



Markey  
Cancer Center

# Addressing the Impact of Tobacco and Alcohol Use on Cancer-Related Health Outcomes: “A Cancer Center’s Perspective”

## B. Mark Evers, MD, FACS

# National Cancer Policy Forum

March 17, 2025



## Comprehensive Cancer Center

A Cancer Center Designated by the  
National Cancer Institute







# Agenda

- **Markey Cancer Center timeline, our catchment population and challenges**
- Strategies to address our KY lung cancer problem
  - Smoking cessation/tobacco treatment programs
  - Lung cancer screening
  - Education
  - Survivorship
  - Public policy
- Outcomes and changing a culture



# Markey Cancer Center (MCC): Our 50 Year History

1986 to 1990

1975

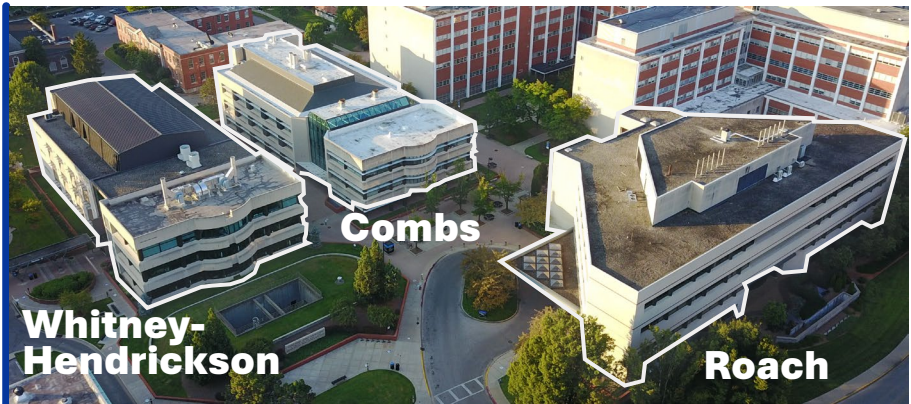
**McDowell  
Cancer  
Network**

Established

1983



**Markey**  
founding  
donation



Built

1990



**KCR**  
formed

2000



2009

**Evers**  
recruited

2013



2023



**Comprehensive**  
designation



**“Top 50” Cancer hospital  
2017–2025**

# Kentucky: Our Catchment Population

**4.5**

**Million people**

**120**

**Counties**

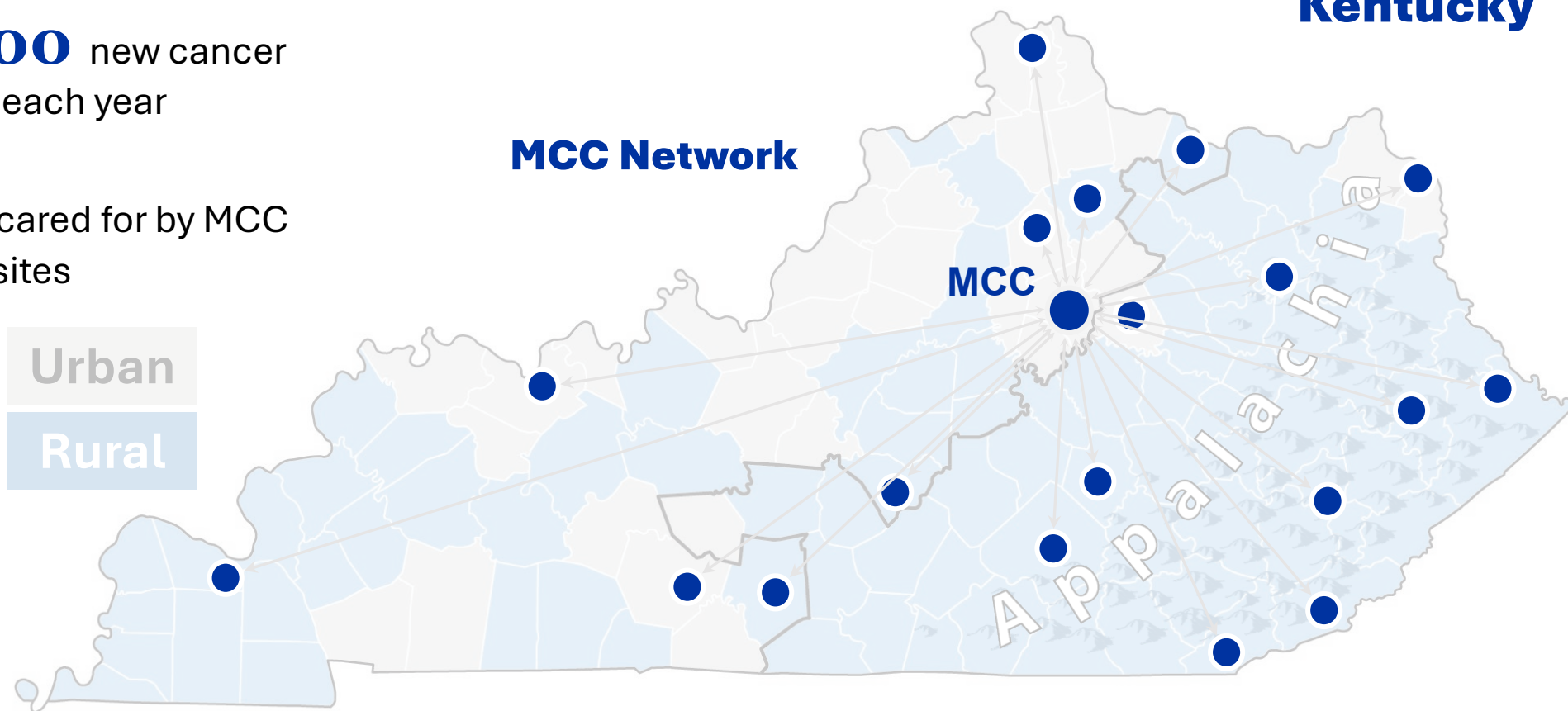
**38%**

**Rural**

**97%**

**of patients are from  
Kentucky**

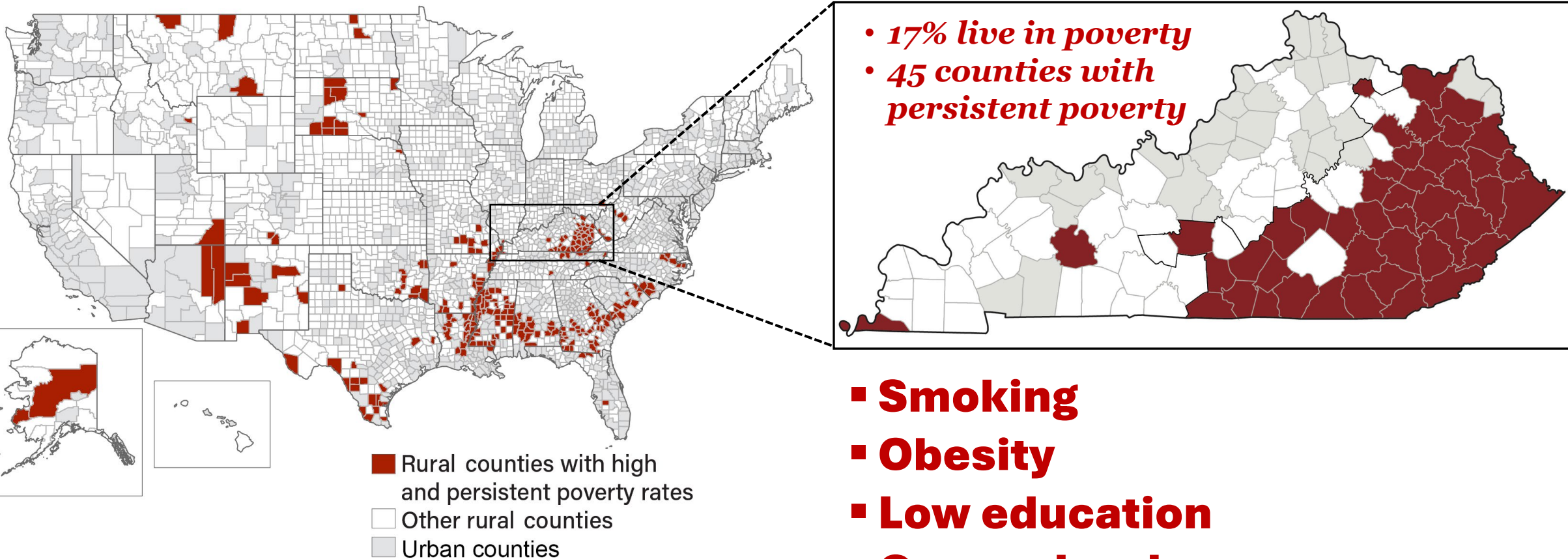
- **~29,000** new cancer cases in KY each year
- **~38%** cared for by MCC or network sites



Unique network of **20** independently operated community hospitals

# Kentucky Challenges

## Persistent Poverty



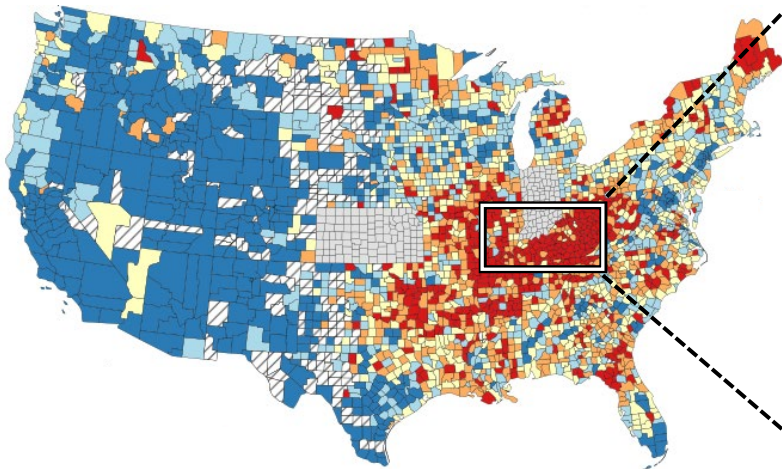
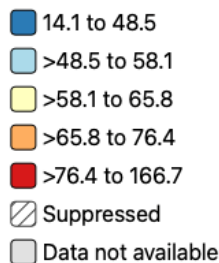
- **Smoking**
- **Obesity**
- **Low education**
- **Cancer burden**



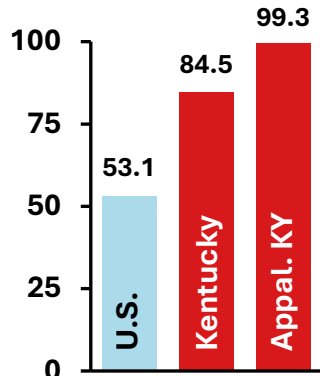
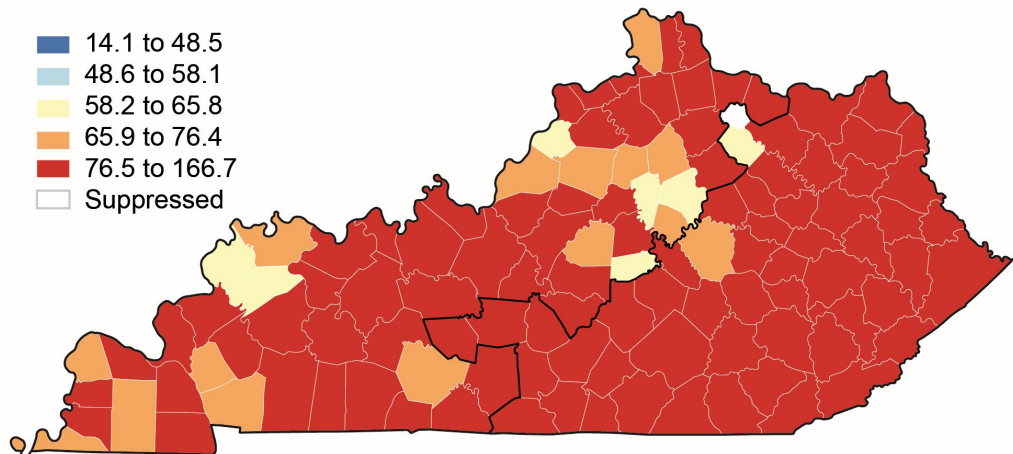
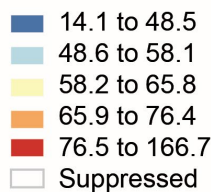
# Lung Cancer Burden

## Lung Cancer Incidence

Rate per 100,000  
2017-2021

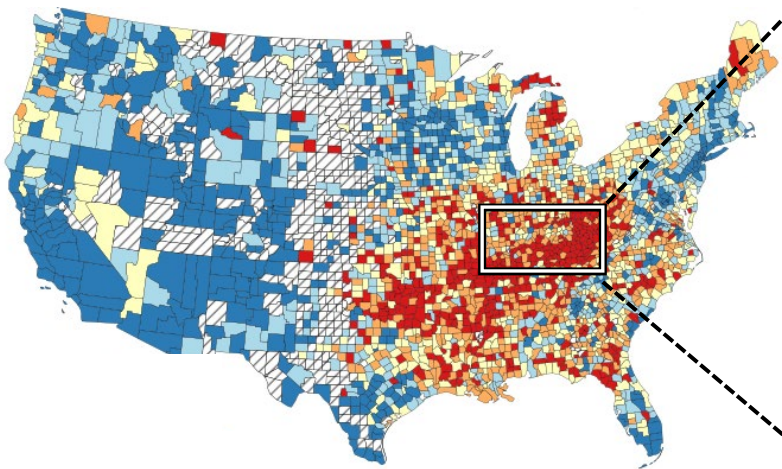
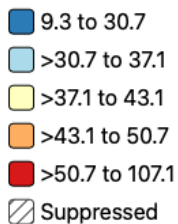


## Lung Cancer Incidence

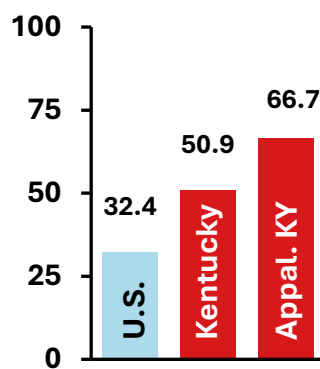
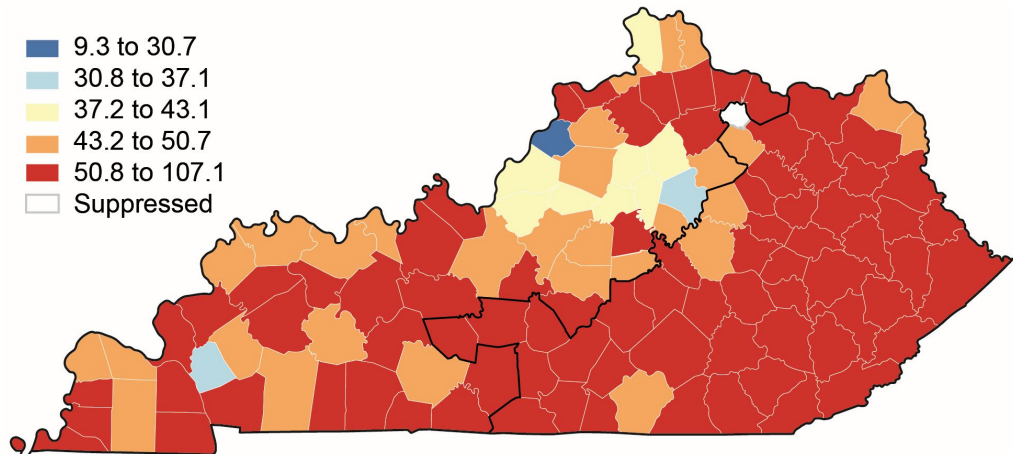
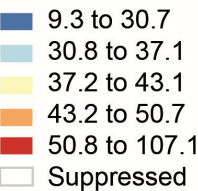


## Lung Cancer Mortality

Rate per 100,000  
2018-2022



## Lung Cancer Mortality



Source: NIH NCI State Cancer Profiles, 2017/18-2021/22 data; KY Cancer Registry

**“What are YOU doing  
about YOUR Kentucky  
lung cancer problem?”**

*—Linda Weiss, PhD, Director of  
Cancer Centers (2010)*





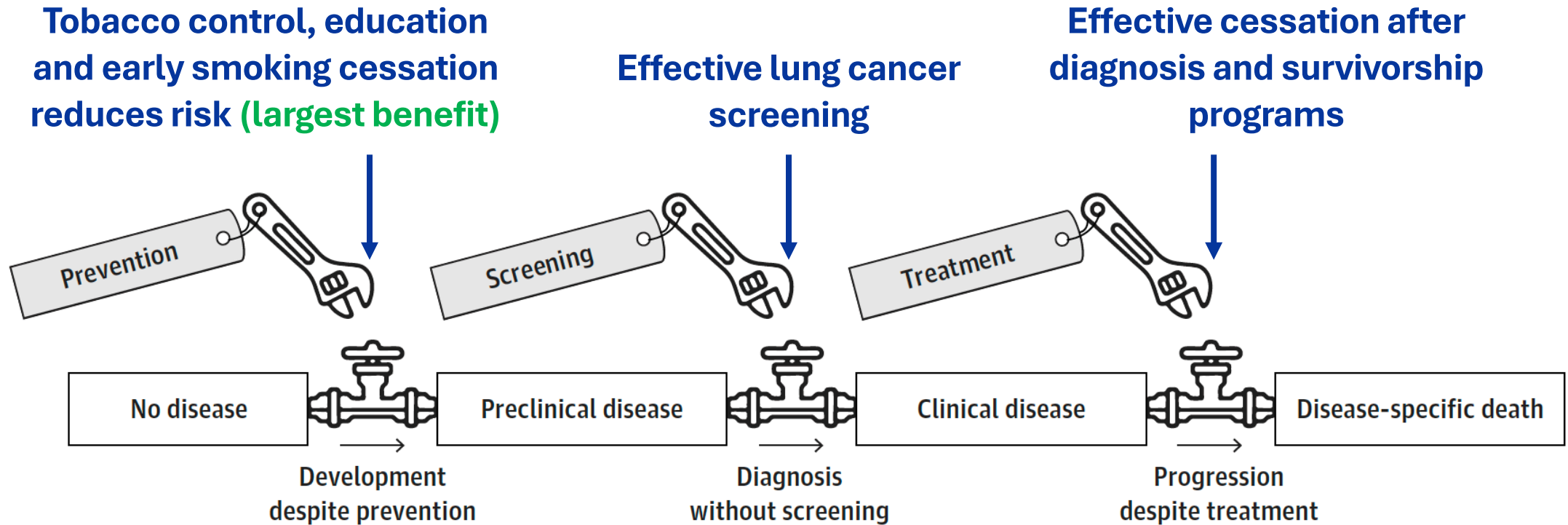
An aerial photograph of a city, likely Louisville, Kentucky, showing various buildings, streets, and green spaces. The entire image is overlaid with a semi-transparent blue filter. The text is placed over this background.

# Agenda

- Markey Cancer Center timeline, our catchment population and challenges
- **Strategies to address our KY lung cancer problem**
  - **Smoking cessation/tobacco treatment programs**
  - **Lung cancer screening**
  - **Education**
  - **Survivorship**
  - **Public policy**
- Outcomes and changing a culture



# Smoking Must be Addressed with All Steps of the Lung Cancer Continuum



**Smoking cessation may be the EASIEST, CHEAPEST, and LOWEST TOXICITY approach to significantly improve patient outcomes**

# Markey CARES Tobacco Treatment Program



**BURRIS**



**VALENTINO**



Cancer patients who report current tobacco use and accept an offer of cessation assistance



Bi-directional data exchange

**Markey Tobacco Treatment Specialists (TTS)**

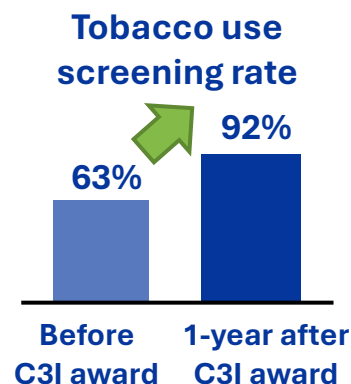
Free “in house” tobacco treatment from Psych-Oncology

## Outcomes:

**20+**

Oncology and supportive care providers trained as Tobacco Treatment Specialists (TTS)

Markey spearheaded the UK HealthCare system-wide adoption of an e-referral to the state quitline



Markey CARES screening program is now implemented at Lexington Clinic

JCO® Oncology Practice

Nicotine & Tobacco Research

Journal of Health Psychology



# Leading the Nation in Tobacco Treatment Delivery



**BURRIS**

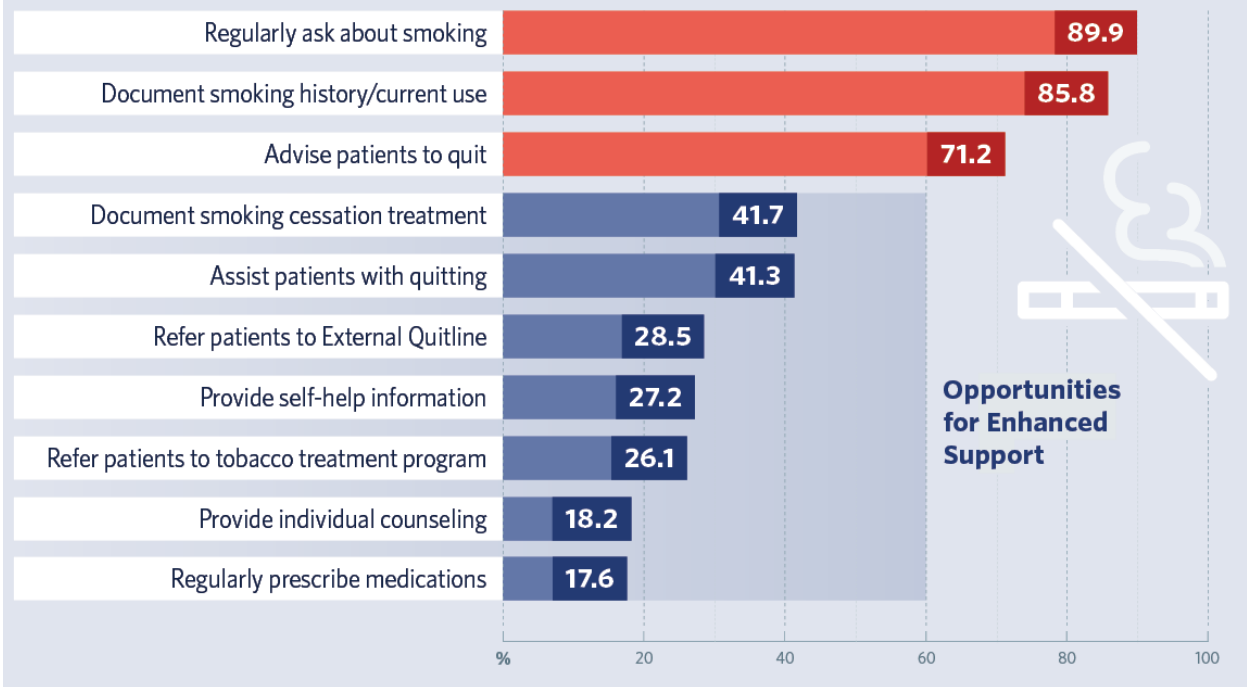


**MULLETT**



**WARREN**

## Just ASK Quality Improvement Project Baseline Survey Results

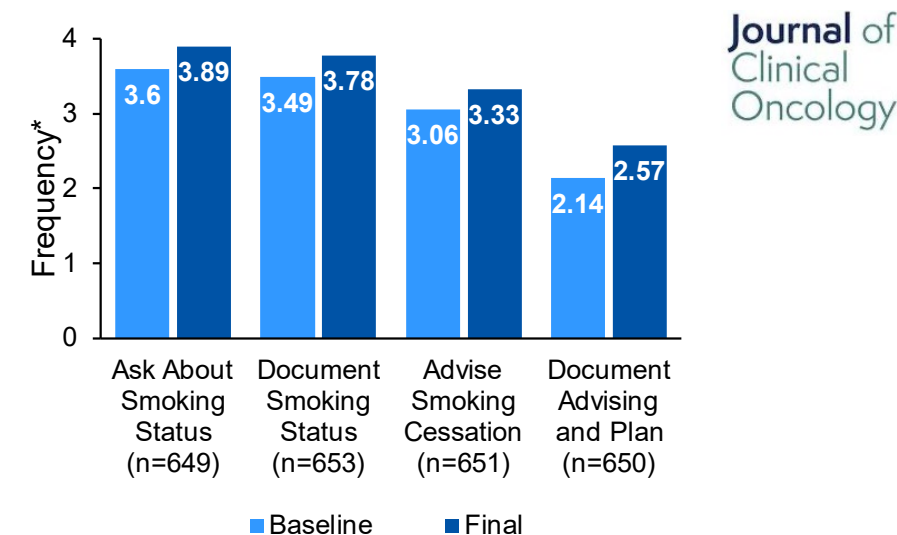


American College of Surgeons

Original Reports | Health Services and Outcomes

## Longitudinal Results From the Nationwide Just ASK Initiative to Promote Routine Smoking Assessment in American College of Surgeons–Accredited Cancer Programs

Jessica L. Burris, PhD<sup>1</sup>; Jamie S. Ostroff, PhD<sup>2</sup>; Eileen M. Reilly, MSW<sup>3</sup>; Graham W. Warren, MD, PhD<sup>4</sup>; Rachel C. Shelton, ScD, MPH<sup>5</sup>; and Timothy W. Mullett, MD<sup>6</sup>; on behalf of the Just ASK Quality Improvement Task Force



\*Where 0=never or rarely and 4=almost always



AMERICAN COLLEGE OF SURGEONS

## Impact

- This large quality improvement project demonstrates the feasibility of implementing smoking assessment as standard cancer care, doing so in a diverse sample of  $\approx 750$  accredited cancer programs nationwide ( $\sim 650,000$  cancer patients)

# Kentucky LEADS Collaborative



MULLETT



KNIGHT



**KENTUCKY  
LEADS**  
COLLABORATIVE™

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



**Provider  
Education**




**LuCa**  
NATIONAL TRAINING NETWORK

**Outcome → 2,877**  
Health care  
professionals trained

**Survivorship  
Care**




  
**NATIONAL  
CANCER  
INSTITUTE**

**Precision  
Lung Cancer  
Survivorship**

**Prevention and  
Early Detection**



  
**QUILS™**  
Quality Implementation  
of Lung Cancer Screening

**Kentucky Health  
Collaborative**

**Kentucky Lung  
Cancer Screening  
Program**



# Building on KY LEADS Research Foundation



## MAJOR GRANT SUBMITTED

We have submitted a 4-year, \$6.5 million proposal to enhance effectiveness and quality of lung cancer screening in these states.

- This grant will focus on:
- Provider engagement
  - Projected 12 sites for supported lung cancer screening programs
  - Lung Cancer Screening Quality Implementation and Feedback
  - Web-based training and statewide virtual learning collaboratives
  - Enhanced advocacy for effective policy change

## SELECTION

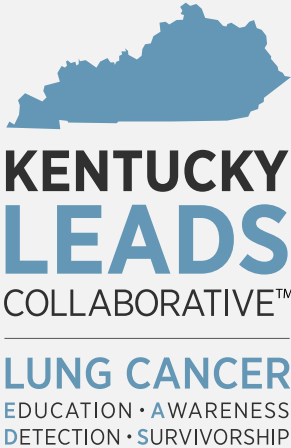
Mississippi and Nevada were selected as leading candidates for expansion

## ASSESSMENTS

The QUILS™ leadership team assessed several states based on lung cancer burden, existing collaborations, current state of lung cancer screening and opportunities to address disparities.

## PLANNING GRANT

Bristol Myers Squibb Planning Grant to explore potential to expand LEADS experience to other states.

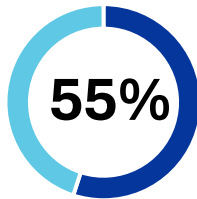


# Survivorship for Patients with Advanced Stage Lung Cancer



**MCLOUTH**

**Survival has improved; unmet care needs persist**



Unmet supportive care needs related to psychological well-being, physical and daily living

**JCO® Oncology Practice**  
An American Society of Clinical Oncology Journal



**“Hope”-based interventions as a promising approach to support mental health and quality of life during treatment**

**HEALTH PSYCHOLOGY**



**“Pathways,” A Hope-Based Intervention for Patients with Advanced Stage Lung Cancer**



Theory-based psychological intervention embedded in cancer care, designed with patient and provider input

**Definitive Efficacy Trial:**

1. Efficacy – depression symptoms (primary), quality of life, positive affect
2. Mechanisms
3. Intervention completion and benefit ( $\geq 65$  yrs vs.  $<65$ ; rural vs. urban; male vs. female)



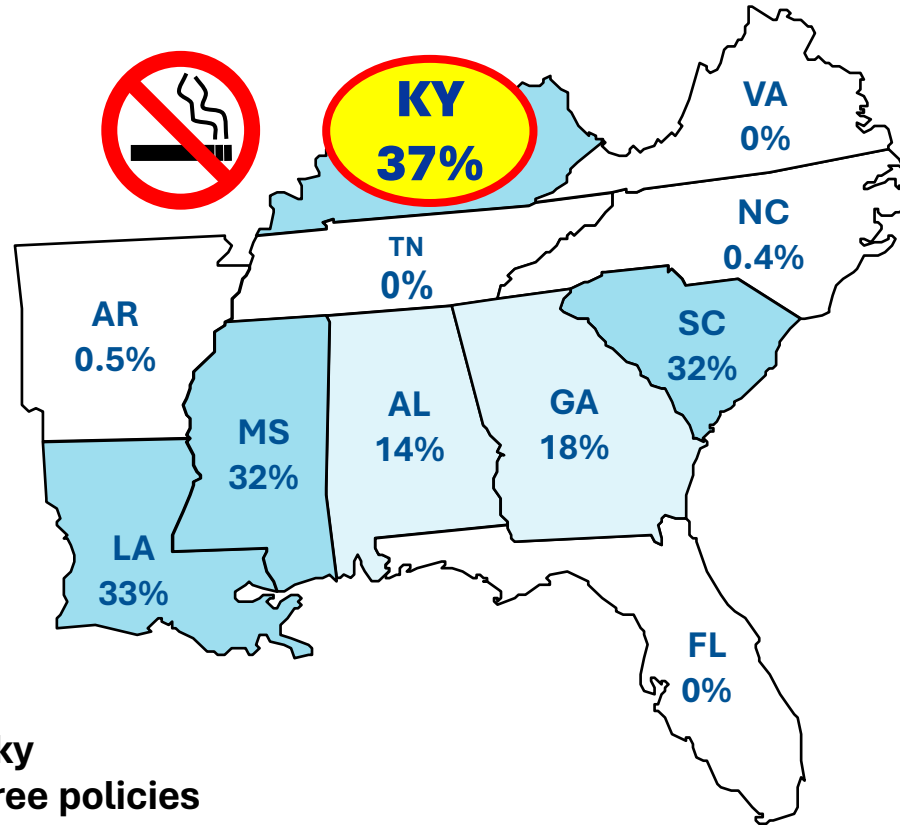
**2025 Citation Award**



# Smoke-Free Policy Research: Kentucky 2025



Ellen Hahn, PhD, RN, FAAN  
Professor Emerita



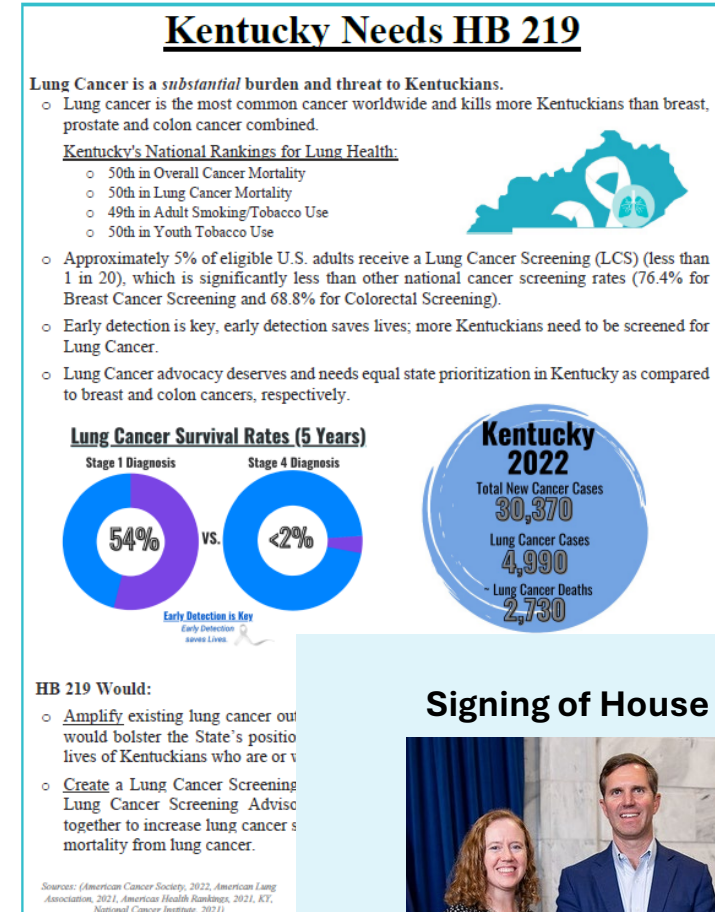
- **The Problem:** In 2003, 0% of Kentucky population was covered by smoke-free policies
- **The Plan:** Through support from Markey Cancer Center, a Robert Wood Johnson grant and NIH funding, Kentucky Center for Smoke-Free Policy was established at UK by Dr. Ellen Hahn
- **The Result:** **37%** of the Kentucky population is currently covered by local non-hospitality workplace, restaurant, and bar smoke-free ordinances (highest of all southern states)



Culture change from “tobacco economy” to smoke-free policy

# Kentucky State Lung Cancer Screening Initiative

- 2022 Legislative Session: HB 219
  - Sponsor drafted bill after LC Network discussions
  - Created Lung Cancer Screening Program and Advisory Committee
  - Provides oversight and funding
- Unanimously passed State House and Senate
- Kentucky LEADS influenced focus on evidence-based quality metrics



## Signing of House Bill 219



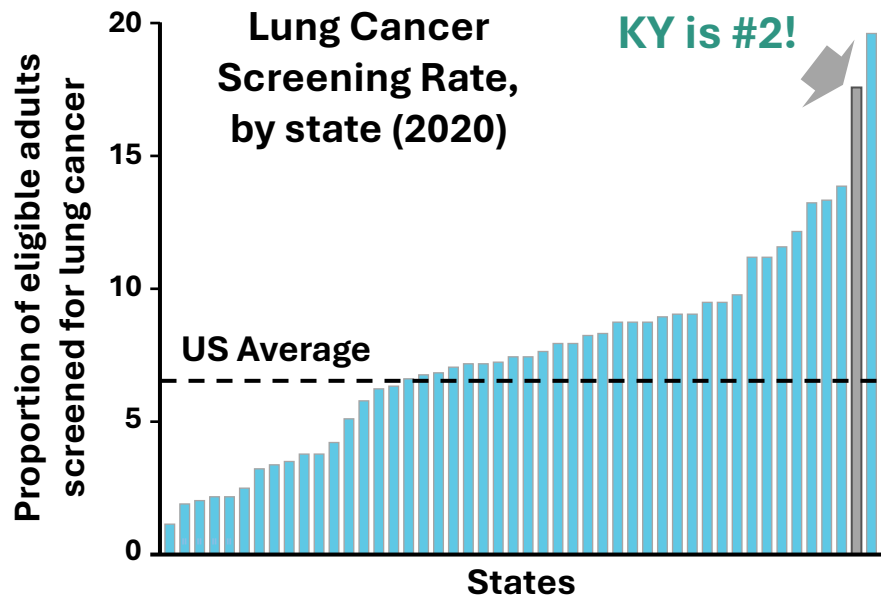
Dr. Pamela Hull  
Kentucky Governor Andy Beshear  
Dr. B. Mark Evers



# Agenda

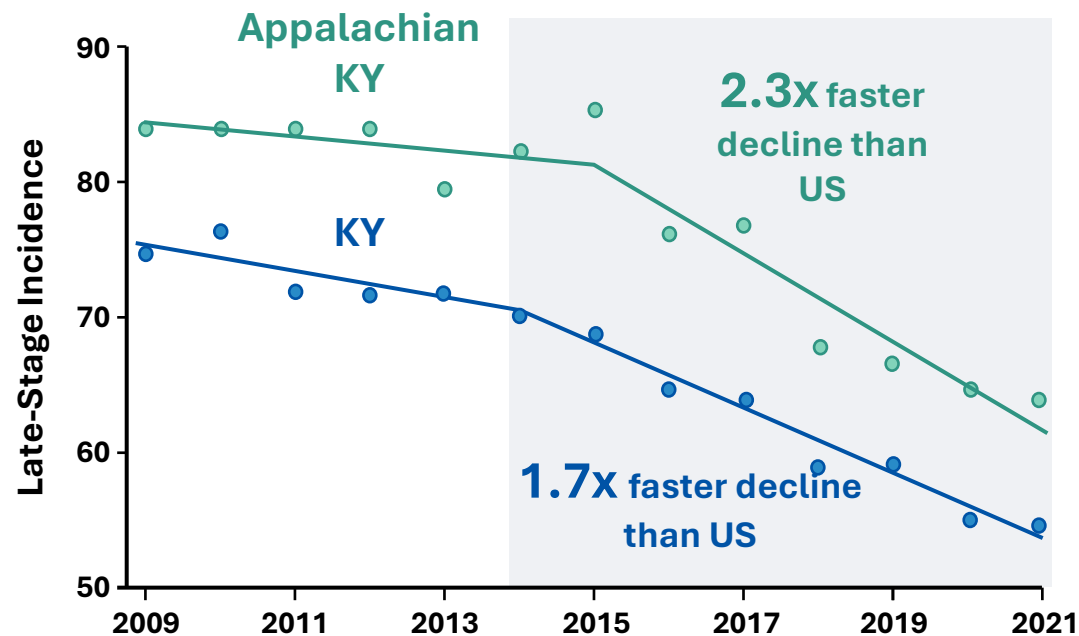
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# Impacting Late-Stage Lung Cancer Diagnoses in Kentucky



“Kentucky, which has supported screening implementation efforts, is unique as its screening rates are over twice the national average and four times that of other high lung cancer burden states, like West Virginia and Arkansas.”

—ASCO post, 2021

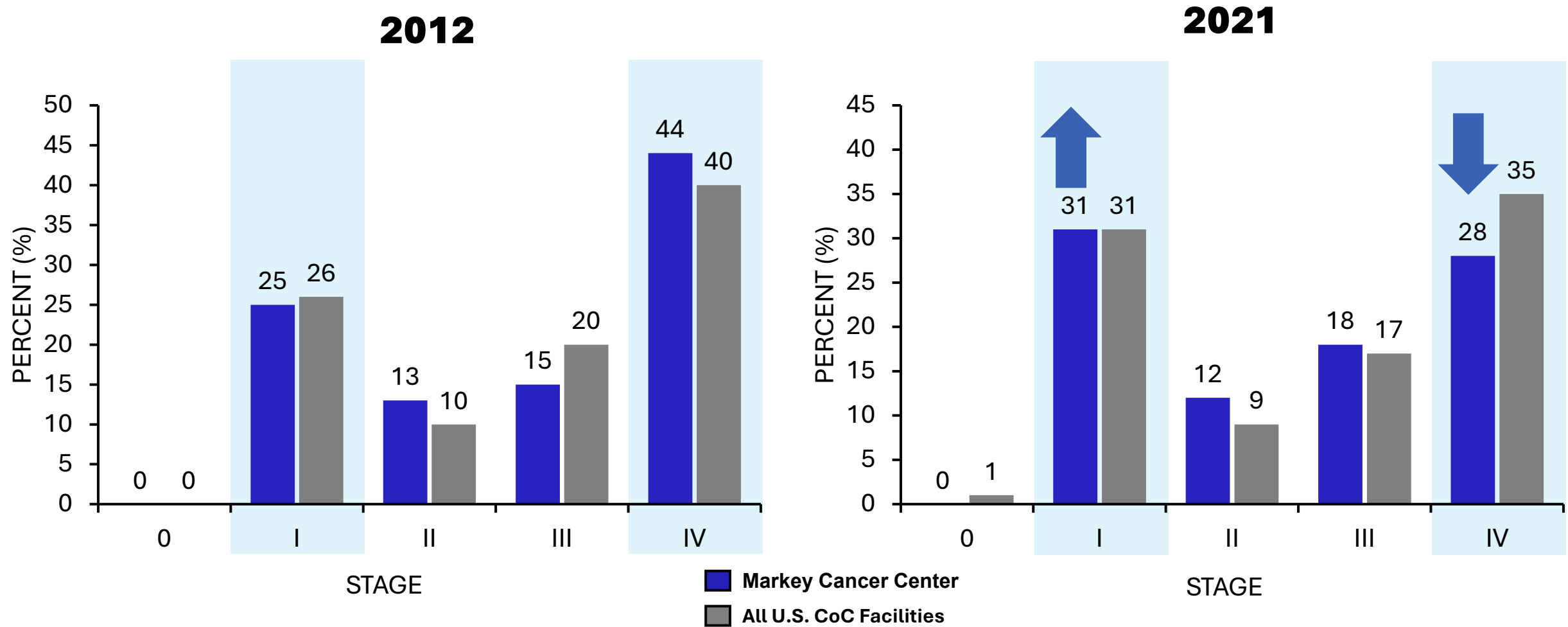


## Impact

- Lung cancers identified at earlier stages with notable progress in KY and Appalachian KY



# Lung Cancer Stage Shift – Cases Diagnosed and Treated at Markey Cancer Center vs U.S., 2012 and 2021

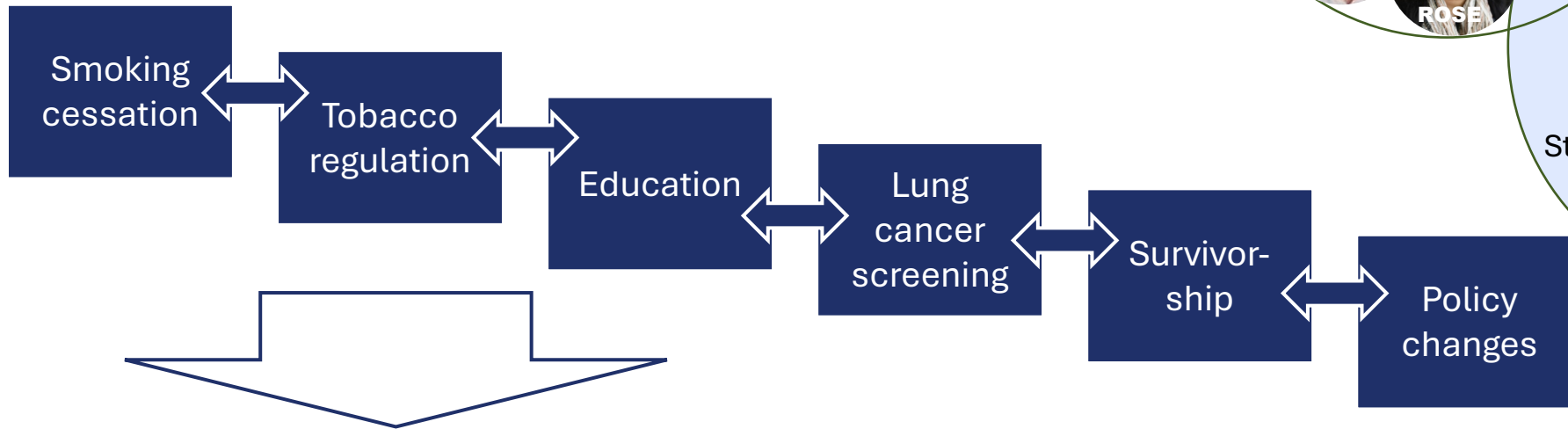


Stage of Lung, Bronchus - Non-Small Cell Carcinoma Cancer Diagnosed; UK Hospital vs. All U.S. Commission on Cancer (CoC) facilities; \*2012 includes data from 1,216 CoC Accredited facilities; 2021 includes data from 1,287 CoC Accredited facilities

# Summary

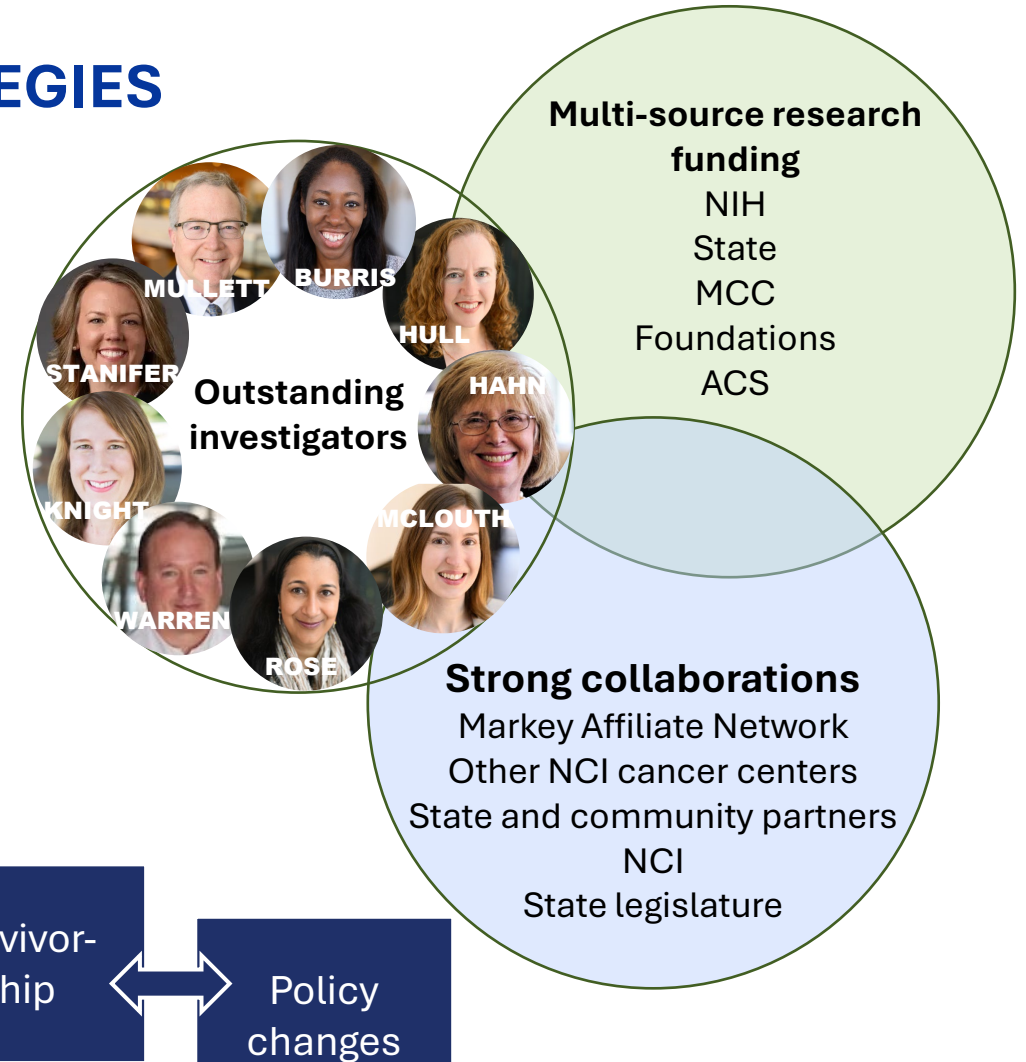
- Goal (2010): To reduce KY smoking rates and decrease lung cancer incidence and mortality

## PROGRAMS



- Shift in late- to early-stage lung cancer diagnoses
- Changing a culture in Kentucky

## STRATEGIES







**Thank you!**