

# *Rural Cancer Control: A “Moonshot” Implementation Research Agenda*

---

Lisa M Klesges, PhD, MS

August 23, 2018

# Rural Cancer Disparities

Centers for Disease Control and Prevention

# MMWR

Morbidity and Mortality Weekly Report

Surveillance Summaries / Vol. 66 / No. 14

July 7, 2017

Published OnlineFirst June 9, 2017; DOI: 10.1158/1055-9965.EPI-17-0992

Commentary

Cancer  
Epidemiology,  
Biomarkers  
& Prevention

## Invasive Cancer Incidence, 2004–2013, and Deaths, 2006–2015, in Nonmetropolitan and Metropolitan Counties — United States

## Making the Case for Investment in Rural Cancer Control: An Analysis of Rural Cancer Incidence, Mortality, and Funding Trends

Kelly D. Blake, Jennifer L. Moss, Anna Gaysynsky, Shobha Srinivasan, and Robert T. Croyle



Published OnlineFirst July 9, 2018; DOI: 10.1158/1055-9965.EPI-18-0210

Research Article

Cancer  
Epidemiology,  
Biomarkers  
& Prevention



## Rural–Urban Disparities in Time to Diagnosis and Treatment for Colorectal and Breast Cancer

Rebecca J. Bergin<sup>1,2</sup>, Jon Emery<sup>2</sup>, Ruth C. Bollard<sup>3</sup>, Alina Zalounina Falborg<sup>4</sup>,  
Henry Jensen<sup>4</sup>, David Weller<sup>5</sup>, Usha Menon<sup>6</sup>, Peter Vedsted<sup>4</sup>, Robert J. Thomas<sup>2,7,8</sup>,  
Kathryn Whitfield<sup>7</sup>, and Victoria White<sup>1,9</sup>

JAMA | Original Investigation

## Trends and Patterns of Disparities in Cancer Mortality Among US Counties, 1980–2014

Ali H. Mokdad, PhD; Laura Dwyer-Lindgren, MPH; Christina Fitzmaurice, MD, MPH; Rebecca W. Stubbs, BA;  
Amelia Bertozzi-Villa, MPH; Chloe Morozoff, MPH; Raghid Charara, MD; Christine Allen, BA;  
Mohsen Naghavi, MD, PhD; Christopher J. L. Murray, MD, DPhil

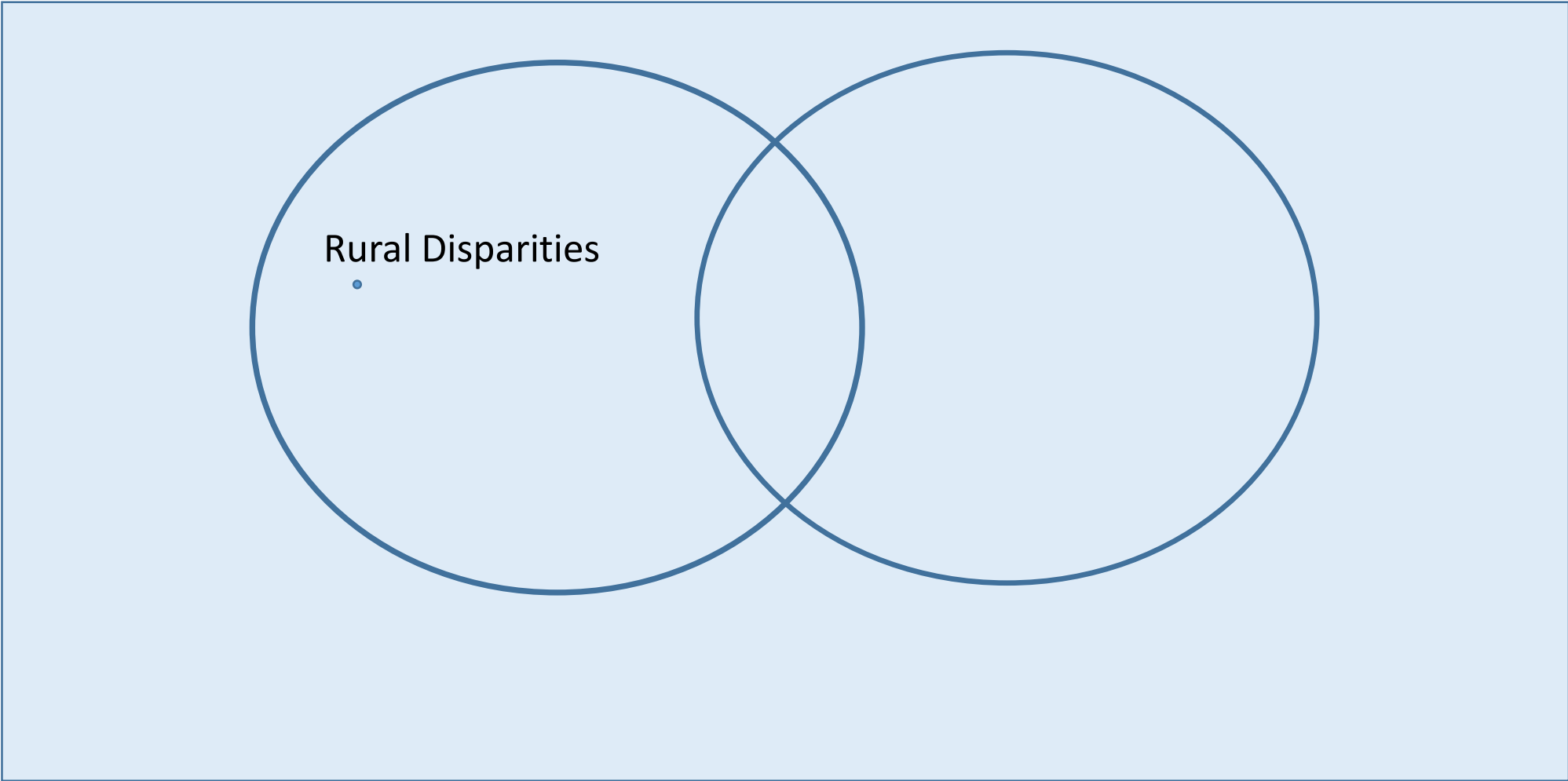
**INTRODUCTION** Cancer is a leading cause of morbidity and mortality in the United States and results in a high economic burden.

**OBJECTIVE** To estimate age-standardized mortality rates by US county from 29 cancers.

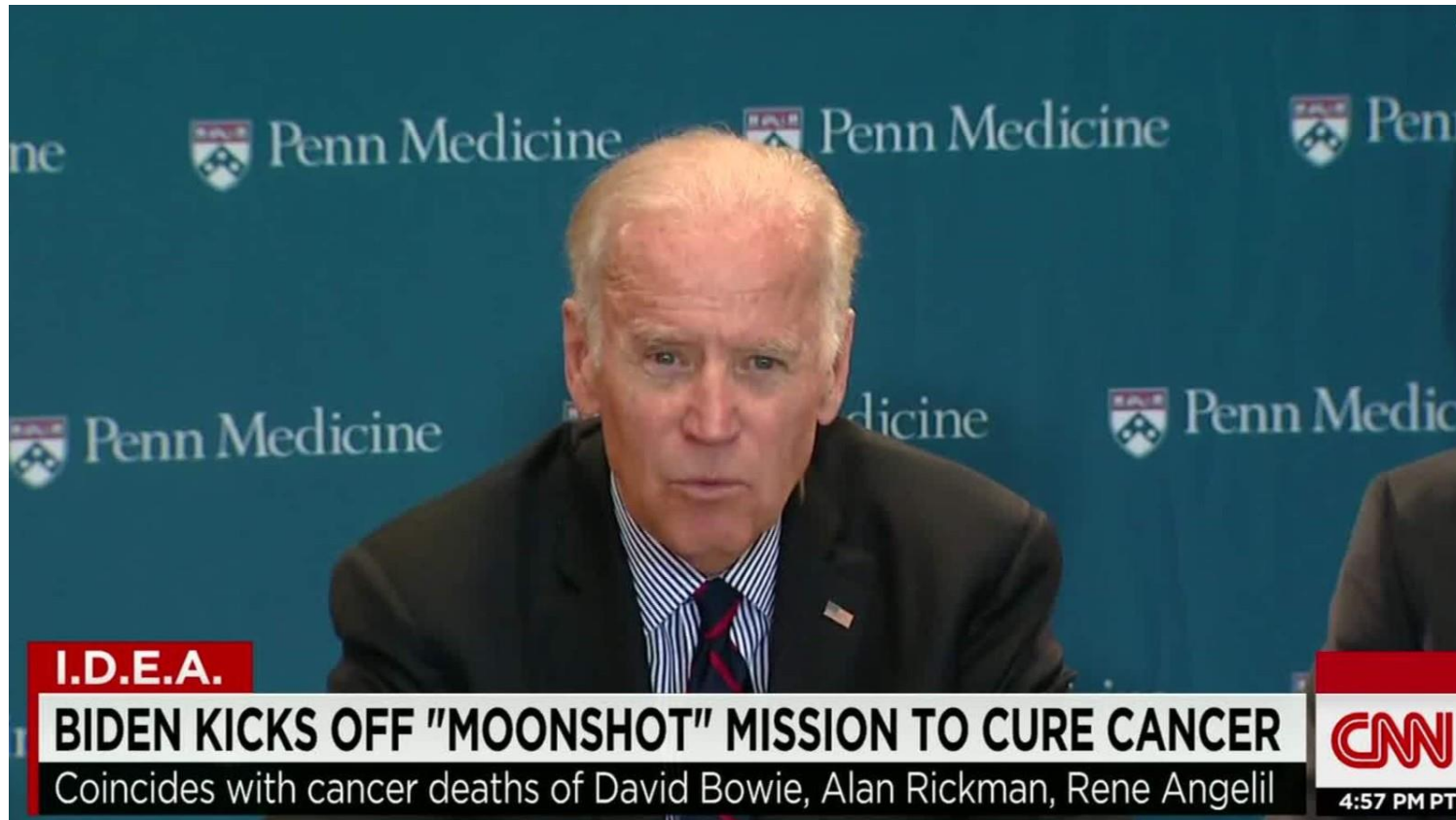
← Editorial p

+ Suppleme

# Rural Cancer Control Implementation Research



# Cancer moonshot



<http://www.cnn.com/2016/11/30/politics/joe-biden-cancer-moonshot-congress/>

# Blue Ribbon Panel: Implementation Science Working Group

BLUE RIBBON PANEL 2016

- Conduct *implementation research to accelerate the adoption and deployment of sustainable, evidence-based cancer prevention and screening interventions* at multiple levels and in different clinical and community settings.
- Advance *implementation science directed at fully integrating current evidence-based cancer prevention and screening interventions* in 3 high priority, high impact areas: HPV vaccination, colorectal cancer (CRC) screening, and tobacco control.
- To *significantly impact* cancer outcomes in the general population as well as among populations that experience *persistent cancer disparities (e.g. low income, minority, rural, and other underserved populations)*.

# Blue Ribbon Panel Recommendations, 2016

## **A. Establish a network for direct patient involvement**

Engage patients to contribute their comprehensive tumor profile data to expand knowledge about what therapies work, in whom, and in which types of cancer.

## **B. Create a clinical trials network devoted exclusively to immunotherapy**

Establish a cancer immunotherapy clinical trials network devoted exclusively to discovering and evaluating immunotherapy approaches.

## **C. Develop ways to overcome cancer's resistance to therapy**

Identify therapeutic targets to overcome drug resistance through studies that determine the mechanisms that lead cancer cells to become resistant to previously effective treatments.

## **D. Build a national cancer data ecosystem**

Create a national ecosystem for sharing and analyzing cancer data so that researchers, clinicians and patients will be able to contribute data, which will facilitate efficient data analysis.

## **E. Intensify research on the major drivers of childhood cancers**

Improve our understanding of fusion oncoproteins in pediatric cancer and use new preclinical models to develop inhibitors that target them.

## **F. Minimize cancer treatment's debilitating side effects**

Accelerate the development of guidelines for routine monitoring and management of patient-reported symptoms to minimize debilitating side effects of cancer and its treatment.

## **G. Expand use of proven cancer prevention and early detection strategies**

Reduce cancer risk and cancer health disparities through approaches in development, testing and broad adoption of proven prevention strategies.

## **H. Mine past patient data to predict future patient outcomes**

Predict response to standard treatments through retrospective analysis of patient specimens.

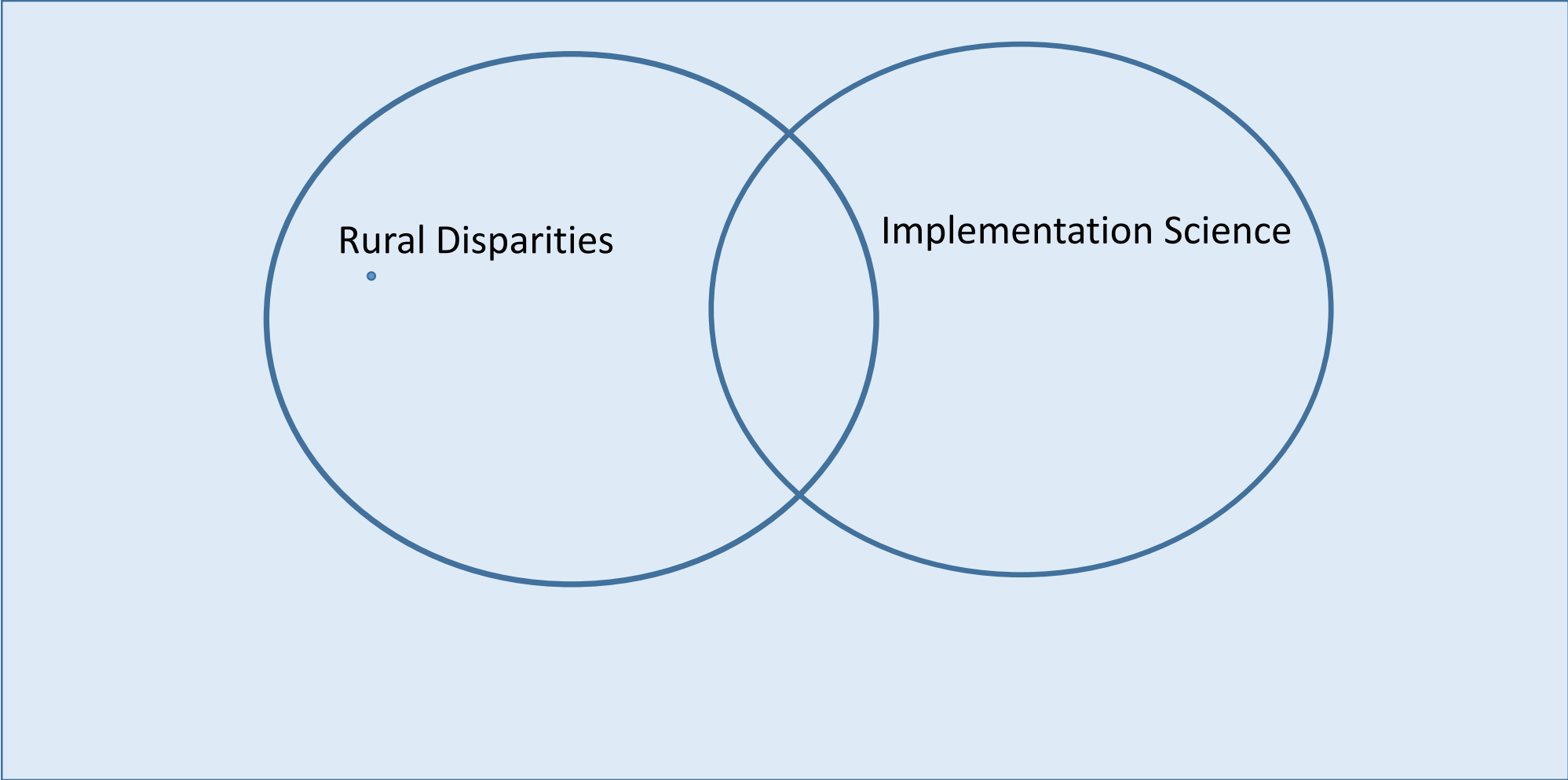
## **I. Develop a 3-D cancer atlas**

Create dynamic 3-D maps of human tumor evolution to document the genetic lesions and cellular interactions of each tumor as it evolves from a precancerous lesion to advanced cancer.

## **J. Develop new cancer technologies**

Develop new enabling cancer technologies to characterize tumors and test therapies.

# Rural Cancer Control Implementation Research



# *Rural Cancer Control: Challenges & Opportunities*

Meeting in Memphis, 2017

- **Implementing Successful Prevention Research**
- **Emerging Research Methods**
- **Data, Tools, Technology to Connect Rural Populations**
- **Clinical Research and Quality**
- **Improving Access, Engagement, Care Experiences**
- **Public Health and Community Capacity: Aligning Research to Reduce Disparities**

Imagine 10-years from now, major improvements have been made in reducing cancer disparities in rural communities...



# Concept Mapping of Implementation Science Priorities in Rural Cancer Control

At a Rural Cancer Control meeting (5/17) researchers identified opportunities for future research that can be translated into effective interventions leading to prevention, diagnosis and treatment of cancer. Ideas from that conference were expanded using group concept mapping.



Invited Online Brainstorming: Researchers, Health Care Practitioners, and Intermediaries to expand

*To achieve measurable progress in Rural Cancer Prevention and Control, a comprehensive dissemination and implementation research agenda would consider or include...*

# Organizing Knowledge and Opinion

69 total Sorting Invitees

The screenshot shows a web application interface for a webinar. At the top, it says "signed in as webnarparticipant@conceptsistemas.com". Below that is a navigation bar with "Instructions", "Create a pile", "Save", "Arrange all", "Minimize all", "Maximize all", "Edit pile name", and "Switch to". The main content area is divided into three panes: "Advertisement", "Employee Benefits", and "Technology". The "Advertisement" pane contains the text: "advertise the organization's image rather than just specific programs". The "Employee Benefits" pane contains: "establish a 'quality circle' team approach for program employees", "improve employee medical benefits", "allow employees flex-time options", and "develop better strategy for determining annual salary". The "Technology" pane contains: "computerize communication mailing lists". On the left side, there is a "PROJECT FOCUS PROMPT:" section with the text: "A specific action that the North County Department of Social Services could implement over the next five years to improve its culture and level of service is...". Below that is a "Progress Bar" showing "7 out of 40 sorted." and a list of "Unsorted statements:" including "improve communication among employees", "friendlier program managers", "reduce unnecessary reports, memos, meetings", "improve cleanliness of offices and program locations", "conduct program effectiveness analysis for all major current programs", "explore options for program facilities and office expansion", "start a program to reduce employee absenteeism and turnover", "develop in-house computer network for management staff", "investigate potential safety issues in the workplace", "improve the quality of our program advertising", "decrease client waiting time", "develop employee incentive program", and "computerize all phases of the program management system". At the bottom, there are tabs for "Advertisement", "Employee Benefits", and "Technology".

CS Global MAX NFP Intro Webinar 0812



show menu signed in as Global MAX Webinar sign out save cancel home help

Progress:

## Importance Rating

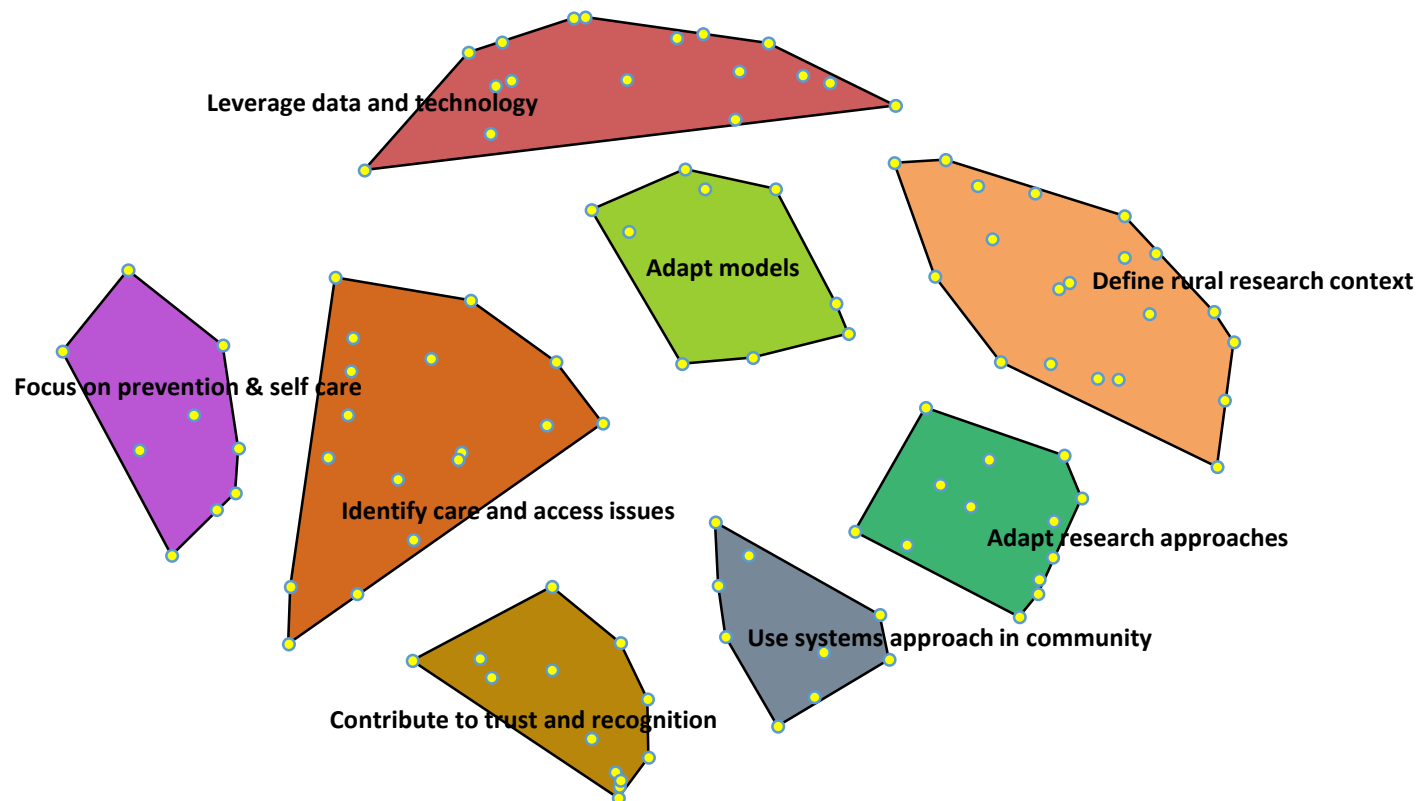
INSTRUCTIONS: Please rate the following statements, in the range indicated below. Rate each statement on a 1-to-5 scale where: 1=relatively unimportant; 2=somewhat important; 3=moderately important; 4=very important; 5=extremely important.

Project Focus Prompt: A specific action that the North County Department of Social Services could implement over the next five years to improve its culture and level of service is...

Show unrated statements only  Show all statements

Rating		Statement
Relatively Unimportant	Extremely Important	
<input checked="" type="radio"/> 1	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	advertise the organization's image rather than just specific programs <a href="#">[unrate]</a>
<input type="radio"/> 1	<input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	establish a 'quality circle' team approach for program employees <a href="#">[unrate]</a>
<input type="radio"/> 1	<input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	improve employee medical benefits <a href="#">[unrate]</a>
<input type="radio"/> 1	<input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 5	improve communication among employees <a href="#">[unrate]</a>
<input type="radio"/> 1	<input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	friendlier program managers <a href="#">[unrate]</a>
<input type="radio"/> 1	<input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	reduce unnecessary reports, memos, meetings <a href="#">[unrate]</a>
<input type="radio"/> 1	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input checked="" type="radio"/> 5	improve cleanliness of offices and program locations <a href="#">[unrate]</a>
<input type="radio"/> 1	<input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	computerize communication mailing lists <a href="#">[unrate]</a>
<input type="radio"/> 1	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input checked="" type="radio"/> 5	allow employees flex-time options <a href="#">[unrate]</a>
<input type="radio"/> 1	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	conduct program effectiveness analysis for all major current programs

# The Conceptual Framework



Point Cluster Map of Shared  
Conceptual Structure

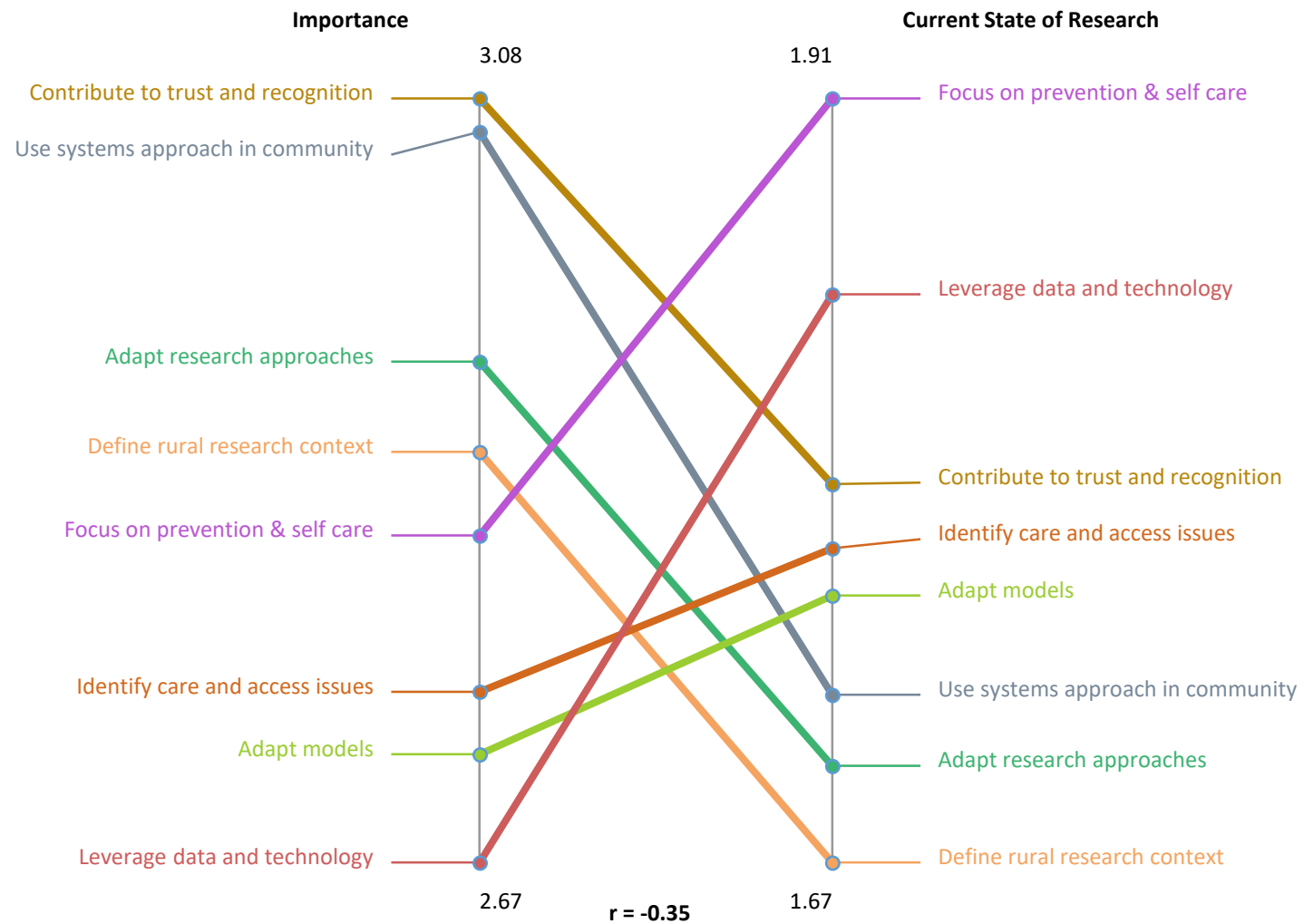
# Aggregation and Clustering: Building Results

**8 initial clusters were extracted from the map of statements with 6 of the clusters describing “foundational” needs to formation of *a comprehensive dissemination and implementation research agenda in rural cancer control***

- Building an Understanding of the Rural Research Context
- Leveraging Data and Technology
- Adapting Existing Models for Rural Research
- Adapting Research Approaches in Rural Settings
- Applying Systems Concepts/Methods in Community
- Building Trust and Recognition to Support Research
  
- Address Care and Care Access Issues
- Preventive Care Focus in Rural Cancer Control

# Relative Pattern Match

## Importance to Current State of Research



# Research of High Importance/ Less Known

## Rural Research Context (e.g. from 6)

- Identifying research measures that are distinct to rural environments
- Research to examine factors that co-vary with rural/urban status
- Research enabling exploration and appreciation of variability among rural communities

## Leverage Data & Technology

- Achieving electronic health record interoperability across US including rural areas
- Linking heterogeneous data sets to support multilevel exploration of cancer disparities
- Confirming and addressing the digital divide in rural communities
- Information systems to provide the latest best practices to care providers and teams

## Adapt Models

- Longitudinal patterns of care studies that identify where/how rural residents access care
- Access should be recognized as including more than physical location and insurance coverage in rural communities
- Adapting technologies known to work in global settings to rural US settings

# Research of High Importance/ Less Known

## Adapt Research Approaches

- Articulating sustainability as a researchable problem
- Heterogeneity among rural settings and the impact on care delivery interventions
- Studying program impact over the longer time horizon (than 5 yr funding mechanisms)
- Multi-site demonstration projects

## Use Systems Approaches (e.g. from 5)

- Implement evidence-based interventions via coordinated efforts w/ cancer stakeholders
- How to best build research interest, capacity among rural and community-based providers
- Multi-level approach (patient, caregiver, community, etc.) to adapting evidence-based methods

## Build Trust and Recognition

- How partners are engaged, integrated, and paid as part of community-based interventions
- What models work best to sustain community-heavy interventions once grant period ends
- How to best engage patients in their health in rural communities to help set norms and expectations for health

# Research of High Importance/ Less Known

## Identify Care and Access Issues (e.g., from 6)

- A whole person lens vs singular disease focus as critical for understanding cancer control and care delivery in rural settings
- Treating policy and payment as context variables and examining the impact of these changes in rural settings
- Support for rural providers to talk about clinical trials and link patients to trials

## Prevention & Self-Care

- Resources to support follow-up and treatment for abnormal screening
- What are optimal roles for coordinating care between specialists, primary care practiced  
And community health workers



# “High Priority” Implementation Research

*My Takeaways...public health systems view*

- Systemic approaches....Learning Community Health System for identifying needs and understanding implementation research in context of rural community
- Designing and Supporting an “adaptive system” of rural health (cancer control) recognizing that *cancer care delivery* exists as part of a larger “social enterprise” driving health outcomes
- Participatory “co-design” or “user-designed” approaches to prevention and care delivery seeking understanding of local culture e.g., distance, connectivity
- Explore new opportunities for data, technology, communication, informatics to support person-centered care – can we “move information not people”

# Aspirations for a better system design....

“...transform health care by moving from its historic “linear, deconstructed model” that falls along traditional disciplinary boundaries to a “complex, adaptive system” that drives better performance outcomes, and considers healthcare as a complex social process.”

*--Paul Batalden, Institute for Healthcare Improvement*

# Care Redesign...Accountable Communities for **RURAL** Health System Transformation...



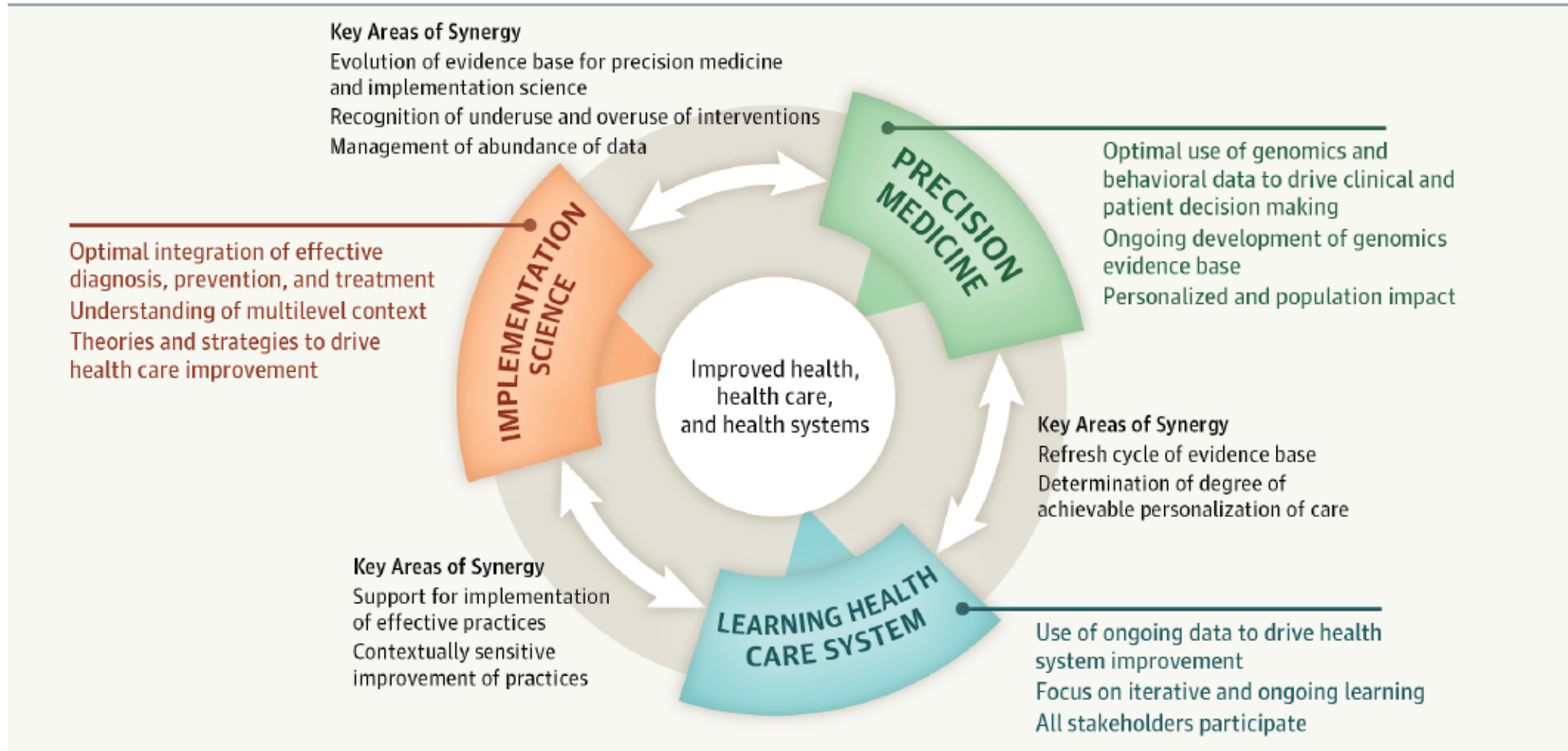
# 10 Rules to Accelerate Healthcare Redesign

- Change the balance of power. *Co-produce health and well-being in partnership with patients, families and communities.*
- Standardize what makes sense. *Standardize what is possible to reduce unnecessary variation and increase time available for individualized care.*
- Customize to the individual. *Contextualize care to an individual's needs, values and preferences, guided by an understanding of what matters to the person in addition to "What's the matter?"*
- Promote well-being. *Focus on outcomes that matter the most to people, appreciating that their health and happiness may not require healthcare.*
- Create joy in work. *Cultivate and mobilize the pride and joy of the healthcare workforce.*

# 10 New Rules to Accelerate **Healthcare Redesign**

- Make it easy. *Continually reduce waste and all nonvalue-added requirements and activities for patients, families and clinicians.*
- **Move knowledge, not people.** *Exploit all helpful **capacities of modern digital care** and continually substitute better alternatives for visits and institutional stays. Meet people where they are, literally.*
- Collaborate and cooperate. *Recognize that the **healthcare system is embedded in a network that extends beyond traditional walls**. Eliminate siloes and tear down self-protective institutional or professional boundaries that impeded flow and responsiveness*
- Assume abundance. *Use all the **assets that can help to optimize the social, economic and physical environment**, especially those brought by patients, families and communities.*
- Return the money. *Give the money from healthcare savings to other public and private purposes*

# Contributions of Implementation Science, Learning Health Care System, and Precision Medicine



Chambers DA, Feero WG, Khoury MJ. Convergence of Implementation Science, Precision Medicine, and the Learning Health Care System. JAMA. 2016;315(18):1941-1942.

# Robust, Sustainable Implementation Systems

Point #	Characteristic	Implication
<b>Systems Perspective</b>		
1	Context is critical	Research should focus on and describe context
2	Multilevel complexity	Most problems, and interventions are multilevel and complex
3	Focus on systems characteristics	More emphasis needed on interrelationships among system elements and systems rules
<b>Robust, Practical Goals</b>		
4	Representatives and reach	Focus on reaching broader segments of population and those most in need
5	Generalizability	Study generalization (or lack of such) across settings, subgroups, staff, and conditions
6	Pragmatic and practical	Producing answers to specific questions relevant to stakeholders
7	Scalability and sustainability	From outset, greater focus on scale-up potential and likelihood of sustainability
<b>Research Methods to Enhance Relevance</b>		
8	Rigorous	Identify and address plausible threats to validity in context of question. Greater focus on replication
9	Rapid	Approaches that produce faster answers
10	Adaptive	Best solutions usually evolve over time, as a result of informed hypotheses and mini-tests with feedback
11	Integration of methods; triangulation	For greater understanding, integrated Quantitative and Qualitative methods are often required
12	Relevance	Relevance to stakeholders should be top priority
<b>Flexibility</b>		
13	Multiplicity	Encourage and support diverse approaches with the above characteristics (all models are wrong)
14	Respect for diverse approaches; humility	Different perspectives, goals, methods and approaches are needed. Continuing the same existing approaches will produce the same unsatisfactory results

Glasgow RE, Chambers D. Developing robust, sustainable, implementation systems using rigorous, rapid and relevant science. Clin Transl Sci. Feb 2012;5(1):48

# Accountable Communities for **RURAL** Health System Transformation... to support cancer control research

Implementation research in health care, public health, and community settings to study care transformation and innovations in evidence-based cancer control interventions

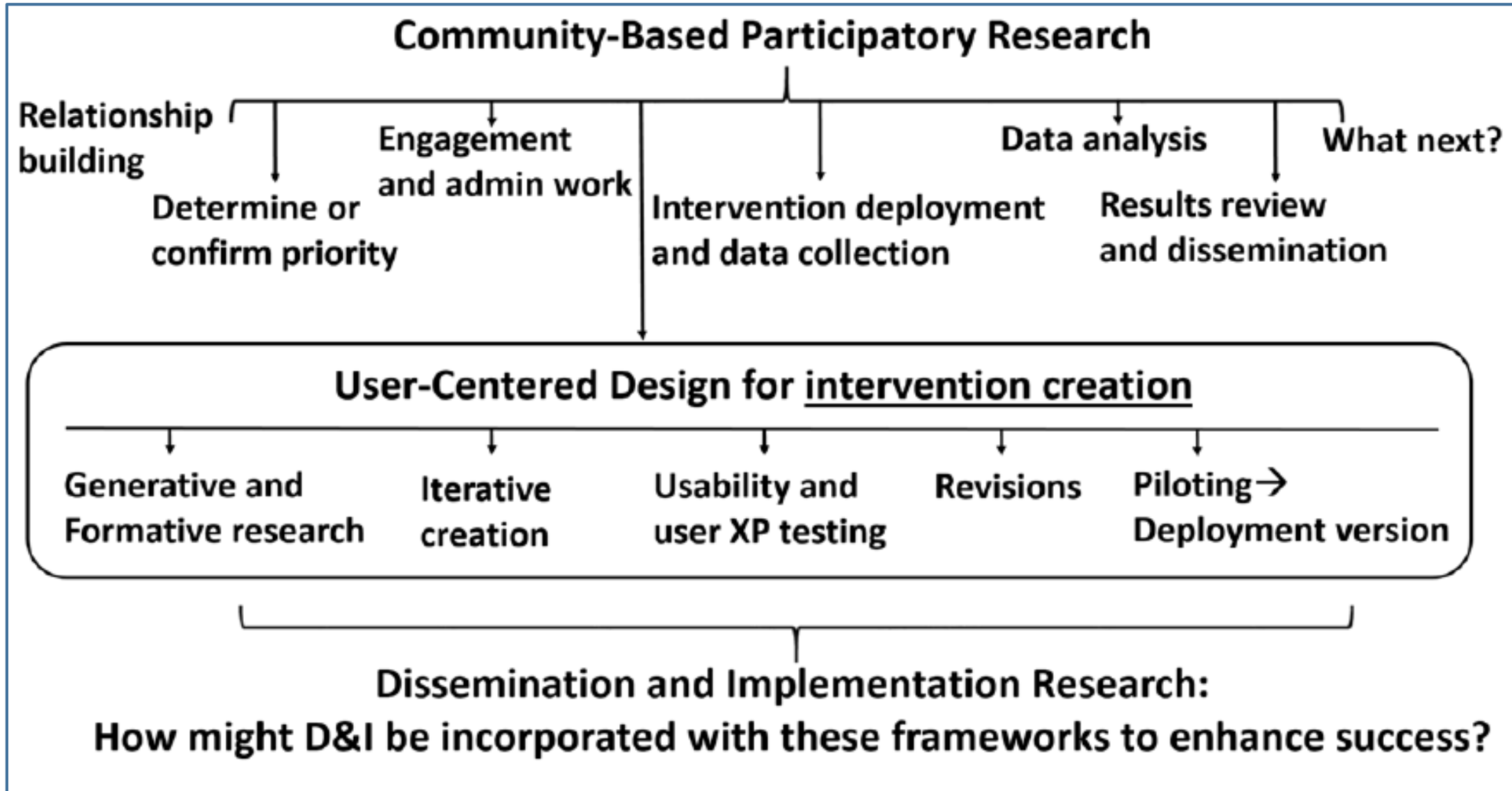




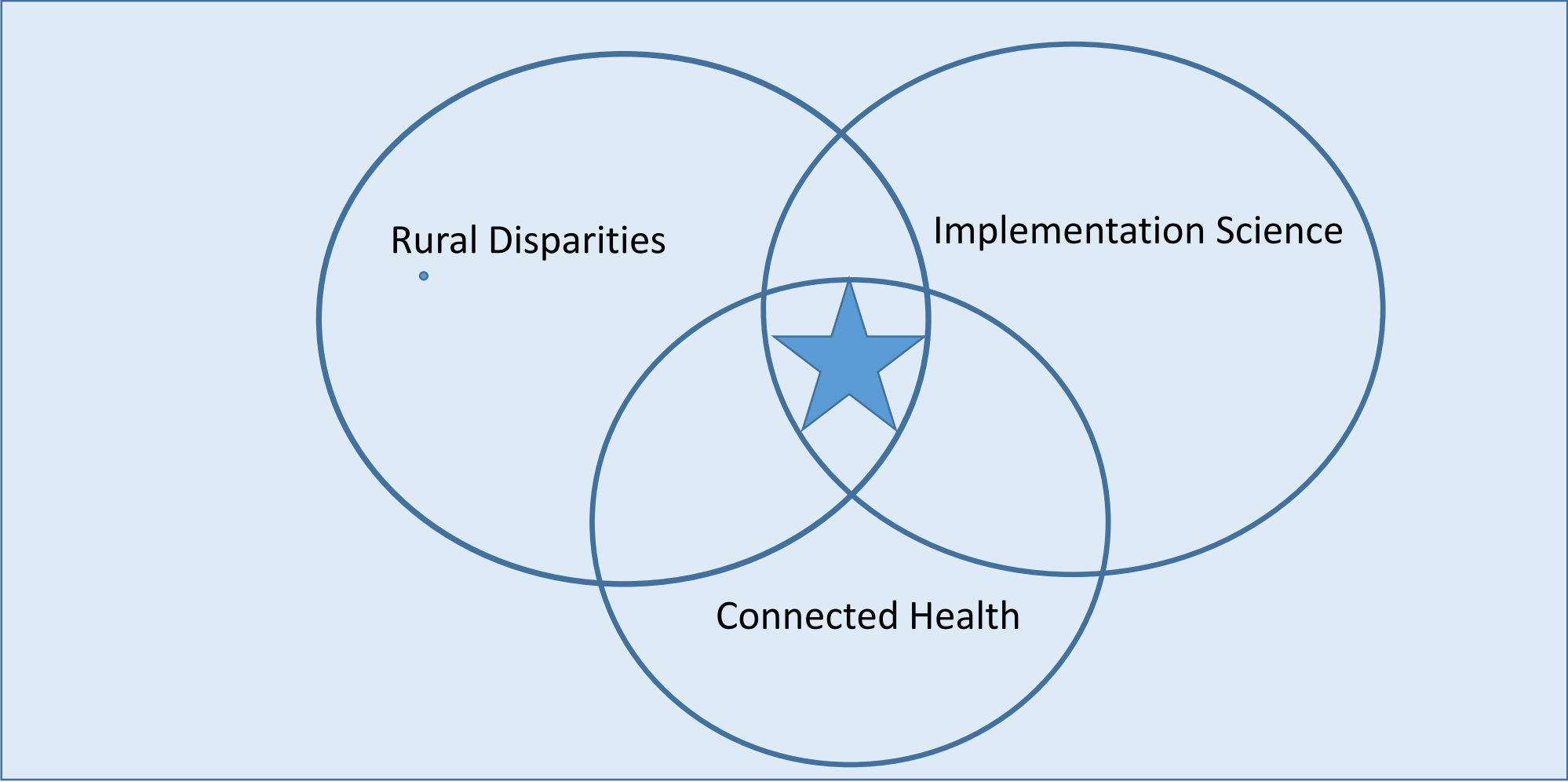
# Leverage community wisdom...future is **co-production** (Turakhia and Combs, 2017)

- Collaborative co-creation is the future of health research and health care interventions and delivery— and may have particular relevance for small populations/rural
- Focus on co-production and co-creation in our approaches, frameworks, and research methodologies
- Generating value together
  - Users and communities co-shape and co-make interventions /products /services
  - Such approaches prioritize and invest in collaborations with those most affected by data, research, interventions

# Co-Mingling Methods – CBPR and Design Approaches....



# Rural Cancer Control Implementation Research



# Improving Cancer-Related Outcomes with **CONNECTED HEALTH**



A Report to the President of the United States  
from the President's Cancer Panel



# Connected Health: Improving Patients' Engagement and Activation for Cancer-Related Health Outcomes

President's Cancer Panel  
2014-2015 Series



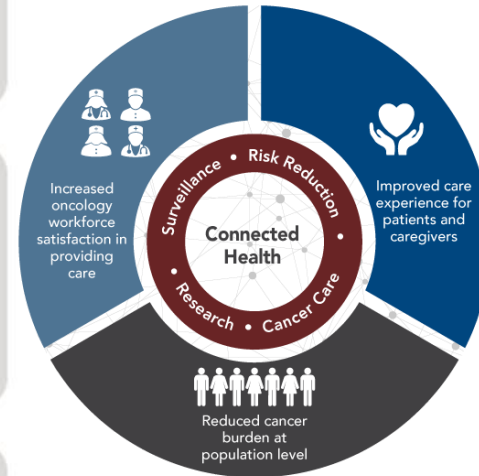
**Enable Interoperability**



**Support the Oncology Workforce**



**Facilitate Data Sharing and Integration**




**Enable Individuals to Manage and Participate in Their Care**



**Ensure Adequate Internet Access**



**Conduct High-Priority Research to Advance Connected Health**

## THE PRESIDENT'S CANCER PANEL

### Chairperson

**Barbara K. Rimer, DrPH**



Dean  
Gillings School of Global Public Health  
Alumni Distinguished Professor of Health Behavior and Health Education  
The University of North Carolina at Chapel Hill  
Chapel Hill, NC

### Members

**Hill Harper, JD**



Cancer Survivor  
Four-Time New York Times Best-Selling Author, Actor, and Philanthropist  
Hollywood, CA

**Owen N. Witte, MD**



University Professor  
Director  
Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research  
University of California, Los Angeles  
Los Angeles, CA



Ensure Adequate Internet Access

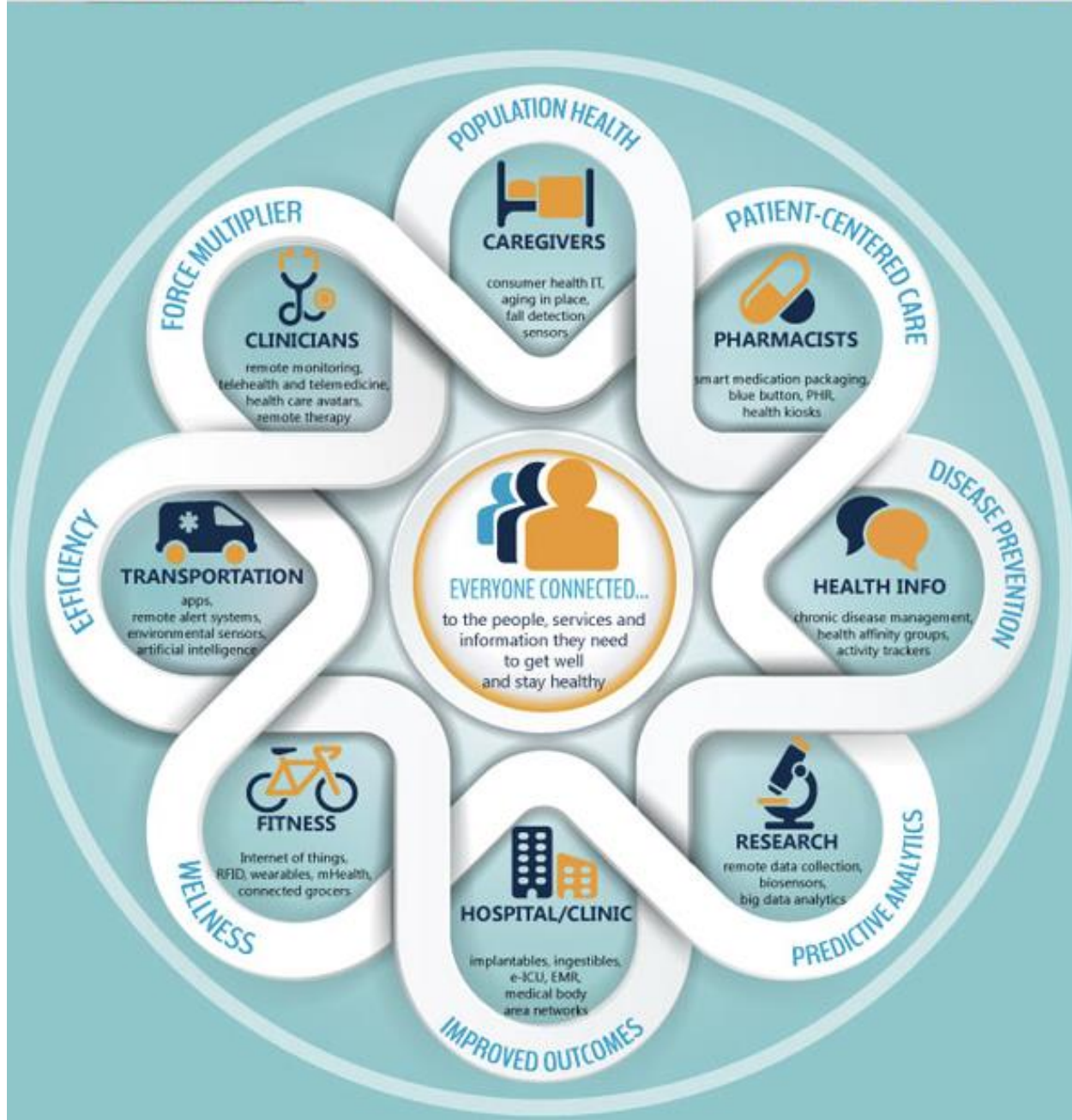


*“Digital Access is becoming a super- determinate of health”*

-Chairman Ajit Pai



# THE BROADBAND HEALTH IMPERATIVE



# Builds on Recommendations from PCP Report



Ensure Adequate Internet Access

*President's Cancer Panel Report on Connected Health (2016)*

## Action Item 4.1

Support initiatives and programs to ensure that everyone in the United States has adequate Internet access if so desired.

## Action Item 4.2

Support initiatives and programs to ensure adequate Internet access for all healthcare providers and organizations.



“Connect2HealthFCC is exploring the intersection of broadband, advanced technology and health and further charting the broadband future of health care – serving as an umbrella for all FCC health-oriented activities to help enable a healthier America.”

# FCC & NCI Announce Partnership in Demonstration of Connected Health

## FCC and NCI team up to expand broadband access to cancer care in rural Kentucky

December 26, 2017

by [John Fischer](#) , Staff Reporter

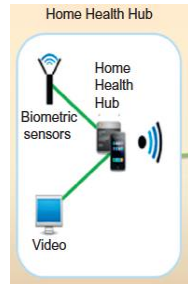
**The Federal Communications Commission (FCC) and the National Cancer Institute (NCI) are teaming up to enhance cancer care in rural communities by providing greater access to broadband technology.**



*NCI and the FCC are teaming up to increase access to broadband connectivity for cancer care in rural areas*

# L.A.U.N.C.H.

Linking and Amplifying User-Centered Networks through Connected Health



*Focus on symptom management: Patrick et al achieved 50% reduction in preventable hospitalizations with this approach*

**UC San Diego**  
The Design Lab

## People-Centered Design

Our major focus is design as a way of thinking, of focusing how people interact with complex systems and technology, and ensuring that we solve the right problem, the root issues that define the true needs of the people and groups that we serve.



NATIONAL  
CANCER  
INSTITUTE

AMGEN<sup>®</sup>

FC  
Federal  
Communications  
Commission

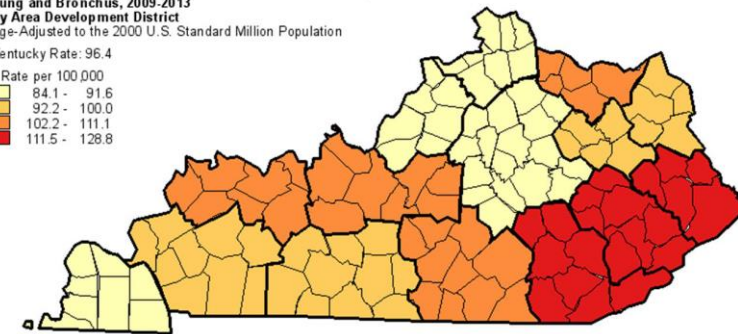
Oncology

Funding

**UK** HealthCare  
MARKEY CANCER CENTER  
An NCI-Designated Cancer Center

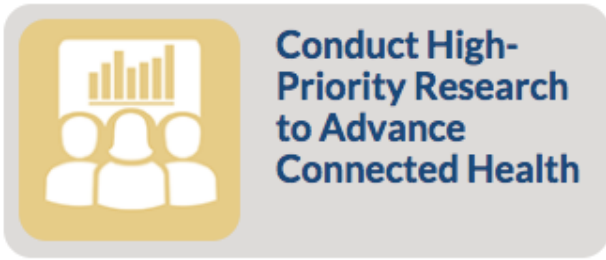
Age-Adjusted Invasive Cancer Incidence Rates in Kentucky  
Lung and Bronchus, 2009-2013  
By Area Development District  
Age-Adjusted to the 2000 U.S. Standard Million Population

Kentucky Rate: 96.4  
Rate per 100,000  
84.1 - 91.6  
92.2 - 100.0  
102.2 - 111.1  
111.5 - 128.8



Data accessed July 18, 2016.  
Based on data released Jan 2016.  
Copyright (C) 2016 Kentucky Cancer Registry





## Primary Objectives

- Demonstrate the value of an electronic safety net for patients and care teams through connected health technologies.
- Solve the “last mile problem” of extending benefits of current knowledge to all populations, especially in rural areas.
- Emphasize symptom management as Moon-Shot Compatible cancer focus.
- Move the needle on treatment burden (miles traveled, preventable complications, treatment coordination) and disease burden (through better adherence to treatment regimen and through early intervention on adverse symptoms).
- Create a platform for innovation and citizen participation.

# L.A.U.N.C.H. Design Pad

HUMAN-CENTERED HEALTH DESIGN



1.0

Initial phase to **explore data** on rural disparities, cancer treatment innovations, communication technology gaps and barriers

2.0

Preliminary **ethnographic research** engaging patients, providers, support network and community. First around needs, attitudes, barriers, then with **technology probes** prior to co-design of pilots

3.0

**Participatory design** around symptom management: micro pilots around distress reporting, connected health passive and active sensing

4.0

**Agile Pilots** for Symptom management integrating connectivity, sensing, reporting and collaboration technology form basis to understand requirements for Platform for Agile Development (PAD)

5.0

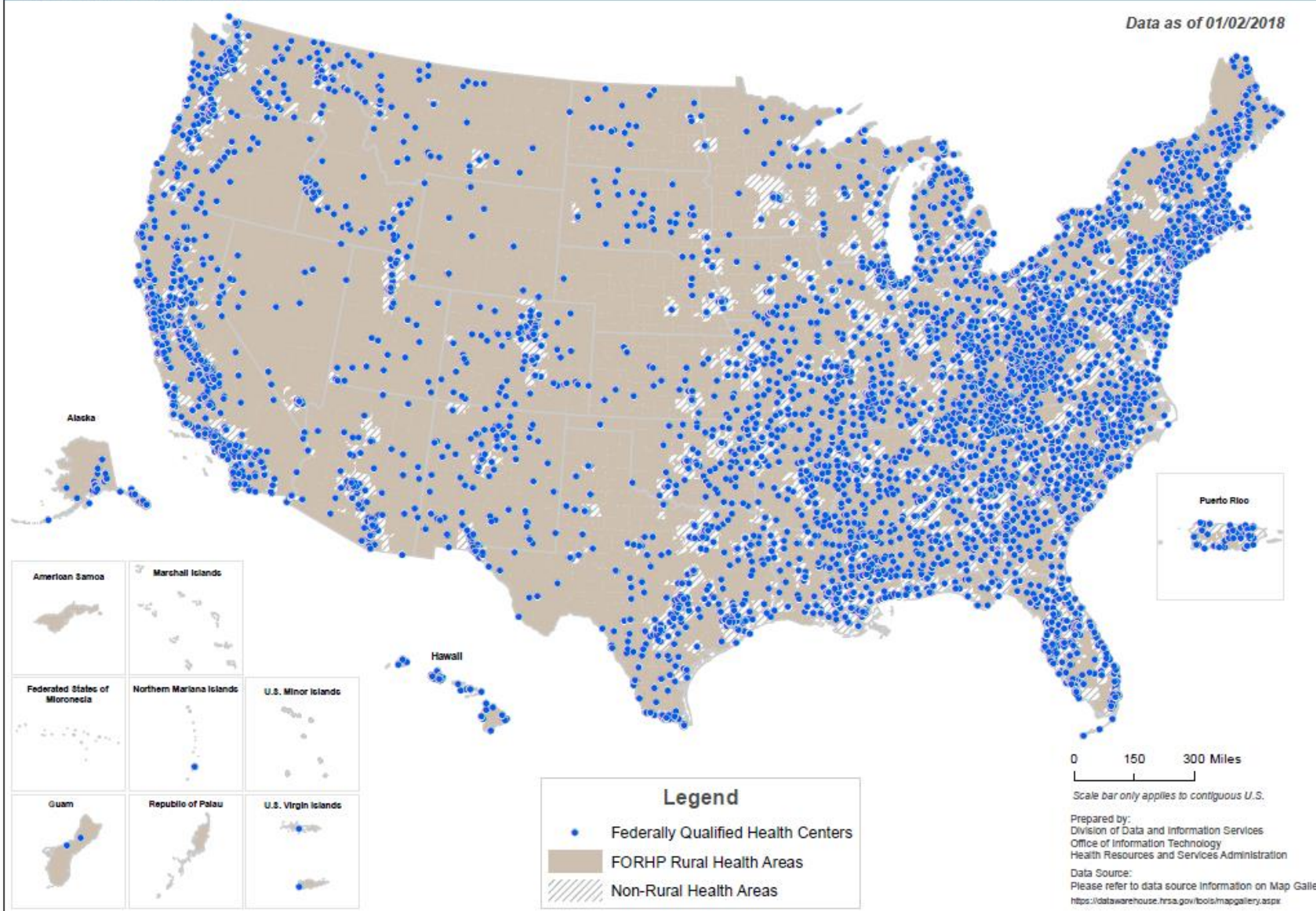
Preliminary data, ethnography, co-design and agile pilots set **requirements for PAD**: first "launch" with challenges and co-designed community based interventions

6.0

**Scaling and evolution** of PAD. Growth of an ecosystem of modular, open and interlocking parts from principles to policies to open-source software, open-APIs, technologies and standards



Data as of 01/02/2018



Currently 183 PBRNs nationally with over 29,000 practices, 150,000 clinicians, and 80 million patients



**NCI**

## Community Oncology Research Program

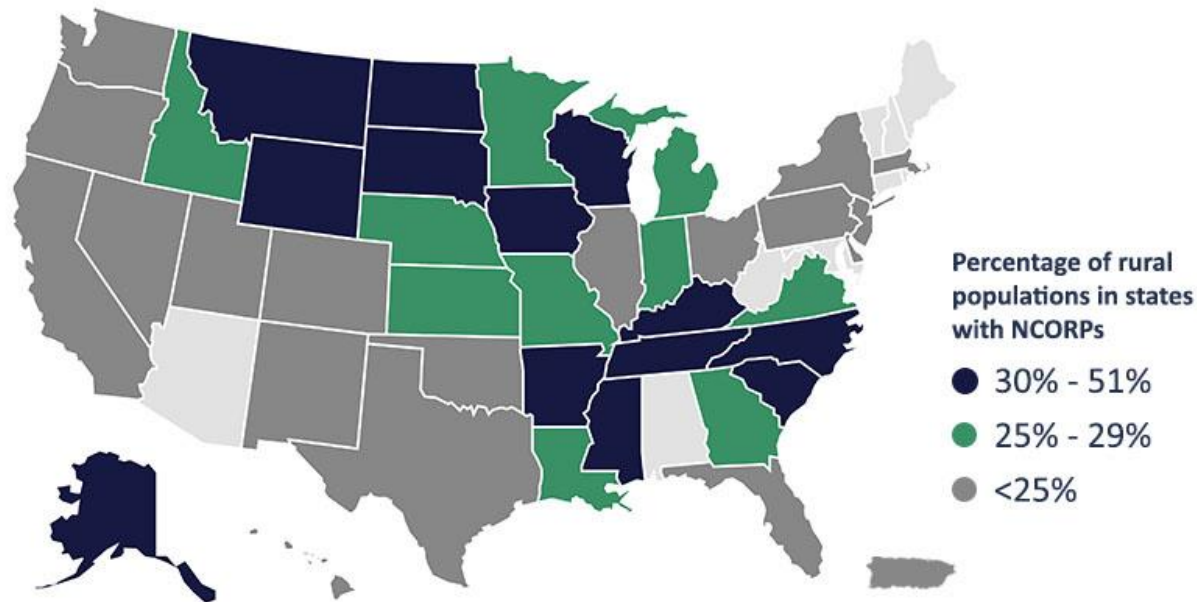
A program of the National Cancer Institute  
of the National Institutes of Health

A national network that brings  
cancer clinical trials and cancer  
care delivery studies to people in  
their communities.



Clinical trials are available to people in communities across the U.S. through the NCI Community Oncology Research Program (NCORP), including 23 states with large rural populations.

**23**  
RURAL  
STATES



For a full list of all the NCORP sites across the U.S.: <https://ncorp.cancer.gov/findasite/>

ALASKA

ARKANSAS

IOWA

KENTUCKY

MISSISSIPPI

MONTANA

NORTH CAROLINA

NORTH DAKOTA

SOUTH CAROLINA

SOUTH DAKOTA

TENNESSEE

WISCONSIN

WYOMING

MISSOURI

IDAHO

INDIANA

NEBRASKA

LOUISIANA

MINNESOTA

KANSAS

MICHIGAN

GEORGIA

VIRGINIA

[ncorp.cancer.gov](https://ncorp.cancer.gov)

**NCI** Community Oncology  
Research Program

A program of the National Cancer Institute  
of the National Institutes of Health

# RESOURCES NCI

**Rural Cancer Control (<https://cancercontrol.cancer.gov/research-emphasis/rural.html> )**

-Improving the Reach and Quality of Cancer Care in Rural Populations (RFA-CA-18-026)

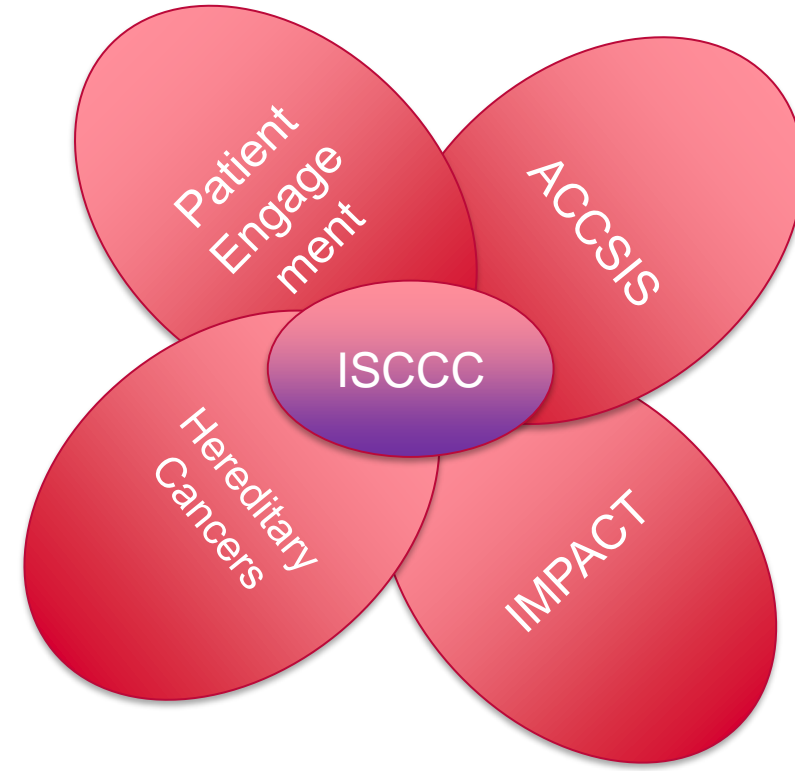
-Integration of Individual Residential Histories into Cancer Research (R21, R01)

-Academic Research Enhancement Award (Parent R15)

-Collaborative Minority Health and Health Disparities Research with Tribal Epidemiology Centers (R01 Clinical Trial Not Allowed) (PAR-17-484); (R21 Clinical Trial Not Allowed) (PAR-17-483)

# Implementation Science Centers for Cancer Control RFA

- 4-5 Research Centers
  - Implementation “Laboratories” Core
  - Methods Core
  - Principal Research Core
  - Network Cores



- 3 Advanced Centers P50 (\$2M per yr); 2 Developing Center P20 (\$1M per yr)
- **FY19 Budget: \$8M TC (\$40M TC over 5 years)**
- **RFA on track for a Fall release**

# IS-C3: Advance Implementation Science (IS) in Cancer Prevention and Control

- Establish “implementation laboratories” in cancer in health care, public health, and community settings to study rapid innovations in evidence-based cancer control interventions
- Develop IS methods cores to fill gaps in measurement and study design
- Develop and execute innovative research pilots on optimal strategies to adopt, implement, and sustain evidence-based care and interventions
- Improve understanding of ethical issues related to implementation and de-implementation
- Develop data resources for an IS data ecosystem
- Disseminate lessons learned to grantees, health care systems, community settings, and key stakeholders in the field via a network core