# CANCER SURVEILLANCE AND ACCESS TO CARE IN RURAL AMERICA

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#### RURAL AND MINORITY HEALTH RESEARCH CENTER/RMHRC

#### **RMHRC Mission Statement**

Our mission is to illuminate, and address, health and social inequities experienced by rural and minority populations to promote the health of all through policy-relevant research and advocacy.

#### **Areas of Expertise**

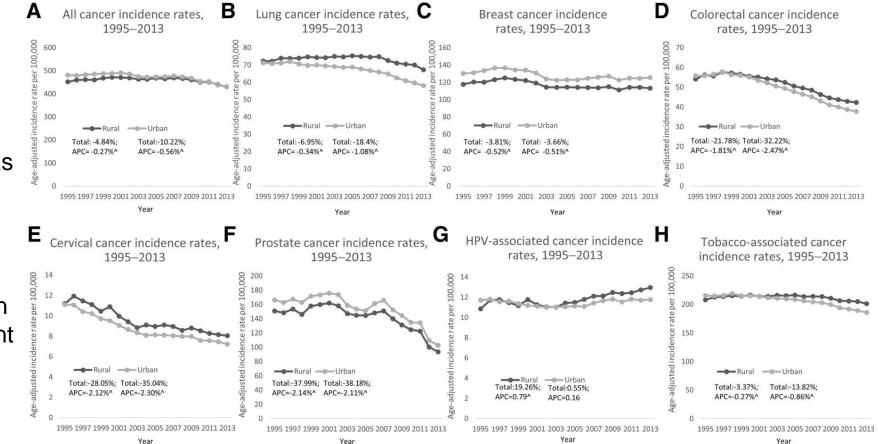
- Cancer prevention and control
  - Jan Eberth, Whitney Zahnd, Peiyin Hung, Swann Adams, Heather Brandt
- Maternal and child health
- Health care access
- Social determinants of health
- Health equity
- Health economics



# BACKGROUND

Rural populations have higher incidence of tobacco- and HPVassociated cancers, and colorectal cancer. They have later stage cancers as well.

Non-Hispanic White and Black rural residents had higher incidence rates than their urban race-concordant peers.



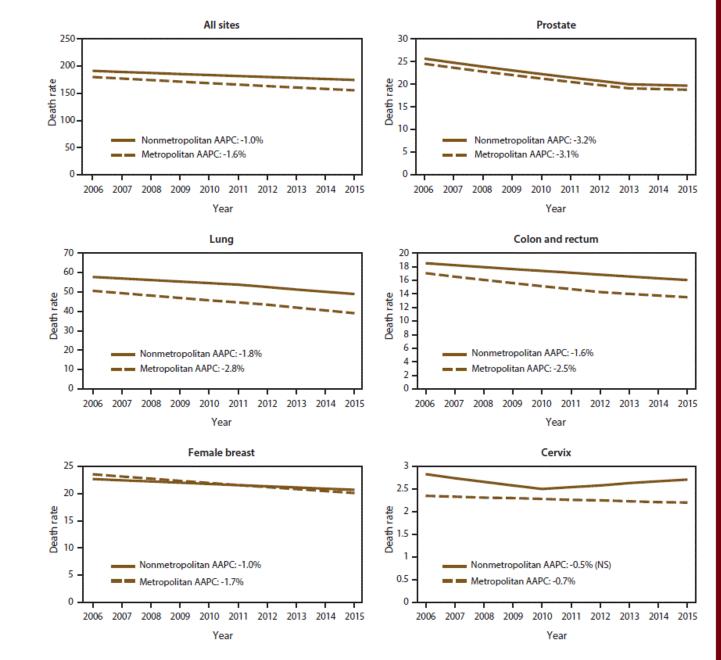
<sup>3</sup> Zahnd et al. Rural-urban differences in cancer incidence and trends in the U.S. CEBP. 2018. Zahnd et al. Rural-urban disparities in stage of diagnosis among cancers with preventive opportunities. AJPM. 2018.



### BACKGROUND

- Overall cancer mortality declined slower in nonmetro vs. metro areas between 2006-2015.
- Major differences between metro and nonmetro areas observed for lung, colon and rectum, and cervical cancers – all cancers that can be detected early through screening.

Henley J et al. Invasive cancer incidence, 2004-2013, and deaths, 2006-2015, in nonmetropolitan and metropolitan counties – United States. MMWR Surv Summ. 2017;66(14):1-13.



### **SETTING THE STAGE...**

- Persistent (and for some cancers, widening) rural-urban cancer disparities raise concerns about access and underutilization of cancer care, as well as insufficient care coordination and/or lower quality of care.
- Fewer providers (and consolidating care to urban areas) may hinder access to preventive, diagnostic, and cancer treatment service for rural residents.



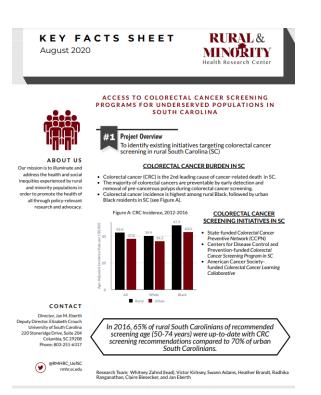
### **RMHRC PROJECTS**

- 2016-2017 Colorectal Cancer Screening Bypass Behavior & Outcomes
- 2018-2019 Rural Cancer Environmental Scan
- 2019-2020 Cancer Prevention & Control in Rural Hospitals
- 2019-2020 Planning and Pilot Testing of Evidence-Based Cancer Prevention and Control Interventions in RHCs
- 2020-2021 Assessing Cancer Care Coordination in RHCs During a Pandemic



#### RESEARCH PRODUCTS ON RURAL HEALTH RESEARCH GATEWAY AND RHI HUB

- Publications
- Key Facts Sheets
- Chartbooks
- Webinars
- Toolkits
- Literature Summaries



**Rural Tobacco Control and Prevention Toolkit** 

#### Rural Tobacco Control and Prevention Toolkit

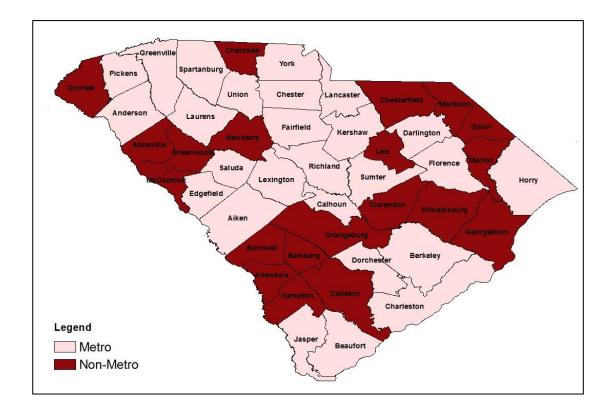
Welcome to the Rural Tobacco Control and Prevention Toolkit. This toolkit provides evidence-based examples, promising models, best practices, and resources that your organization can use to implement programs for tobacco control and prevention.

There are seven modules in this toolkit. Each module contains information and links to resources that your organization can use to design, implement, evaluate, sustain, and disseminate rural programs for tobacco control and prevention. There are more resources on general community health strategies available in the <u>Rural Community Health Toolkit</u>.



#### **RURAL CANCER ENVIRONMENTAL SCAN**

The Rural Colon and Cervical Cancer Environmental Scan (RCCC) aimed to identify opportunities for improving screening uptake, follow-up of abnormal results, and timeliness of cancer treatment received among rural SC residents.





## **RCCC DATA SOURCES**

• Healthcare location data:

- National Breast and Cervical Cancer Early Detection Program providers
- Vaccines for Children registered providers
- Colon Cancer Prevention Network referring providers
- Medical personnel from SC Labor & Licensing Board and CMS Physician Compare
- CMS Provider of Service Files
- Pharmacy data from the SC Labor & Licensing Board
- Cancer treatment facilities from SC Central Cancer Registry

#### $_{\odot}$ Epidemiologic and outcomes data:

- Behavioral Risk Factor Surveillance System
- SC Ambulatory Surgery Discharge Database (colonoscopy data)
- o SC Central Cancer Registry Data

o Interviews of healthcare providers, patients, and other rural stakeholders



# RURAL-URBAN DISPARITIES IN COLORECTAL CANCER BURDEN AND WORKFORCE

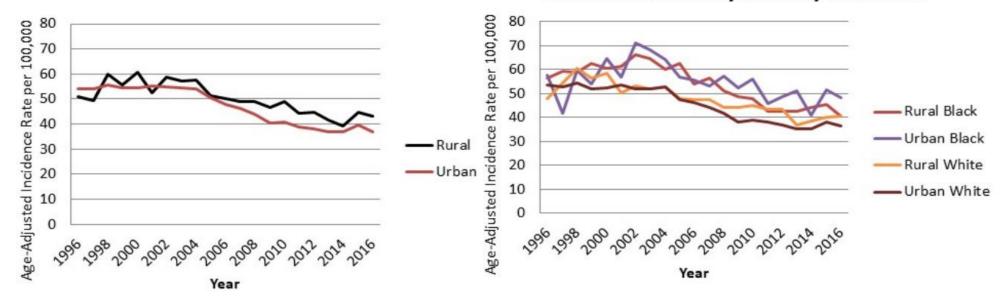
Selected findings from projects co-sponsored by NCI and HRSA, and an American Cancer Society Mentored Research Scholar Award (PI: Eberth)



#### **COLORECTAL CANCER INCIDENCE IN SC**

Figure A: Age-Adjusted Colorectal Cancer Incidence Rates

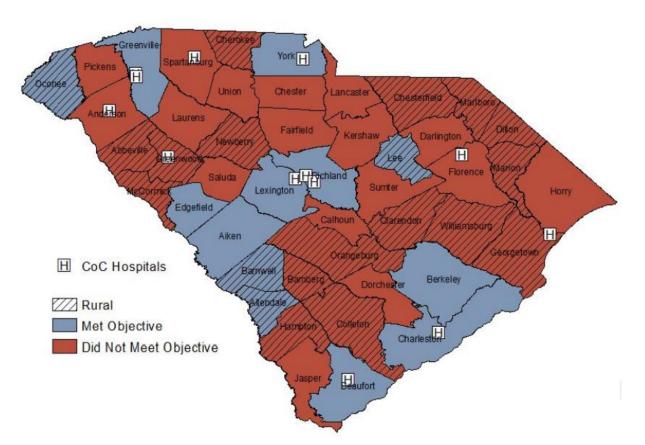
#### Figure B: Age-Adjusted Colorectal Cancer Incidence Rates by Rurality and Race



Since 1996, urban residents have experienced a larger decline (-2.4%) in CRC incidence than their rural peers (-1.1%). Both rural and urban blacks are most impacted.



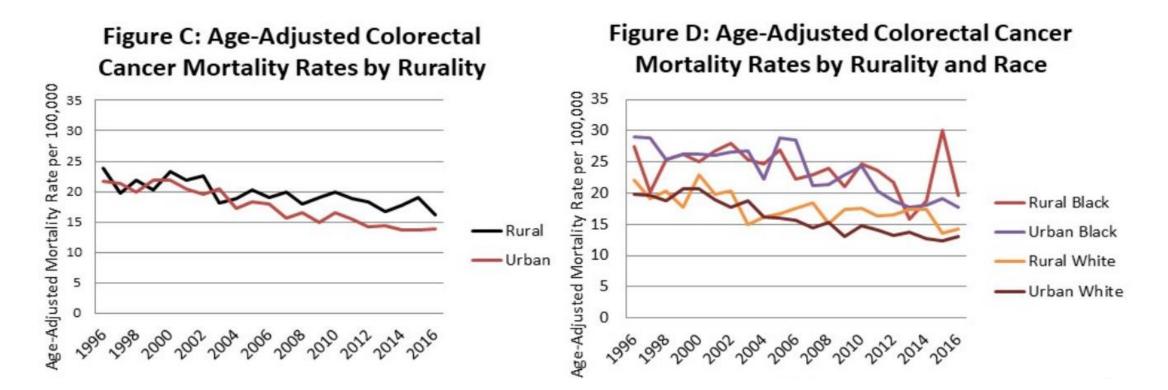
#### **CRC INCIDENCE OBJECTIVE, HEALTHY PEOPLE 2020**



*HP 2020 Objective C-9* Target: 40.0 new cases per 100,000 population



#### **COLORECTAL CANCER MORTALITY IN SC**

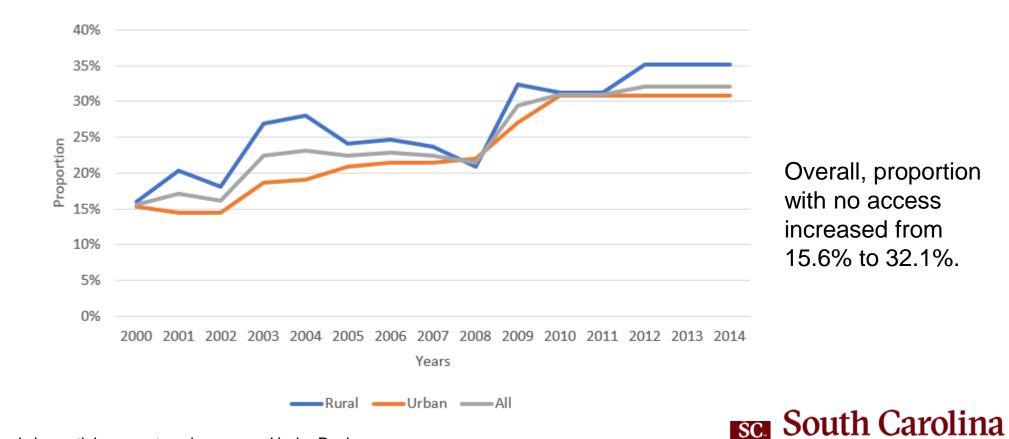


Significant declines in mortality have been shown for all groups except rural Black residents.



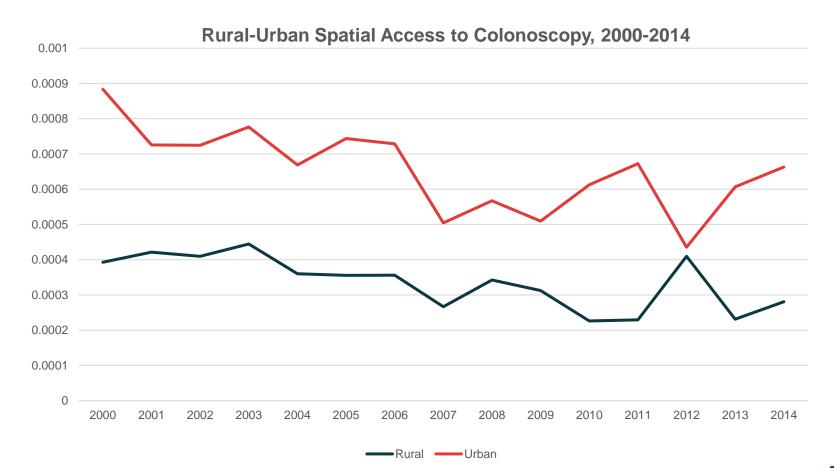
### **ACCESS TO COLONOSCOPY IN SC**

Proportion of ZCTAs with no access to colonoscopy within 30 minutes travel time



Zahnd et al. Trends in spatial access to colonoscopy. Under Review.

# ACCESS TO COLONOSCOPY IN SC

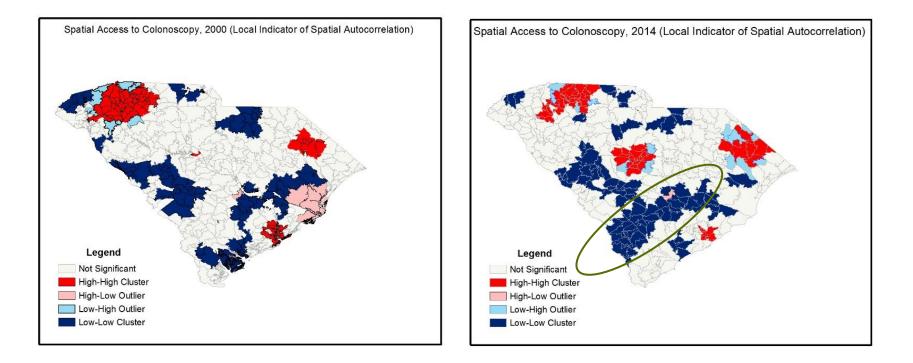


Median spatial accessibility decreased in both urban and rural ZCTAs, but spatial accessibility was significantly higher in urban ZCTAs most years.

\* Spatial accessibility scores account for supply and potential demand.



### **ACCESS TO COLONOSCOPY IN SC**

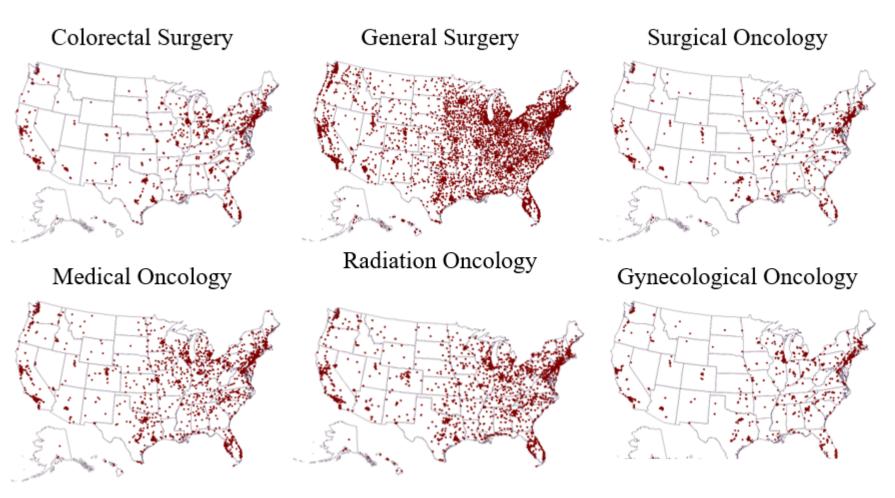


Clusters of low spatial access grew over time and were largely situated in rural areas of the state, and in the Lowcountry. Adjusted models found that access did not predict odds of late stage colorectal cancer.



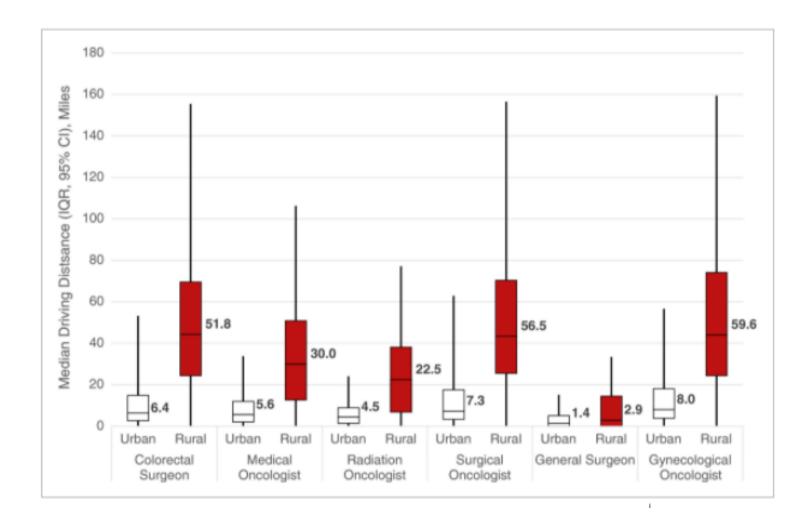
### **LOCATIONS OF CANCER SPECIALISTS, 2018**

About 50% of rural residents must travel 60+ miles to reach the nearest colorectal surgeon or surgical oncologist.



Hung et al. Geographic disparities in residential proximity to colorectal and cervical cancer care providers. Cancer. 2019;126(5):1068-76.

#### **TRAVEL TIME TO CANCER SPECIALISTS, 2018**



Nearly 1 in 5 rural Americans live >60 miles from a medical oncologist.



### DISCUSSION

- For many cancers, widening rural-urban disparities have been observed.
- Access to cancer specialists in rural areas is limited.
  - Studies have shown patients who live farther from care are less likely to receive appropriate diagnosis/treatment.
- Few EBIs to increase cancer screening have been implemented in RHCs; opportunities to use/evaluate Community Guide supported EBIs



#### DISCUSSION

States, tribes and territories have an opportunity to examine their own data and set goals & objectives around rural cancer control in their respective cancer plans (Recommendation #5 of 2019 NACRHHS report).

Over the next year, members of the CPCRN Rural Cancer Workgroup are undertaking:

- Content analysis of existing cancer control plans to review rural data, goals, objectives, and strategies
- Interviews with cancer control program directors and coalition leaders about how rural data and stakeholders are incorporated in cancer plan development
- Development of a resource guide for coalitions where to find and how to use rural cancer data in your plans





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# THANKS!

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