Thank you for joining today’s webinar. We will begin promptly at 12:00 pm Central.
Housekeeping

- Slides are available at www.ruralhealthinfo.org/webinars/rural-cancer-control

- Technical difficulties please visit the Zoom Help Center at support.zoom.us

If you have questions…
Featured Speakers

**Shobha Srinivasan, Ph.D.**, Senior Advisor for Health Disparities, Office of the Director, Division of Cancer Control and Population Sciences, National Cancer Institute

**Zaria Tatalovich, Ph.D.**, Geospatial Scientist, Surveillance Research Program, Division of Cancer Control and Population Sciences, National Cancer Institute

**Robin C. Vanderpool, DrPH**, Branch Chief, Health Communication and Informatics Research, Division of Cancer Control and Population Sciences, National Cancer Institute

**Amy Kennedy, Ph.D.**, Health Disparities Coordinator, Office of the Director, Division of Cancer Control and Population Sciences, National Cancer Institute

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**Introduction**

_**Dr. Shobha Srinivasan**_
Discovering Cancer Disparities Through Maps: Rural-Urban Map Story

Dr. Zaria Tatalovich

- Geospatial Activities at NCI
- Geospatial Resources
- Rural-Urban Map Story
Geospatial Activities at NCI

- NCI has a long history of collecting, measuring, mapping and analyzing, cancer related data
- These activities are part of larger effort to:
  - Better understand cancer health disparities
  - Inform targeted interventions to improve health and cancer outcomes in the areas in need

Addressing Cancer in a Geographic Context

- The role of spatial context across all areas of the cancer control continuum
**Scope of Geospatial Activities at NCI**

- Web-based Tools and Research Resources
- Small Area Estimates
- Geographic Patterns Analysis
- Spatial Analysis and Modeling
- Spatial Statistics
- Exposure Analysis
- Built Environment and Cancer
- Mapping and Visualization
- Funding Grants

**NCI’s Resources for Mapping and Pattern Analysis**

- Characterize areas based on cancer burden and other cancer related information
- Identify underserved areas
- Provide source of data and information for researchers
- Enhance communication of cancer related information
- Help generate hypothesis
- A collaborative effort between NCI and CDC
- Primary audience: cancer control planners

State Cancer Profiles, integrates cancer surveillance into cancer control planning, characterizes areas and demographic groups, and reveals health disparities.
GIS Portal for Cancer Research

Featured Geospatial Tools
Featuring interactive mapping and visualization of cancer-related geo-spatial data.

Cancer Map Stories
This section provides links to map stories developed by the National Cancer Institute (NCI) that discuss a cancer topic using a map-based explanation.

Rural-Urban Disparities in Cancer
Evidence shows that rural residents face serious disadvantages related to socioeconomic deprivation and limited access to quality healthcare relative to urban residents.

Tobacco Use & Lung Cancer
Tobacco use poses a considerable public health burden in the United States. In fact, it is the leading cause of preventable illness and death in this country.

Colorectal Cancer in Young Adults
Excluding skin cancers, colorectal cancer is the third most common cancer diagnosed in both men and women in the United States.
Map Story: Rural-Urban Disparities in Cancer

- An overview of recent contributions to understanding inequalities between populations residing in rural vs. urban counties in the US
- The focus is on disadvantages that residents of rural areas face relative to urban residents
- Summarizes our division’s efforts to improve the outcomes of cancer in rural areas

The maps of cancer incidence and mortality reveal the areas across the rural-urban continuum where the incidence and death rates from cancer are elevated...

Evidence suggests that some cancers are more common in rural areas while others are more common in urban areas. Among the four most common cancers, lung and colorectal cancers occur more often in rural populations...

Rural residents face challenges related to accessing healthcare services. Rural areas often have fewer primary and specialty care physicians as well as fewer home- and community-based service providers compared to urban areas...
Persistent poverty counties in the U.S. (with ≥20% of residents in poverty since 1980) are almost exclusively rural, as 83% of persistent poverty counties have entirely rural populations. These areas face social, structural, and behavioral challenges that may increase residents’ risk of developing cancer…

Populations living in rural communities have higher rates of risky health behaviors such as tobacco use and poor diet, placing them at higher risk of cancer and other chronic diseases…

Rural-urban differences in access to and utilization of cancer screening services likely contribute to disparities observed in cancer incidence and mortality. Studies have found that rural residents have lower rates of cancer screening and experience lower quality cancer care…

Recently, the National Advisory Committee on Rural Health and Human Services issued policy recommendations to the Secretary underscoring the importance of greater funding support for the Centers for Disease Control and Prevention, the Health Resources and Services Administration, and the National Cancer Institute (NCI) to develop, implement, and evaluate a rural patient navigation program to enhance care coordination, particularly in tribal communities and persistent poverty counties [32].

To better understand and improve cancer control in rural communities across the continuum (prevention, screening, diagnosis, treatment, survivorship, end-of-life), NCI’s Division of Cancer Control and Population Sciences undertook an in-depth analysis of its extramural research funded from 2011-2016 and found that only 3% of the division’s portfolio focused on rural populations. These findings provided an impetus for NCI to increase its investment in rural cancer control research and initiate strong partnerships with other national health agencies in this domain [33].
Rise in Telehealth Use Due to COVID-19

- Following the onset of the COVID-19 pandemic, there has been a dramatic increase in use of telehealth to deliver healthcare services.
Telehealth Use among HRSA-funded health Centers during COVID-19 Pandemic, MMWR Feb 2021

Stakeholder Input on Scientific Gaps and Research Needs Related to Delivery of Cancer-related Care via Telehealth (NOT-CA-20-080)

- The Request for Information (RFI) sought information on:
  1. **Scientific gaps** that need to be addressed as cancer-related care via telehealth becomes a more common part of routine clinical practice.
  2. **New resources or approaches** that may be needed to address these gaps
    - The RFI focused on **enduring and sustainable evidence-based approaches** in the use of telehealth to advance cancer prevention, detection, and control rather than short-term responses to the current pandemic.
    - **46 responses** from academic institutions, healthcare systems, patients/advocacy groups, professional associations, private sector, fed govt.
Population Groups of Interest

Who can benefit from telehealth care?

- The removal of travel and time burdens may be especially beneficial for:
  - Specialty care (i.e., pediatric oncology, rehabilitation), as these sites may be more geographically dispersed than treatment sites for standard care
  - Medically-fragile patients
  - Patients with time constraints due to work, childcare, and/or eldercare responsibilities
  - Patients in rural and geographically remote areas

*Categories are not mutually exclusive
**Broadband Access and Lung Cancer in Kentucky.** This county-level map of Kentucky visualizes fixed broadband access in those counties where the lung cancer incidence is greater than the Kentucky average (i.e., more than 89.6 cases per 100,000 persons). It then identifies connectivity gaps—the lighter the color, the lower the percentage of households with broadband access, as shown in the legend which divides access into five color-coded quintiles. The large cluster of counties in the Eastern Kentucky region is the broad target area for the L.A.U.N.C.H. initiative—where we see some of the highest lung cancer incidence and low broadband access (i.e., in the 0-20% or 20-40% ranges).

Is access to telehealth care equitable?

- Factors affecting access include:
  - A lack of broadband internet connection
  - A lack of a compatible digital device (e.g., smartphones, computers)
  - Limited digital literacy
  - Lower socioeconomic status, age, geography
- Can partnerships with community organizations be established to minimize travel burden and/or provide reliable access to devices and/or the internet?
- What is the efficacy and cost-effectiveness of providing devices and/or internet access to populations in need?

Analysis of RFI responses

Is delivery of telehealth care equitable?

- Telehealth-delivered care may be impacted by:
  - Language barriers
  - Ineffective communication
  - Lack of cultural competency
- Is the patient care experience comparable to an in-person visit?
- Does involvement from family members, interpreters, or other care workers in the telehealth visit increase patients' ease of use?
- Can telephone-only telehealth meet the needs of specific patients?

Analysis of RFI responses
Centers on Telehealth Research for Cancer-Related Care
RFA-CA-21-029 (P50 - Clinical Trial Required)

RFA Goals:

- Centers will generate and disseminate a robust evidence base for synchronous, patient-centered, sustainable telehealth models of cancer care delivery
- Each Center will leverage a clinical practice network able to support multiple cancer-focused telehealth research studies
- Centers will focus on access to care and digital divide challenges

Informational Webinar: https://healthcaredelivery.cancer.gov/media/telehealth-research.html

Due Date: July 20, 2021
Contact: Roxanne.Jensen@nih.gov or robin.vanderpool@nih.gov

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Telehealth in Cancer Care (NOT-CA-21-043)

- Highlights DCCPS’ interest in receiving investigator-initiated applications for conducting research on the use of telehealth in cancer-related care across the cancer control continuum.
- Studies focused on populations that experience inequities in access to care and have worse cancer outcomes compared to the general population are strongly encouraged.
- Synchronous and asynchronous interactions
- Patient-provider and provider-provider interactions
- Patient interactions include interactions with family members/caregivers
- Informational webinar:
- Contacts: Kelly.blake@nih.gov and Gurvaneet.Randhawa@nih.gov
NCI Telehealth and Cancer Care Delivery Webinar Series

- This series will highlight important topics related to transitioning from in-person health appointments to telehealth services as a way for multidisciplinary care teams to provide uninterrupted care to their patients during the COVID-19 pandemic.

**Target Audience:**
Mixed clinical, health services researchers, team science researchers, patients, and patient advocates.

<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Speakers</th>
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<tbody>
<tr>
<td>February 4, 2021</td>
<td>Post-Treatment Follow-up Care for Survivors of Lute and Colorectal Cancer through Telehealth Self Management Skills Building</td>
<td>Dr. Virginia Sub© City of Hope</td>
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<tr>
<td>June 11, 2021</td>
<td>Enhancing Cancer Care of Rural Dwellers Through Telehealth and Engagement</td>
<td>Dr. Debra Friedman© Vanderbilt University Medical Center</td>
</tr>
<tr>
<td>October 12, 2021</td>
<td>Optimizing Telehealth Across the Cancer Care Continuum During the COVID-19 National Emergency</td>
<td>Dr. Ana Maria Lopez© Sidney Kimmel Cancer Center at Jefferson</td>
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Pathways to Prevention (P2P)

Improving Rural Health Through Telehealth-Guided Provider-to-Provider Communication

- What is the uptake of different types of provider-to-provider telehealth in rural areas?
- What is the effectiveness of provider-to-provider telehealth for rural patients?
- What strategies are effective and what are the barriers and facilitators to implementation and sustainability of provider-to-provider telehealth in rural areas?
- What are the methodological weaknesses of the included studies of provider-to-provider telehealth for rural patients and what improvements in study design (e.g., focus on relevant comparisons and outcomes) might increase the impact of future research?
How the Rural Cancer Control Agenda Fits into DCCPS’ Mission for Health Disparities and Health Equity

Dr. Amy Kennedy

DCCPS seeks to eliminate cancer-related disparities by promoting and conducting health equity research that identifies and addresses the mechanisms contributing to disparities across the cancer control continuum and throughout the human lifespan.

Learn more about the background and mission of Health Disparities and Health Equity.

DCCPS Health Disparities and Health Equities Research Areas

- Longitudinal Cohort Studies
- ‘Omics Research
- Epidemiological Studies
- Health Care Delivery Research
- Social and Behavioral Intervention Research

https://cancercontrol.cancer.gov/hdhe
DCCPS Funding History for Health Disparities Research

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
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<tbody>
<tr>
<td>2016 - 2017</td>
<td>Emphasis on rural cancer disparities, Cancer Currents blogs</td>
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<tr>
<td>May 2017</td>
<td>Research Meeting: “Rural Cancer Control: Challenges &amp; Opportunities,” University of Memphis SPH, Memphis, TN</td>
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<td>June 2017</td>
<td>CEBP commentary: “Making the Case for Investment in Rural Cancer Control: An Analysis of Rural Cancer Incidence, Mortality, and Funding Trends”</td>
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<td>October 2017</td>
<td>NCI Workshop: “Understanding Definitions of Rural/Rurality: Implications for Rural Cancer Control,” NCI Shady Grove</td>
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<tr>
<td>May 2018</td>
<td>Research Meeting: “Accelerating Rural Cancer Control,” Natcher Auditorium – NIH Main Campus</td>
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<td>November 2018</td>
<td>CEBP paper: “An Overview of the National Cancer Institute’s Initiatives to Accelerate Rural Cancer Control Research” and “Opportunities and Challenges in Rural Cancer Research: An Epidemiologic Perspective”</td>
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<tr>
<td>FY18 &amp; FY19</td>
<td>P30 Rural Administrative Supplements</td>
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<tr>
<td>April 2018 &amp; Sept 2019</td>
<td>RFA: “Improving the Reach and Quality of Cancer Care in Rural Populations” (R01)</td>
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<tr>
<td>May 2020</td>
<td>Geographically Underserved Areas Admin Supplements (NOT-CA-20-035)</td>
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<tr>
<td>August 2020</td>
<td>CEBP paper: “Advancing Rural Cancer Control Research: NCI Efforts to Identify Gaps and Opportunities”</td>
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<tr>
<td>September 2020</td>
<td>RFA: “Social and Behavioral Intervention Research to Address Modifiable Risk Factors for Cancer in Rural Populations” (R01)</td>
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<tr>
<td>May 2021</td>
<td>P30 Persistent Poverty Administrative Supplements</td>
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<tr>
<td>May 2021</td>
<td>NOSI Persistent Poverty (NOT-CA-21-071)</td>
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Improving the Reach and Quality of Cancer Care in Rural Populations (R01 Clinical Trial Required)

- **RFA Goal**: Improve the quality of cancer care in rural areas among low-income and/or underserved populations
- **Focus**: Strategies for delivering cancer care and treatment in rural areas
- 9 applications were selected for funding from the two rounds of the RFA, which included both observational and intervention studies focusing on:
  - Survivorship in rural primary care
  - Palliative care
  - Symptom management
  - Financial toxicity and navigation
  - Multi-level telehealth interventions
  - Community-based patient navigation for colonoscopy

Social and Behavioral Intervention Research to Address Modifiable Risk Factors for Cancer in Rural Populations (R01 Clinical Trial Required)

- **Purpose of this FOA**: solicit applications to develop, adapt, and test individual-, community- or multilevel interventions to address modifiable risk factors for cancer in rural populations.
- **Applications should focus on primary prevention** and assess and address one or more of the social and behavioral risk factors that contribute to cancer disparities in rural populations: tobacco use; diet, physical activity and weight; alcohol use; UV exposure; and HPV vaccination
- **Applications should also assess and address myriad social determinants of health, cultural factors, and health care and technology access barriers** that may contribute to rural cancer disparities.
- **Next receipt date**: January 18, 2022
Persistent Poverty Areas

- **Persistent Poverty (PP) area:** a county has had poverty rates of 20% or more in U.S. Census data from 1980, 1990, and 2000
- Current categorization includes ~10% of U.S. counties
  - Most in the rural South
- Working with USDA to expand the definition to the census tract level (*more granular*)
  - By expanding, each of the 50 states, including D.C., has a PP area

Persistent Poverty Counties, 2015

[Image of map showing persistent poverty areas]

Persistent Poverty and Cancer

NCI study found that people who live in counties in the U.S. that experience persistent poverty are more likely to die from cancer than people in other counties. This risk was over and above the heightened risk seen in areas experiencing current—but not persistent—poverty.


We wondered: How do we extend our work into these persistent poverty areas?

Fig 1. 2007–2011 age-adjusted cancer mortality rates for non-persistent poverty versus persistent poverty counties. Cancer mortality rates are expressed as deaths per 100,000 people per year, except breast and cervical cancers (females only) and prostate cancer (males only)

[Image of bar chart showing cancer mortality rates]


Efforts to Advance Research in PP Counties

- **Administrative Supplements, R01 grants** (NOT-CA-20-035)
  - Targeted R01 grants to address cancer control research in “geographically underserved areas”
  - Six awards made in 2020

- **Administrative Supplements, P30 CCSG grants**
  - Targeted P30 Cancer Center Support Grants (CCSGs) to advance research in persistent poverty counties
  - Awards pending, September 2021

- **Notice of Special Interest (NOSI), P01 grants** (new) (NOT-CA-21-071)
  - Soliciting new P01 applications proposing cancer control research in persistent poverty counties

Research in Geographically Underserved Areas (GUAs)

- **Administrative Supplement Opportunity (May 2020)**
  - Solicited applications to address cancer control research in GUAs:
    - Areas and populations with high and/or persistent poverty [that may include Health Professional Shortage Areas (HPSA) counties or Frontier and Remote (FAR) area zip codes]
  - Six awards made – each addressing unique challenges and opportunities for cancer control and prevention strategies to improve health and lessen the burden of cancer in GUAs
Persistent Poverty P30 CCSG Admin Supplement

- **Purpose of opportunity**: provide resources to support multidisciplinary teams at NCI-Designated Cancer Centers, in collaboration with clinics that serve underserved populations living in persistent poverty areas, to plan, implement, and sustain a cancer control research program that focuses on low-income and/or underserved populations

- **Long-term goal**: to build the capacity for health care clinics and/or safety net providers to build cancer prevention and control research for the implementation of evidence-based programs and practices focused on low-income and/or underserved populations in persistent poverty areas

- **Awards pending, September 2021**

Notice of Special Interest (NOSI): Expanding Cancer Control Research in Persistent Poverty Areas (NOT-CA-21-071)

- NOSI to provide resources to support *highly collaborative, multi-disciplinary Program Projects (P01s)* that focus on the *development and conduct of cancer control research in low-income and/or underserved populations living in persistent poverty areas*

- Interest in programs that address the challenges and opportunities related to working in partnership with local clinics and other health-related organizations to enhance the prevention of cancer and delivery of cancer care strategies to reduce the burden of cancer in PP areas

- Proposed scientific projects should include multilevel interventions that address underlying factors affecting poverty and examine other social determinants of health in one or more areas across the cancer control continuum, including prevention, diagnosis, treatment, survivorship, and end-of-life care research

- **First Available Due Date: September 24, 2021**

Rural Health Agenda Moving Forward

- Improving rural health remains a top priority of the Division and Institute
- We have highlighted specific initiatives and programs that focused solely on rural cancer control, but all of our agendas encourage work in rural areas
- Our rural efforts have been successful in part due to the work of investigators to ensure that their research:
  - is culturally adapted to the needs of rural communities,
  - utilizes community-based participatory research approaches to involve community members and partners in all aspects of the research process
  - includes a sustainability plan so that the interventions implemented can continue after the project has ended, in an effort to achieve health equity for the rural community
Thank you!

Contact Information:

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Zaria Tatalovich: tatalovichzp@nih.gov
Robin Vanderpool: robin.vanderpool@nih.gov
Amy Kennedy: amy.kennedy@nih.gov

https://cancercontrol.cancer.gov/
Questions?

Thank you!

• Contact us at ruralhealthinfo.org with any questions

• Please complete webinar survey

• Recording and transcript will be available on RHIhub website