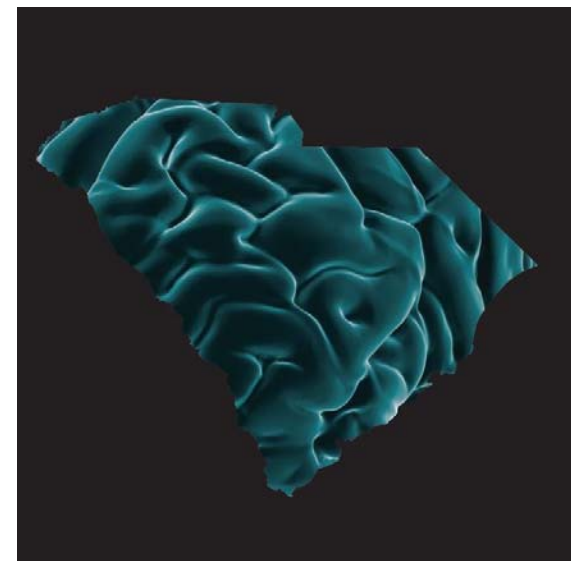


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Social Determinants of Health and Alzheimer's Disease Risk by South Carolina Counties

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CCADMR Seminar
May 10, 2019



Presentation Outline

- Social Determinants
 - Definition
 - Examples
 - County-level Maps
 - ADRD Prevalence by County
 - Current Registry Studies focusing on Social Determinants
-

Background–Social Determinants



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- Social determinants of health (SDOH) are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.



- Understanding the relationship between how population groups experience “place” and the impact of “place” on health is fundamental.

Source: CDC Health People Healthy People 2020

SDOH cont.



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Source: CDC
Health People
Healthy People
2020

Rural/Urban



Rurality

- Higher ADRD prevalence (and mortality) observed in rural compared to urban areas

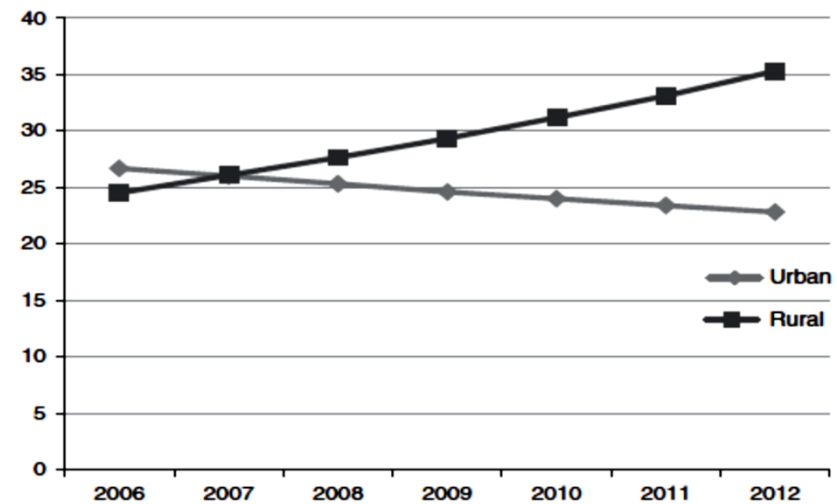


Figure 2. Median trajectories in dementia mortality by urban/rural in China, 2006 to 2012, adjusted for age, sex, and region.

Yin P, Feng X, Astell-Burt T, Page A, Liu J, Liu Y, et al. Temporal Trends and Geographic Variations in Dementia Mortality in China Between 2006 and 2012. *Alzheimer Dis Assoc Disord.* 2016;30(4):348-53

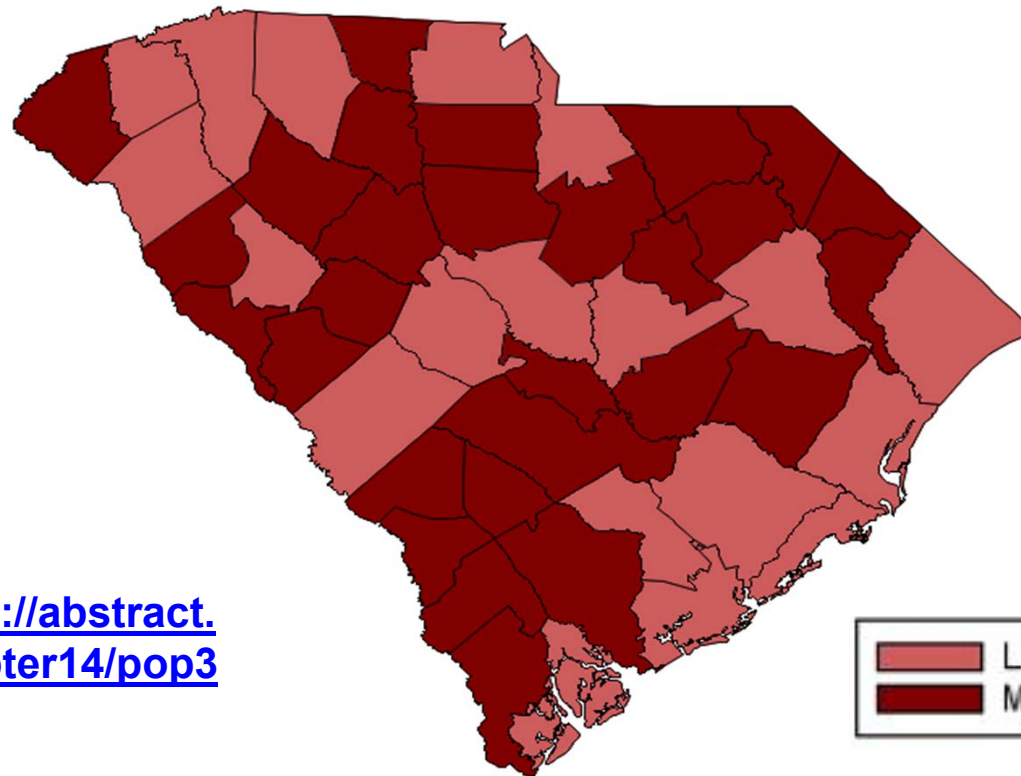
Rural/Urban



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Counties by Percent Rural



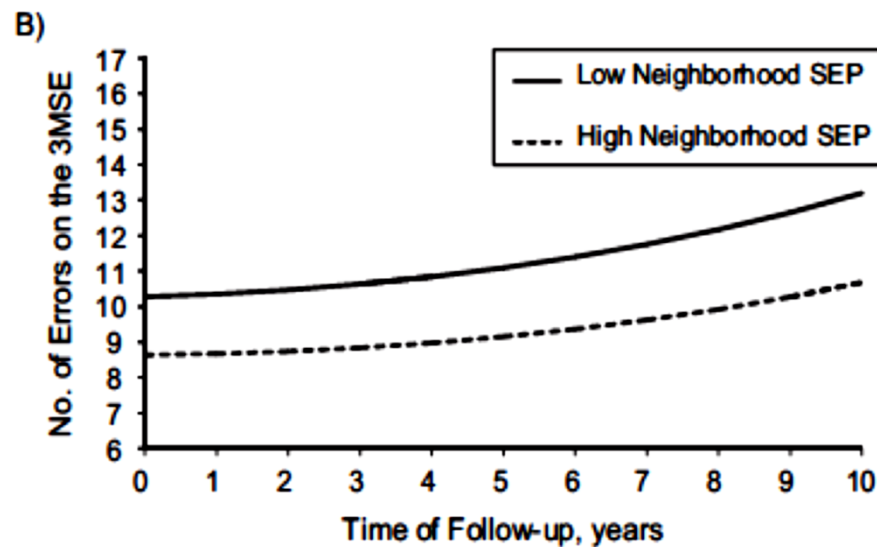
Source: <http://abstract.sc.gov/chapter14/pop31.html>

Neighborhood SES



Neighborhood Socioeconomic Status

High NSES plays a protective
role for cognitive function



Al Hazzouri AZ Al, Haan MN, Osypuk T, Abdou C, Hinton L, Aiello AE. Neighborhood socioeconomic context and cognitive decline among older mexican Americans: Results from the sacramento area latino study on aging. *Am J Epidemiol.* 2011;174(4):423–31.

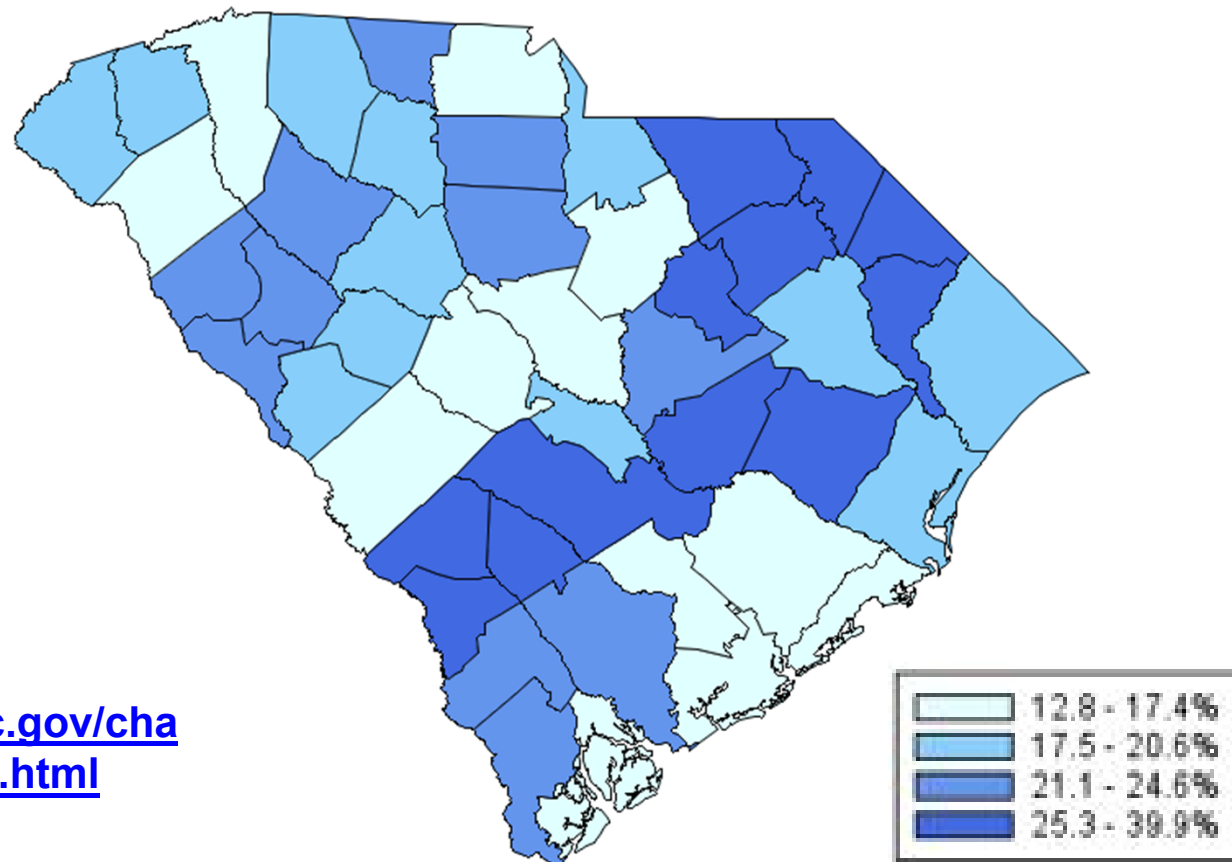
Poverty



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Percent Below Poverty Level



Source:
<http://abstract.sc.gov/chapter13/income12.html>

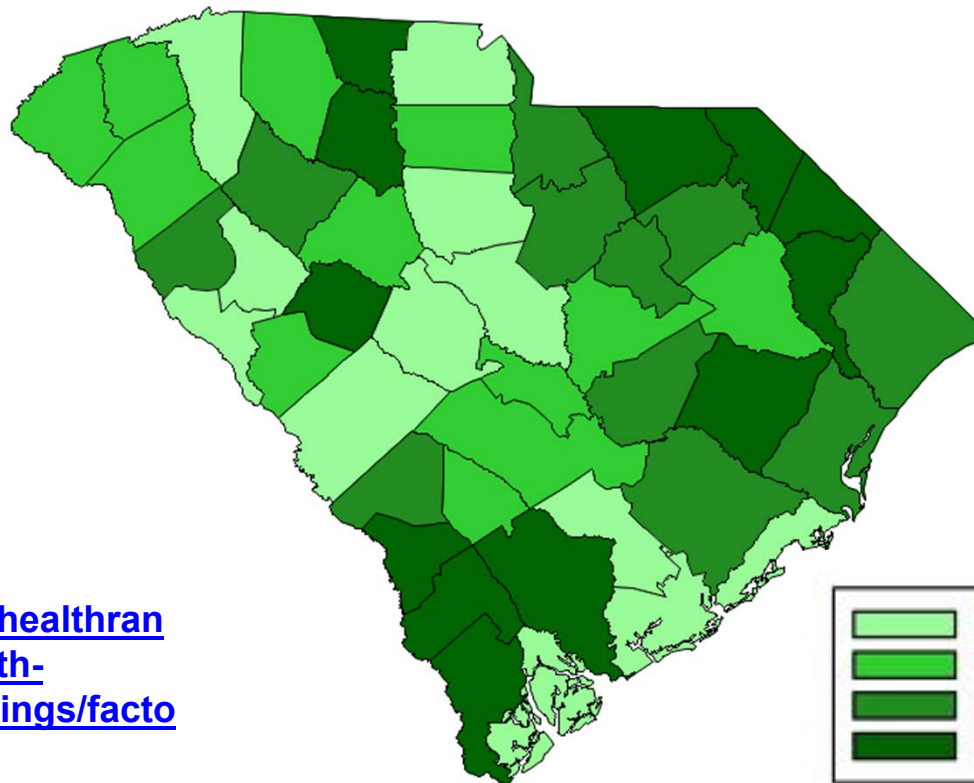
Access to Healthcare



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Counties Ranked by Access to Clinical Health Care



Source:

<http://www.countyhealthrankings.org/app/south-carolina/2014/rankings/factors/2>

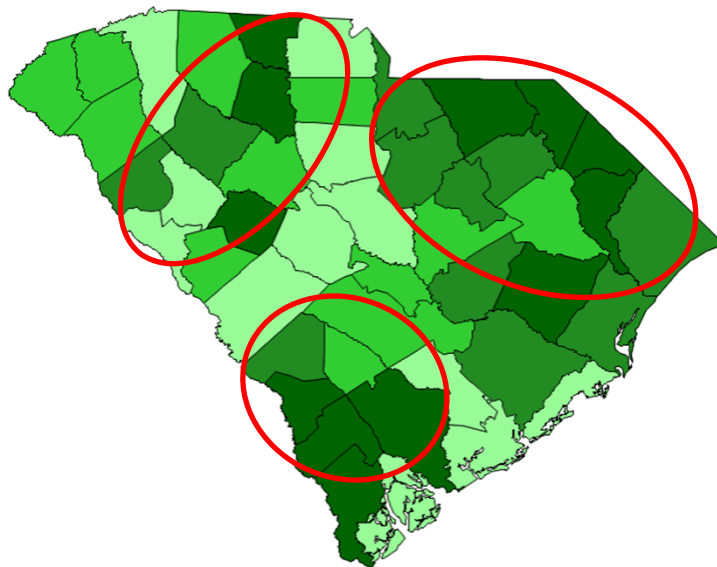
ADRD Prevalence by County



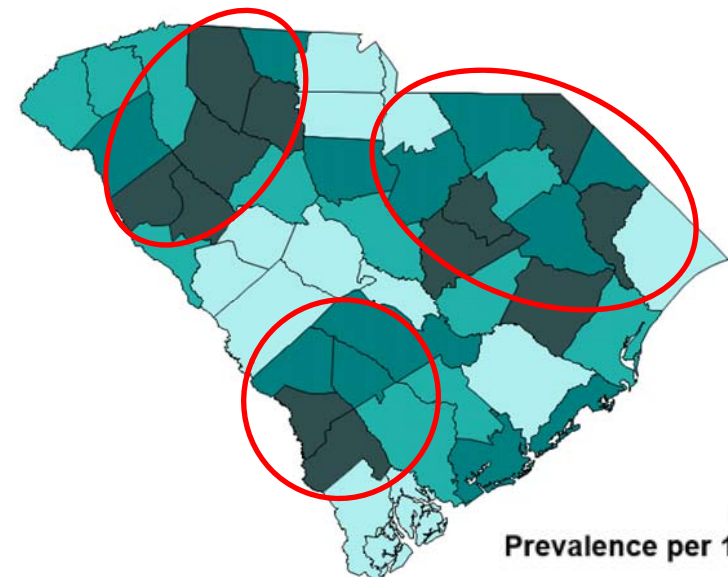
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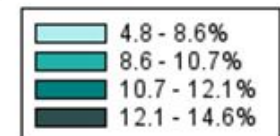
SDOH Map Overlay, 2014



ADRD Prevalence 65+, 2014



Prevalence per 100



*Includes maps for rurality, healthcare access, and poverty. Darker counties are considered to be at higher risk.

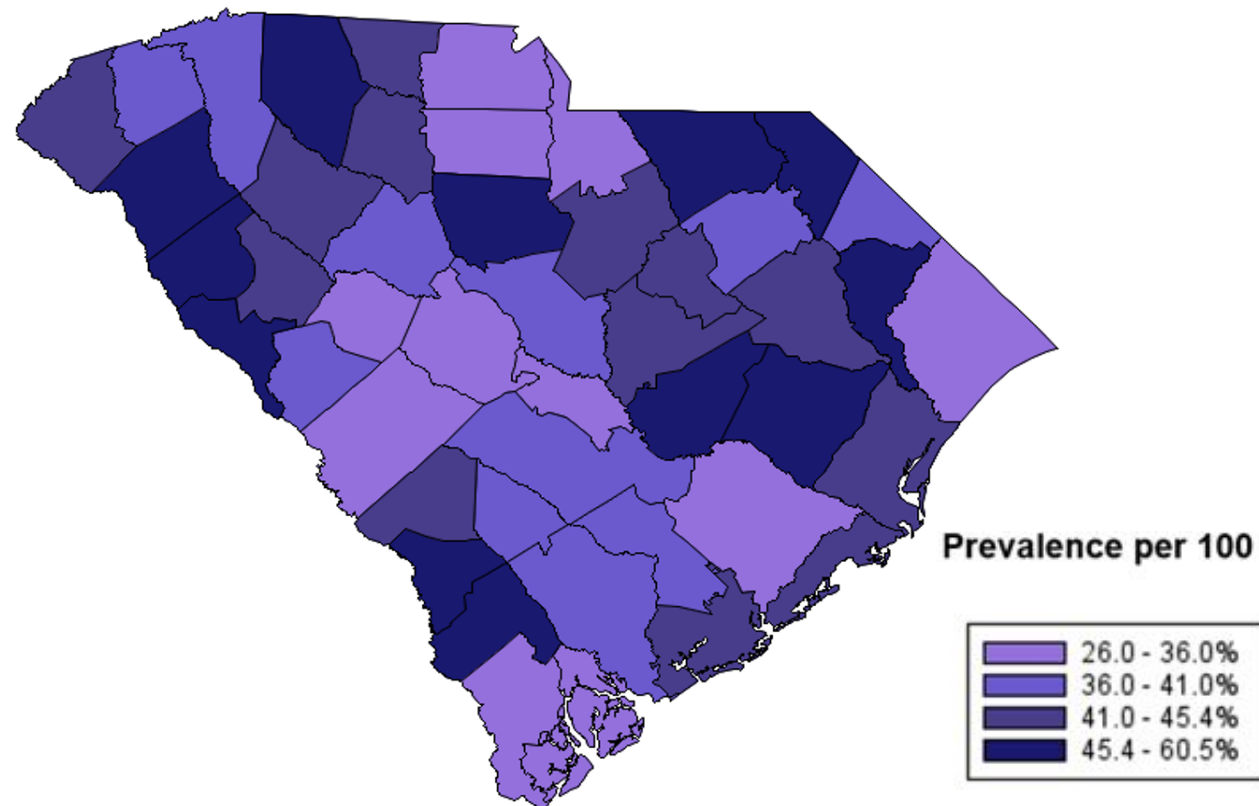
ADRD Prevalence by County



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ADRD Prevalence for Individuals 85+, 2014



Current SDOH Research

- Project 1:

- 1) Investigate associations between county level neighborhood characteristics and ADRD incidence



- 2) Estimate the associations between neighborhood characteristics and AD behavioral symptoms among community-dwelling older adults and nursing home residents.
- 3) Estimate the associations between neighborhood characteristics and depression among caregivers who live with the individual with AD.

Current SDOH Research cont.



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- Project 2:

- 1) **Determine whether sociodemographic factors (e.g. race, gender, geographic location) contribute to ADRD prevalence across counties in South Carolina.**
- 2) **Examine variation of health-care utilization by race, rural/urban counties, ADRD type, and co-morbid conditions.**



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If you are interested in requesting data or would like to learn more about the Registry contact us at:

osainfo@mailbox.sc.edu

