P20 PILOT PROJECT:

Disparities of Health Literacy in the Context of Kidney Cancer and Smoking

Project team

SIU School of Medicine

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- Urologic oncology
- Cancer genomics

Danuta Dynda, MD
- Research assistant professor

Kevin McVary, MD, FACS
- Co-investigator/mentor

WU School of Medicine

Erin Linnenbringer, MS, PhD
- Social-behavioral scientist
- Population health disparities

Kidney Cancer Basics

Among the 10 most common cancers in both men and women

- Lifetime risk of approximately 1 in 63 (1.6%)
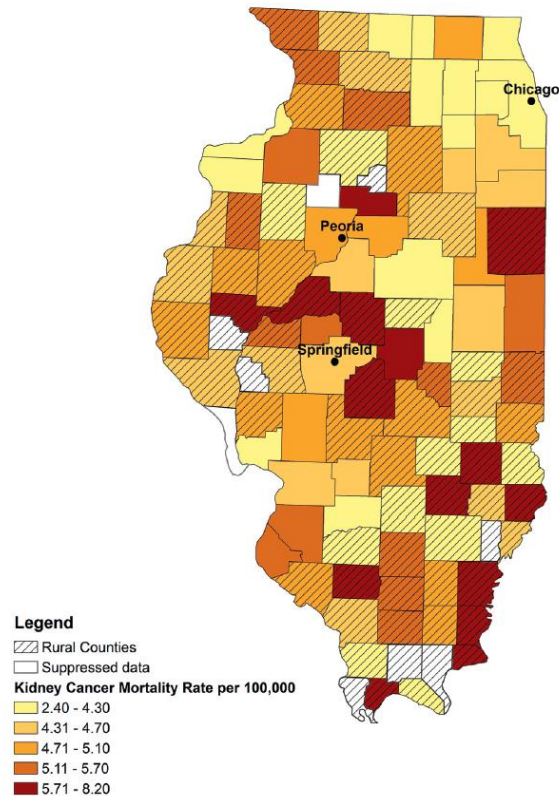
2015 American Cancer Society estimates:

- 61,560 new cases of kidney cancer in the United States
- 14,080 people (9,070 men and 5,010 women) deaths from the disease

Average age at diagnosis = 64 years

Known risk factors:

- Smoking
- Obesity
- Rare genetic syndromes

Kidney Cancer: Regional perspective

Legend

Rural Counties
Suppressed data

Kidney Cancer Mortality Rate per 100,000

2.40 - 4.30
4.31 - 4.70
4.71 - 5.10
5.11 - 5.70
5.71 - 8.20

Illinois county map shows age adjusted kidney cancer mortality rate per 100,000 individuals by quintile from 1990 to 2010.

Map of age-adjusted kidney cancer mortality rates across Illinois counties, 1990-2010.

Published in:
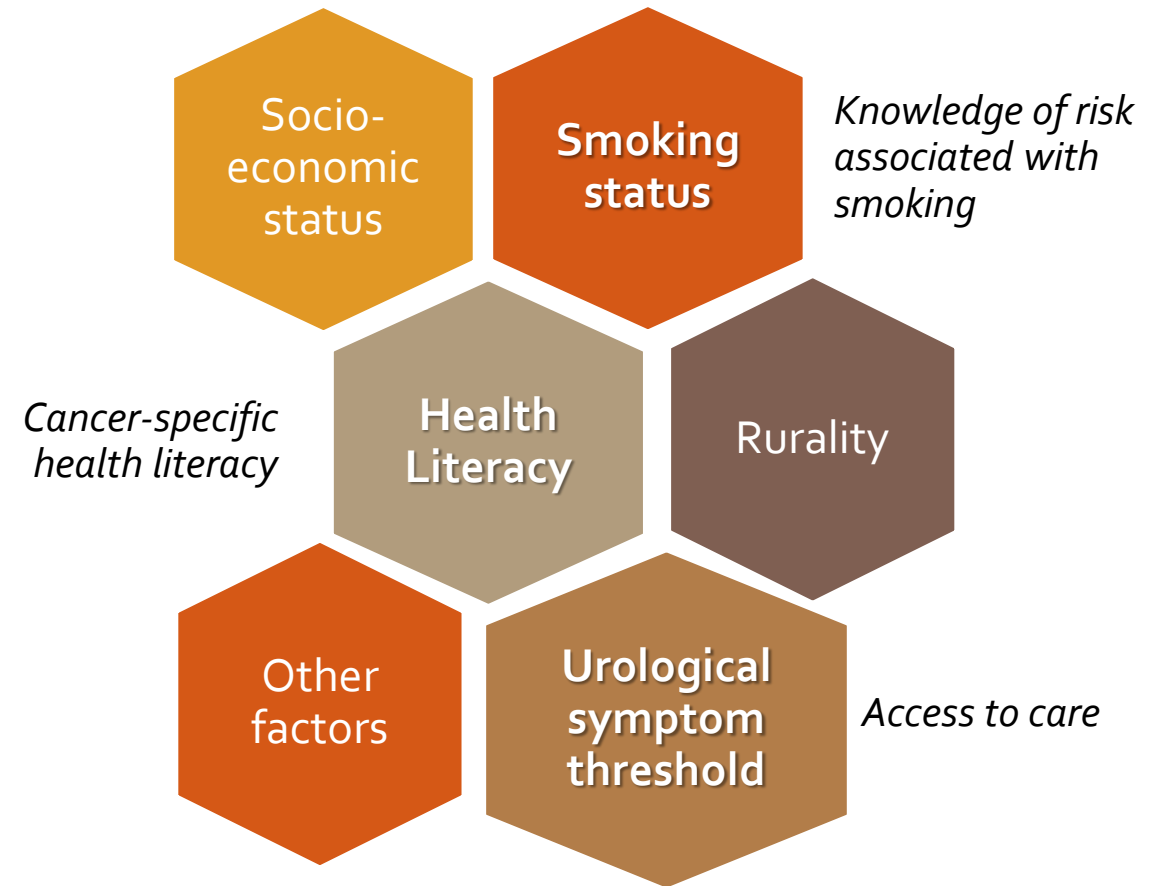Frye TP, Sadowski DJ, Zahnd WE, Jenkins WD, Dynda DI, Mueller GS, Alanee SR, McVary KT. Impact of county rurality and urologist density on urological cancer mortality in Illinois. *Journal of Urology*. 2015; 193(5)1608-13
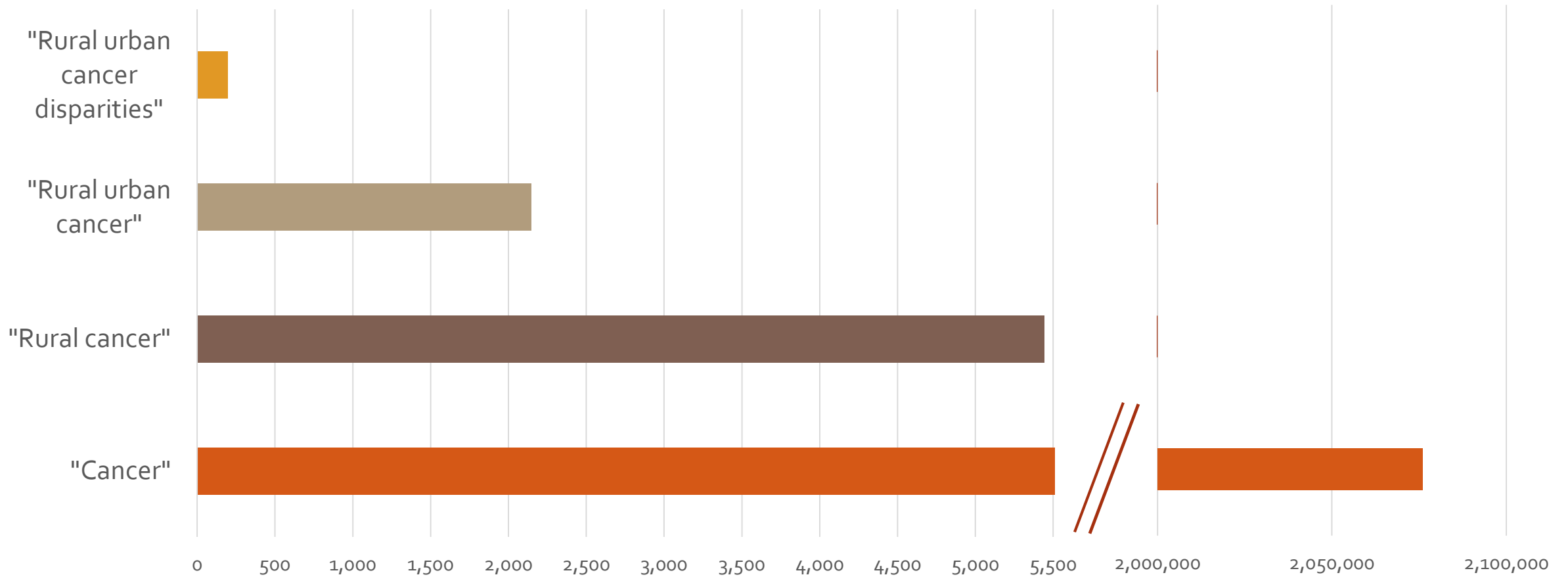
Kidney Cancer: Sociobehavioral perspective

Relationships among social & behavioral risk factors have not been adequately examined

- With regards to kidney cancer

- With regards to urban/rural disparities

Socio-economic status

Smoking status

Knowledge of risk associated with smoking

Cancer-specific health literacy

Health Literacy

Rurality

Other factors

Urological symptom threshold

Access to care

PubMed citations

Filters set to "human" and "English"; retrieved November 19, 2015

Specific aims & research approach

Survey a total of 300 patients (ages 40+) from 5 urology and primary care clinics

By geographic region (urban vs. rural):

1) Examine health literacy and cancer literacy

2) Investigate knowledge of the relationship between smoking and kidney cancer

3) Compare threshold for bother caused by general urologic symptoms

How did we get here?

- SIU team, led by Dr. McVary, responded to the initial RFA

- Reviewed list of potential Washington University collaborators & found a good fit in Dr. Kim Kaphingst

- Pilot project was accepted and submitted with the P20 proposal

- Made changes to the project team following reviewers' comments & staffing changes

Why collaborate in the first place?

- Stronger transdisciplinary approach

- More diverse patient populations

- Opportunities for cross-site mentorship

Questions & Comments