- Symptom Coping
- Psychosocial & Behavioral Concerns
- Caregiver Support



# Lung Cancer Survivorship Randomized Controlled Trial

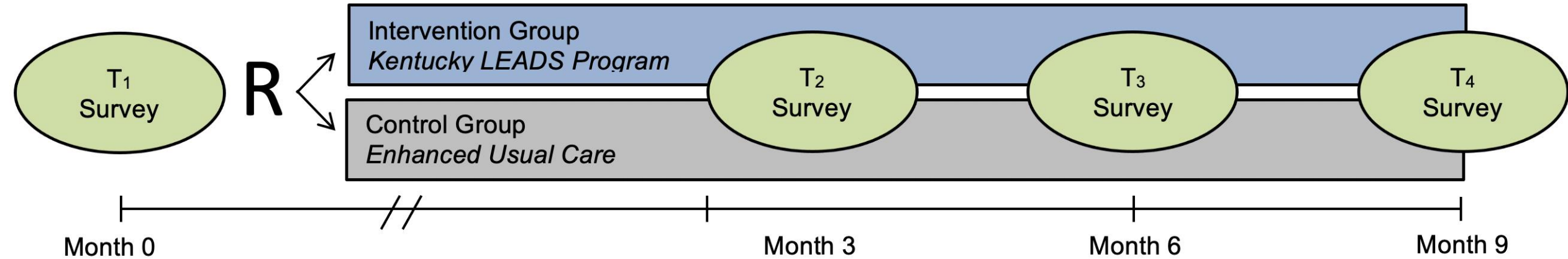
---

- Objective 1.** Test the *efficacy* of the Lung Cancer Survivorship Care Program to improve quality of life and other patient-reported outcomes (e.g., lung cancer treatment engagement, health behavior change)
- Objective 2.** Evaluate the impact of *caregivers as intervention partners* on lung cancer survivors' quality of life outcomes
- Objective 3.** Measure the *cost-effectiveness* of the intervention relative to enhanced usual care





# Lung Cancer Survivorship Randomized Controlled Trial



**Intervention Group.** Modular intervention – personalized, flexible, and collaborative sessions with a trained Survivorship Care Specialist

**Control Group.** Self-guided bibliotherapy – a more simplified, trimmed version of the intervention workbook



**KENTUCKY  
LEADS**  
COLLABORATIVE

**LUNG CANCER  
SURVIVORSHIP**



# Survivorship Care Team and Implementation Sites



Allyson Yates  
Project Manager



Courtney Blair  
Project Coordinator



McLouth  
Co-I



Arnold  
Co-I



Shelton  
Co-I



Andrykowski  
Co-I



Schapmire  
Co-I



Alvey  
Co-I



Rigney  
Co-I



Perrailon  
Co-I



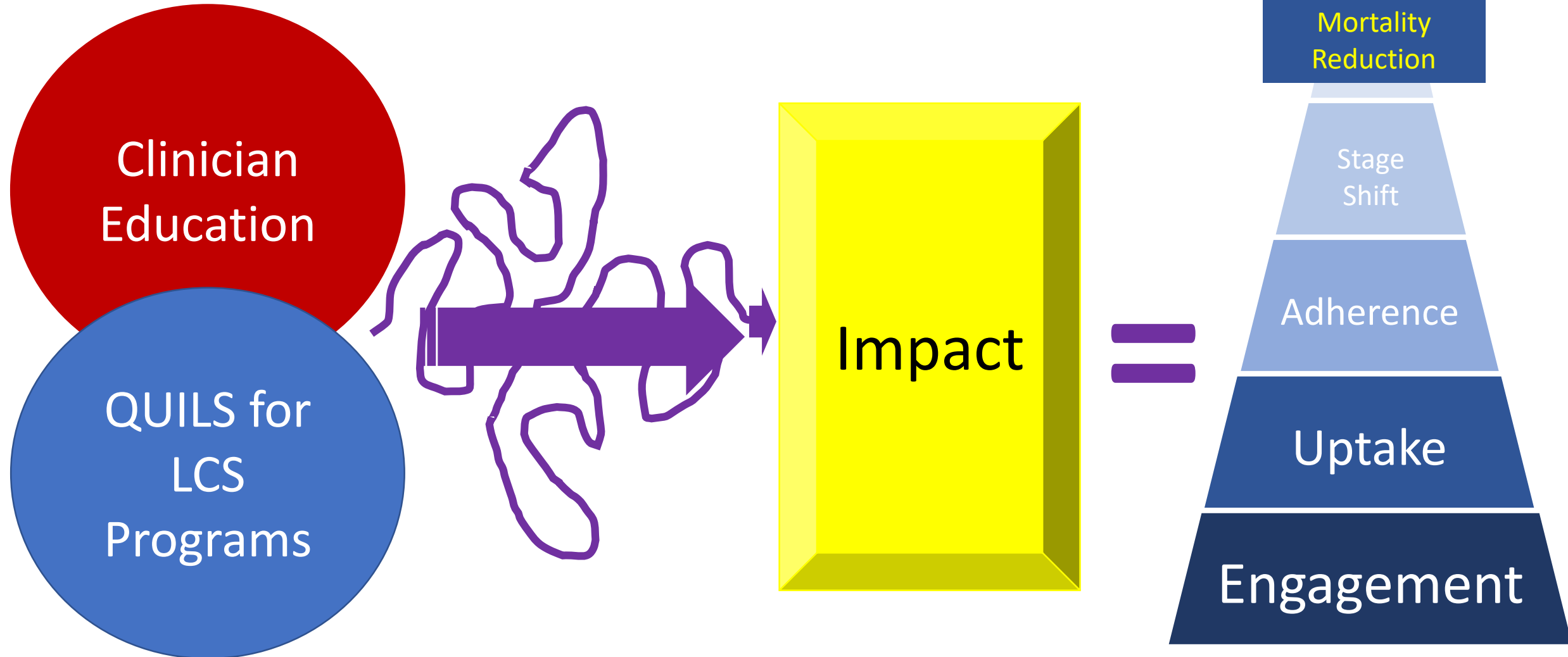
# Summary of QUILS Index Scoring Across Sites

Consistently High	
Eligibility	Screening Eligibility Policy
Eligibility	Screening Frequency & Duration Policy
Radiology	LDCT Performance
Radiology	Lung Nodule Identification
Radiology	Structured Results Reporting
Radiology	Lung Nodule Management Algorithm
Patient	Engagement and Retention Methods
Community	Provider Outreach

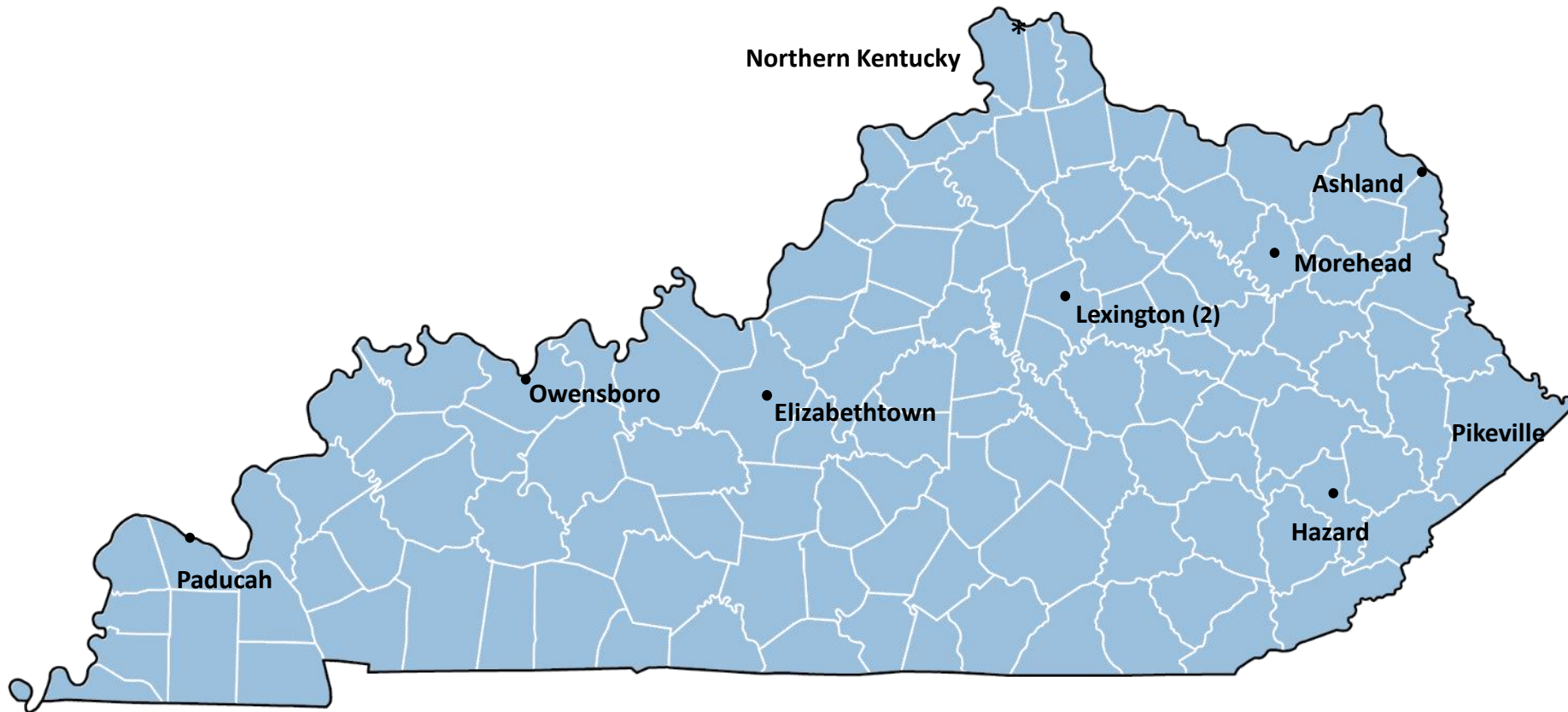
Consistently Low	
Prevention	Tobacco Treatment Interventions
Prevention	Tobacco Treatment Targets
Prevention	Second-Hand Smoke Prevention/Education
Prevention	Radon Prevention Education

Inconsistent	
Team	Interdisciplinary Clinical Team
Team	Team Review of Radiology Results
Patient	Shared Decision Making
Community	Responsible Marketing and Outreach

# Kentucky LEADS Collaborative – Impact



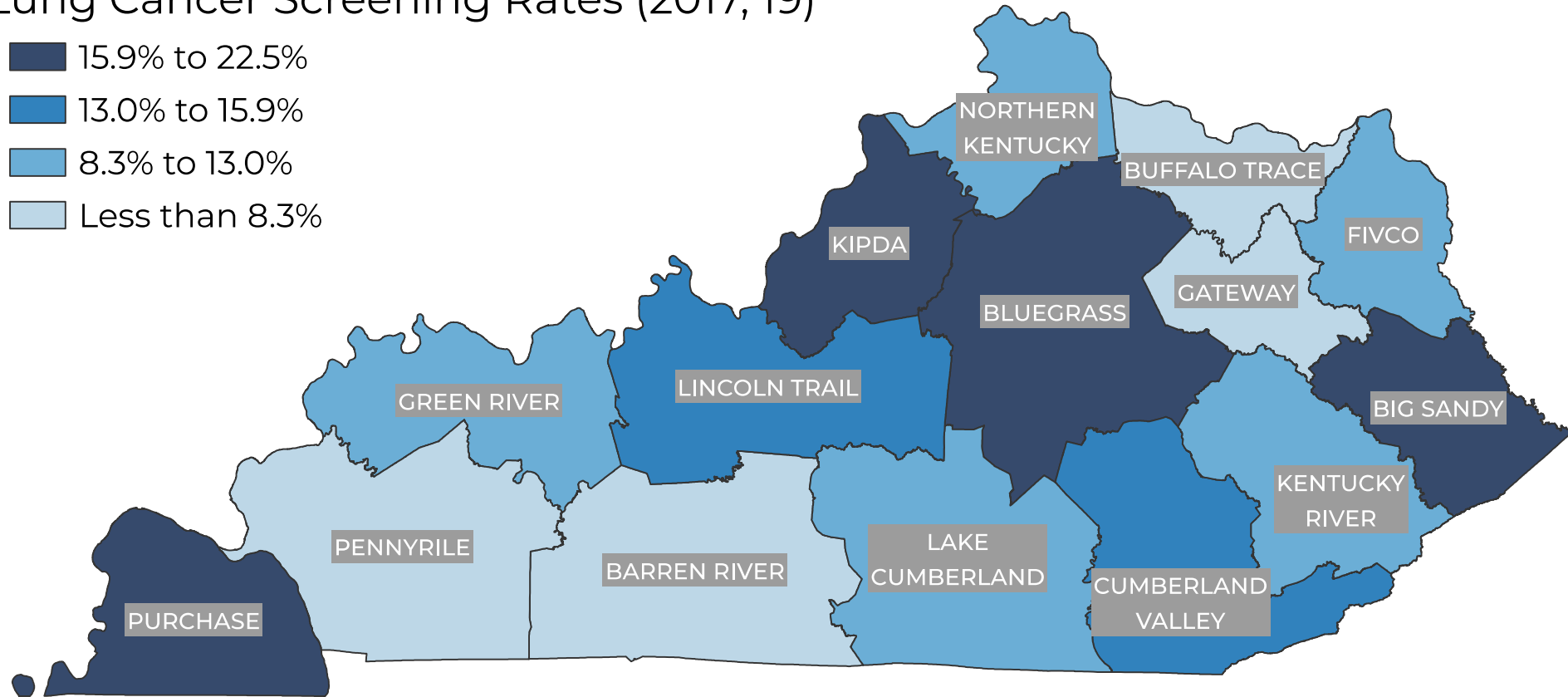
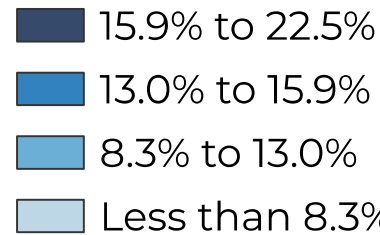
*The Kentucky LEADS Collaborative efforts in lung cancer screening have embraced equity considerations since its initiation in 2014.*



Continued efforts to encourage and support targeted and tailored efforts to meet needs of communities experiencing intersectional challenges to considering and accessing lung cancer screening.

*Despite nation-leading rates of lung cancer screening uptake, there are areas of Kentucky that have not equally benefitted from lung cancer screening.*

Lung Cancer Screening Rates (2017, 19)





# ***If we want these improved outcomes for individuals who have been diagnosed cancer, we need....***



1) policy change to support appropriate access and fitting reimbursement models for service delivery and outcomes,



TRANSODISCIPLINARY

2) greater integration of transdisciplinary clinical teams that utilize bench players as well as our starters,



3) enhanced adaptation to contextual factors and application of precision approaches that utilize patient preferences, and



4) sustained commitment to improving broad outcomes of cancer care, including mortality, morbidity, quality of life, and well-being.