

A Cancer Center Designated by the
National Cancer Institute

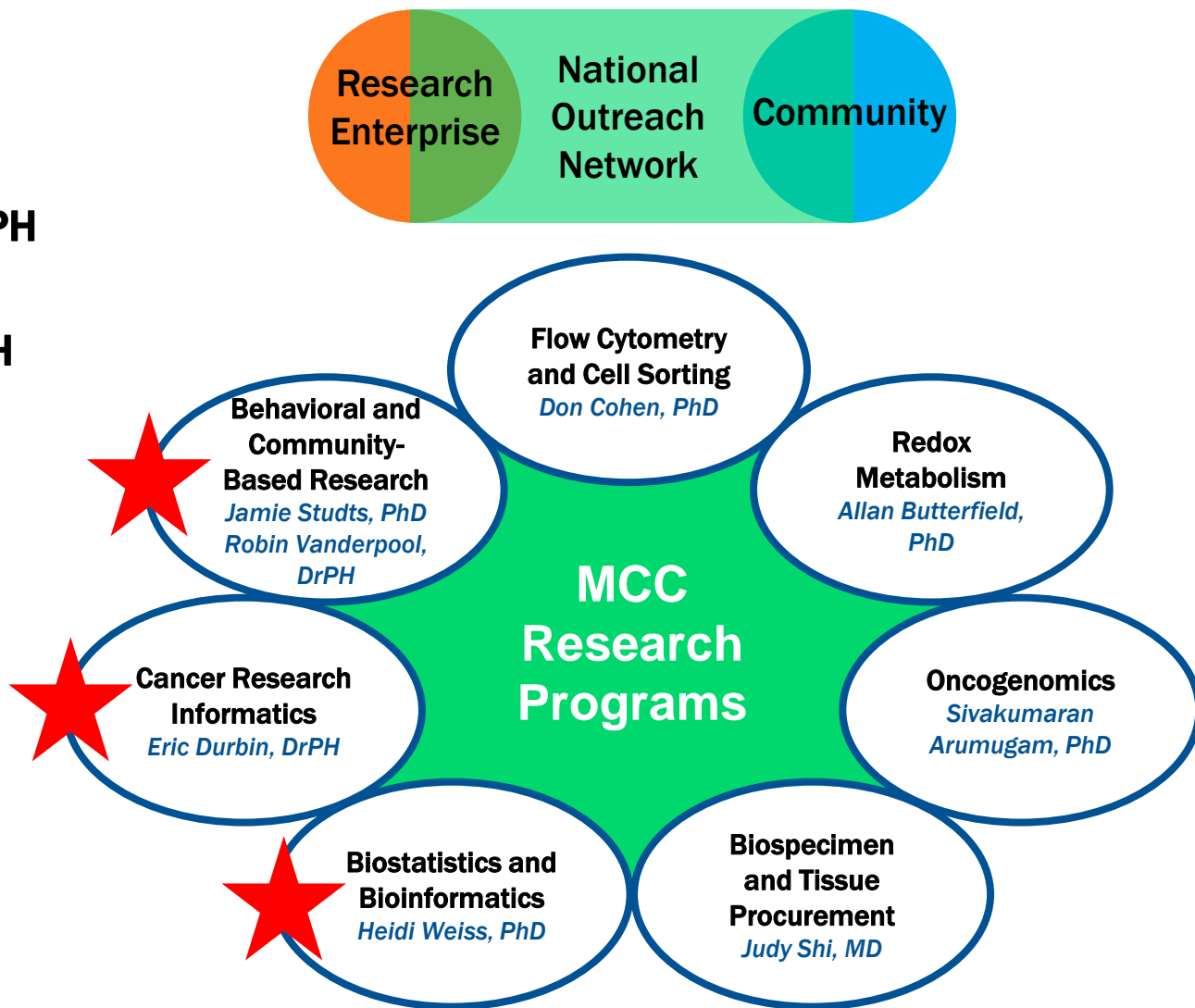
Population Health Assessment for Markey's Catchment Area

Robin C. Vanderpool, DrPH
Bin Huang, DrPH

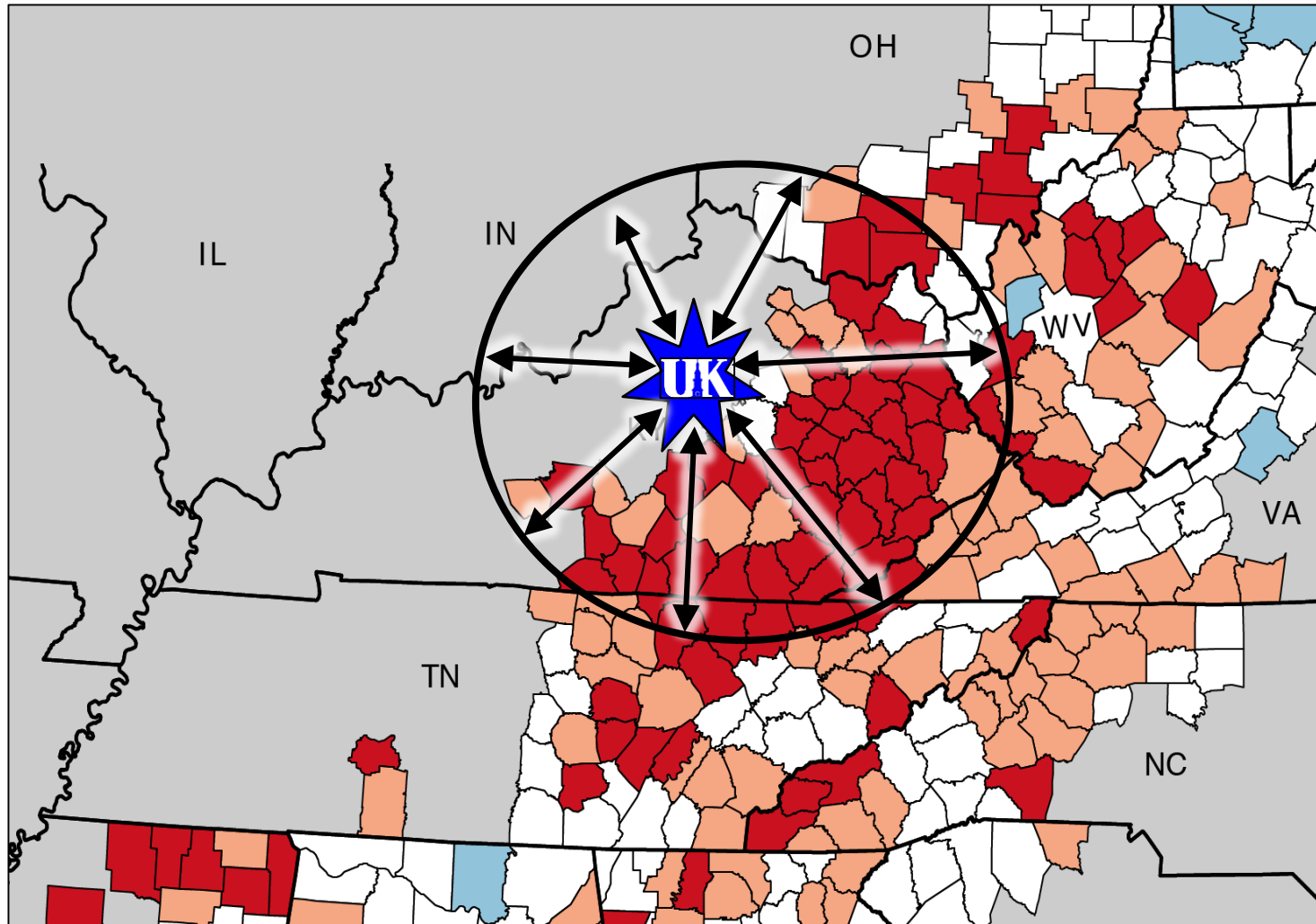
Admin Suppl Grantee Meeting
February 24, 2017

Markey Cancer Center Pop Health Team

- **B. Mark Evers, MD**
 - Cancer Center Director
- **Robin Vanderpool, DrPH**
 - Co-lead
- **Meghan Johnson, MPH**
 - Project Coordinator
- **Mindy Rogers, BA**
 - NON Community Health Educator
- **Justin Levens, BA**
 - REDCap Programmer
- **Bin Huang, DrPH**
 - Co-lead
- **Quan Chen, DrPH**
 - Biostatistician



- Nationally, Kentucky ranks **#1** in cancer incidence and mortality
 - Rates are highest in the **54-county region** of Appalachian KY
 - **73%** of the UK Markey Cancer Center catchment area is **rural**



Sample Sizes by Method and Strata

Method/Strata	# of Respondents	Response Rate	# of Households Selected
Probabilistic Sample	800	25%	3,200
Strata 1 (Codes 1-3, Metro)	160	30%	530
Strata 2 (Codes 4-5, Slightly Rural)	160	25%	640
Strata 3 (Codes 6-7, Rural)	280	25%	1,120
Strata 4 (Codes 8-9, Completely Rural)	200	22%	910
Convenience Sample	200	100%	200

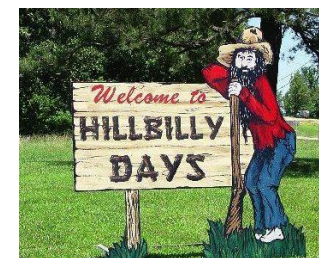
N = 1,000



- 800 mailed surveys (address-based sampling)
- 200 in-person surveys (community-based)
- *Potential to add an internet-based panel*
- English-speaking adults age 18+
- REDCap data entry



Eastern KY Walmart Stores



Hillbilly Days, Pikeville KY

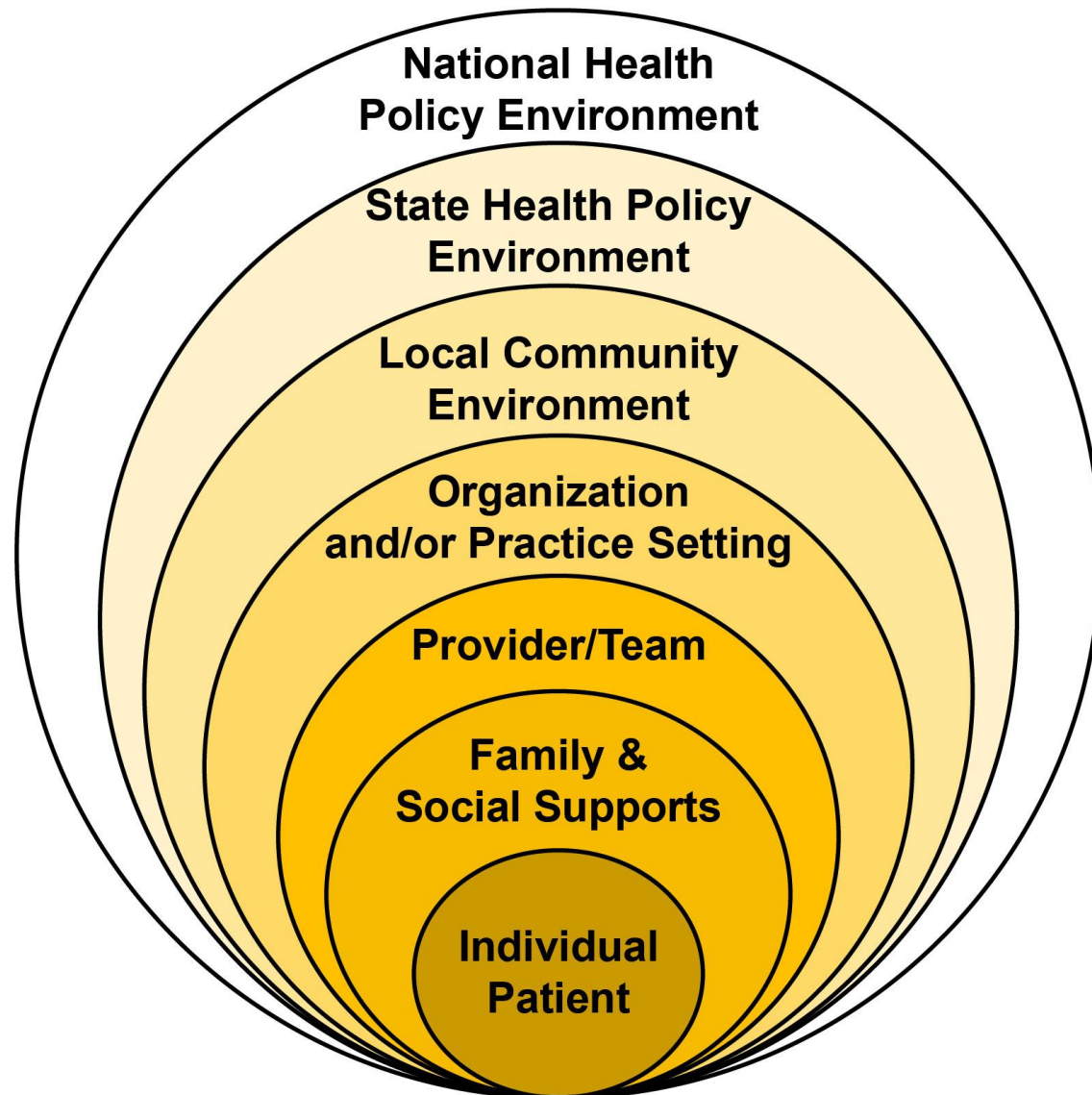


Poke Sallet Festival, Harlan KY



Mountain Laurel Festival, London KY

Socio-ecological Framework (Taplin et al. 2012)



Planned Survey Items/Constructs and Sources

■ Core Measures Workgroup

- Common sociodemographic questions
- Questions from each of the constructs common across 80% of the 15 projects

■ Rural Workgroup

- Rural identity
- Geospatial analysis

Constructs	Available Survey Items/Data Linkage Sources
Tobacco use (including e-cigarettes) and cessation <ul style="list-style-type: none"> - Smoking/tobacco use status - Cessation attempts and strategies - Perceptions of smoking 	HINTS 1 and 2; HINTS 4, Cycles 3 and 4 2015 NHIS Cancer Control Supplement 2014 CDC BRFSS
Lung cancer screening <ul style="list-style-type: none"> - Chest x-ray, low-dose CT scan and frequency - Provider recommendation - Lung cancer knowledge and beliefs 	HINTS 1 and 2; HINTS 4, Cycles 2 and 4 2015 NHIS Cancer Control Supplement 2014 CDC BRFSS
Colorectal cancer screening <ul style="list-style-type: none"> - Blood stool test, endoscopy frequency - Provider recommendation - Colorectal cancer knowledge and beliefs 	HINTS 1 - 3; HINTS 4, Cycle 1 2015 NHIS Cancer Control Supplement 2014 CDC BRFSS
Cervical cancer screening <ul style="list-style-type: none"> - Pap test frequency - Provider recommendation - HPV and HPV vaccination knowledge and beliefs 	HINTS 4; Cycle 4 2015 NHIS Cancer Control Supplement 2014 CDC BRFSS
Breast cancer screening <ul style="list-style-type: none"> - Mammography frequency - Provider recommendation 	HINTS 4; Cycle 4 2015 NHIS Cancer Control Supplement 2014 CDC BRFSS
Cancer information-seeking, internet use <ul style="list-style-type: none"> - Effort, confidence, trust, quality - Access, use of technology 	HINTS 4; Cycle 4
Individual-level data: <ul style="list-style-type: none"> - Sociodemographics, BMI, social networks and cancer history 	HINTS 2 and 4; Cycle 4 2014 CDC BRFSS
County-level data: <ul style="list-style-type: none"> - Census, population data and environment; hospitals and healthcare facilities; healthcare professions 	HRSA AHRF and ACS
Community policies supportive of cancer control	KY Cabinet for Health and Family Services, KY Center for Smoke-Free Policy

Proposed Analysis Plan

- Compare measures between our Appalachian KY population (probabilistic sample) and the U.S. population from national/state surveys.
- Compare measures across the four geographic stratum in the probabilistic sample data.
- Compare measures between the probabilistic and convenience samples.
- Small area spatial analysis will be conducted for various measures.
- Based on respondents' county of residence, we will link our data with the Area Health Resources File.

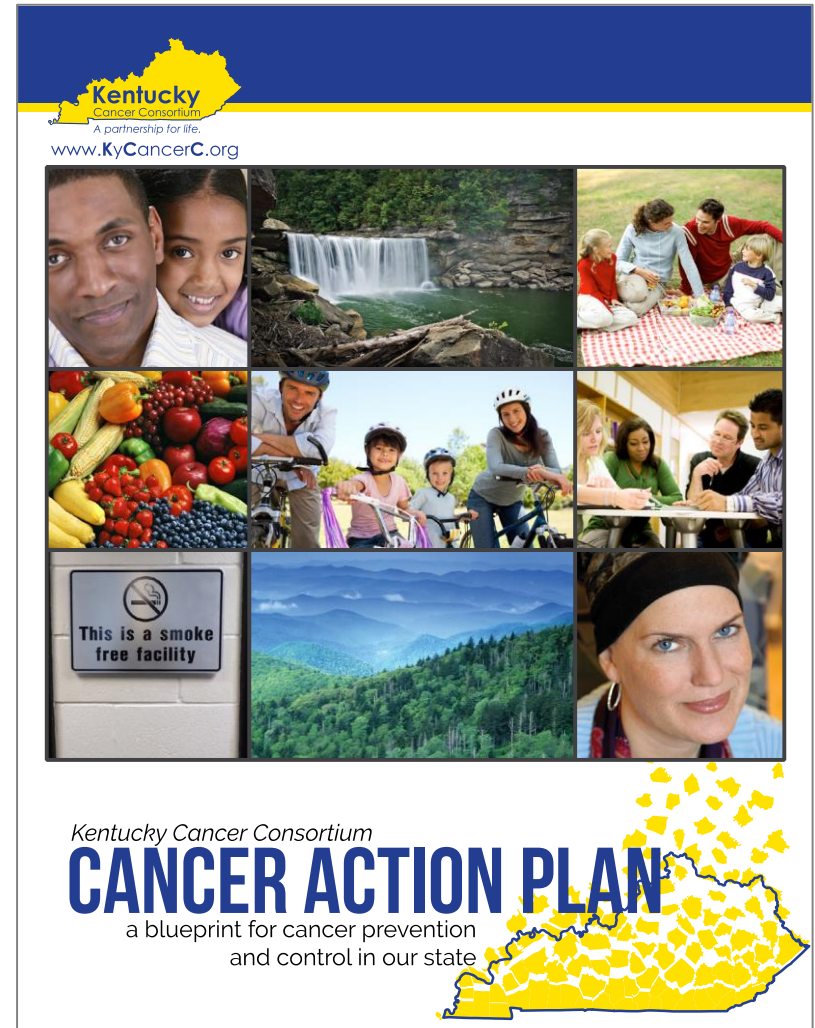
Data Use Plans

- Contribute to Markey's CCSG fall 2017 application for “Comprehensive” designation and current cancer center strategic planning efforts
- Presentations to KCP's Appalachian KY District Cancer Councils to help guide their local cancer control needs assessment, planning, and implementation efforts



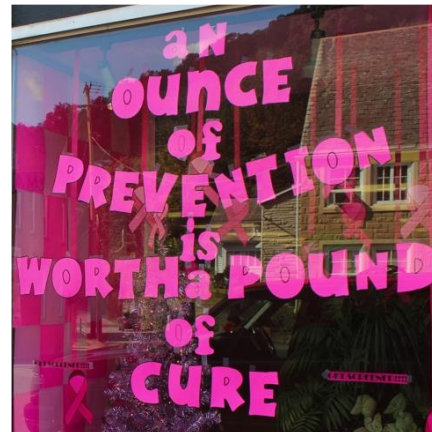
Data Use Plans

- Inform Kentucky Cancer Action Plan and Kentucky Cancer Consortium efforts
- Results dissemination via reports, presentations and publications
- Inform future grant applications (methods and interventional)
 - Applied research in health communication, behavioral science
 - Community-based participatory research
 - Rural health survey methodology



MCC NCI Administrative Supplement 1-Year Timeline

Activities/Major Milestones	Sep – Nov 2016	Dec 2016 – Feb 2017	Mar – May 2017	Jun – Aug 2017
Survey design and development in consultation with NCI-assigned contractor	X	X	X	
REDCap programming	X	X	X	
Secure UK IRB approval	X	X		
Secure address-based sample from MSG	X		X	
Mailings: 1 st round, reminder postcard, 2 nd round		X	X	
Community-based, in-person data collection in Appalachian KY			X	X
Double, manual data entry of completed surveys		X	X	X
Data analysis and interpretation		X	X	X
Results dissemination (manuscripts, conference presentations, NCI grantee meeting, local DCC presentations)				X



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Questions?