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# Rural Disparities in Health and Health Care by Race and Ethnicity

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Webinar Presentation:  
Rural Health Research Gateway  
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## Agenda

- Background
- County-level differences in mortality
- Individual differences in self-rated health
- Disparities in access to care
- Implications



## Background

- Rural-urban disparities in health and access to care are well-documented, with rural residents tending to fare worse
- Disparities in health and health care access by race and ethnicity are also well-documented, with many groups faring worse than non-Hispanic White individuals



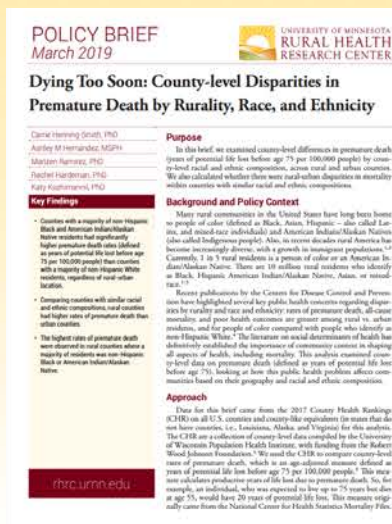
## Background, continued

- Rural areas have always been racially and ethnically diverse, and are increasingly so in recent years
- Today, one in five rural residents identifies as a person of color or as Indigenous
- Still, most research on health disparities focuses either on rural-urban differences or on racial and ethnic differences, without a specific focus on *within-rural* differences by race and ethnicity



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## County-Level Differences in Mortality



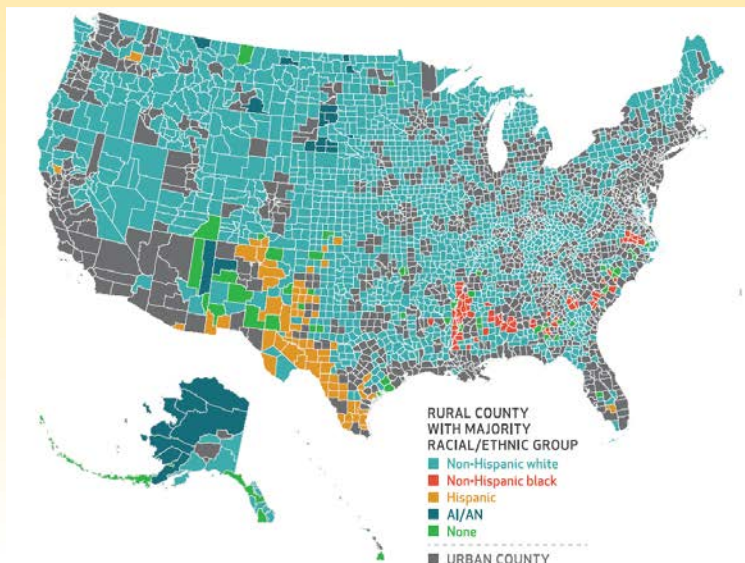
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## Research Question and Methods

- Among rural counties, how does mortality vary by racial and ethnic composition?
- Methods:
  - Data come from 2017 County Health Rankings
  - Compared rural counties by their majority racial or ethnic group



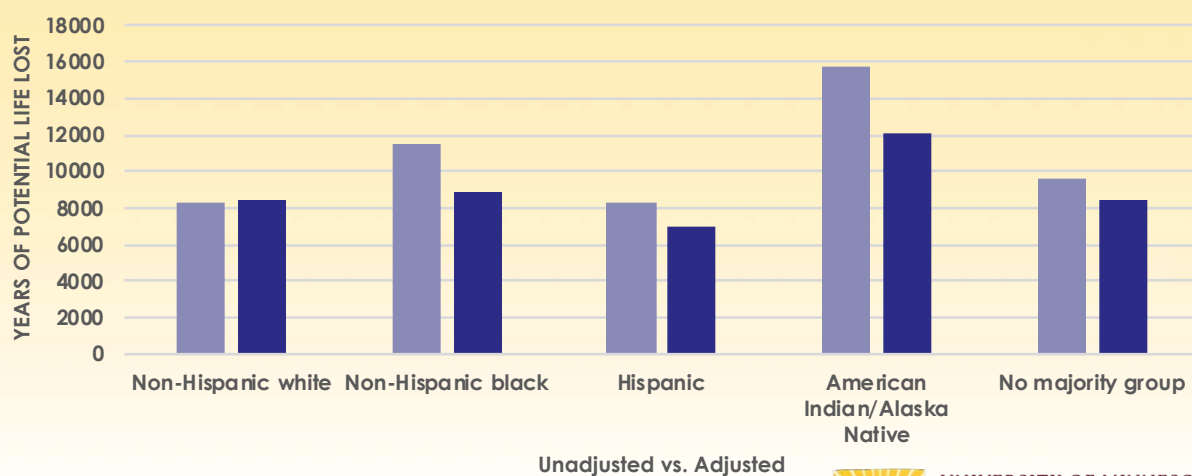
## Rural Counties by Majority Racial or Ethnic Group



## Variation in County-Level Characteristics

	Majority Racial or Ethnic Group				
	Non-Hispanic White	Non-Hispanic Black	Hispanic	American Indian/Alaska Native	No majority Group
Median household income	\$45,605	\$30,281	\$43,166	\$39,001	\$41,080
Unemployment rate	5.4%	9.3%	6.4%	9.0%	6.6%
Limited food access	9.0%	11.1%	12.8%	29.8%	11.7%

## Differences in Premature Death



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## Individual Differences in Self-Rated Health



## Individual Differences in Self-Rated Health



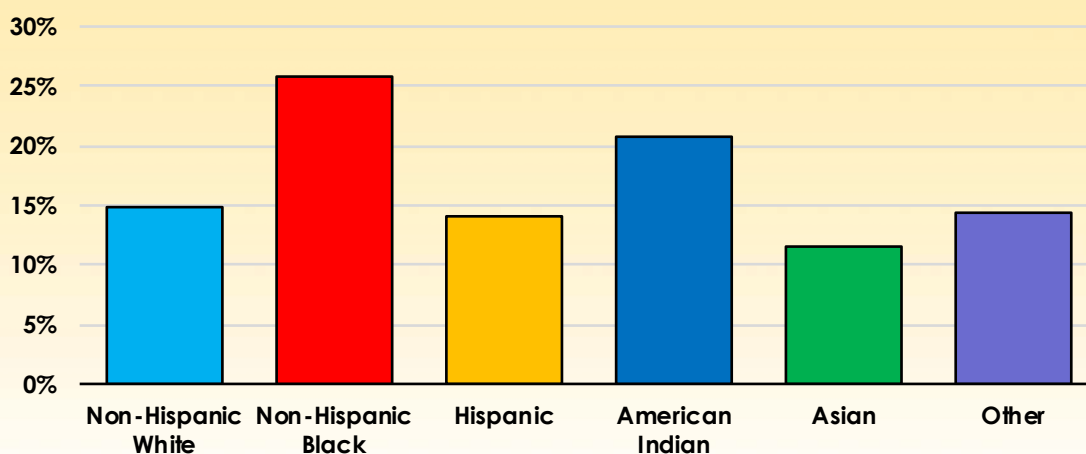


## Research Question and Methods

- Are there differences in self-rated health among rural residents by race and ethnicity?
- Among rural residents, compared differences in self-rated health measures by race and ethnicity
- Used survey weighted analysis



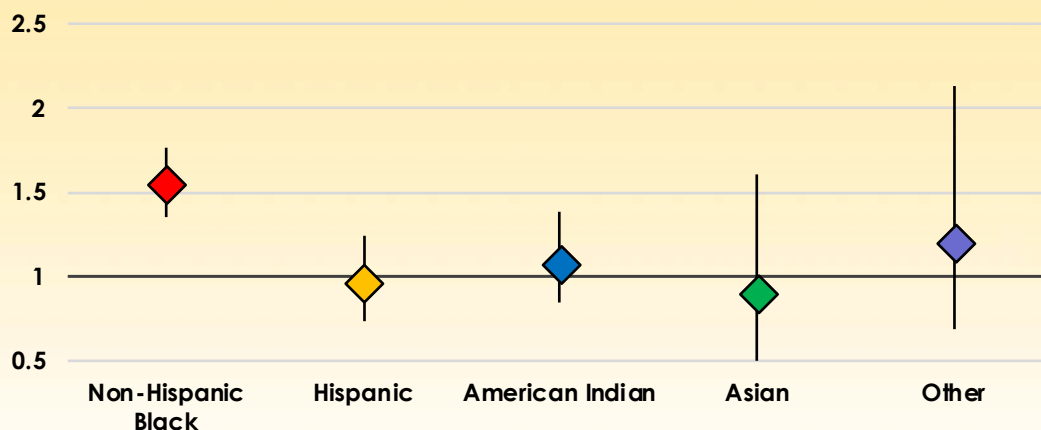
## Rural Residents Reporting Fair or Poor Self-Rated Health



Differences significant at  $p < 0.001$



## Adjusted Odds of Self-Rated Fair/Poor Health

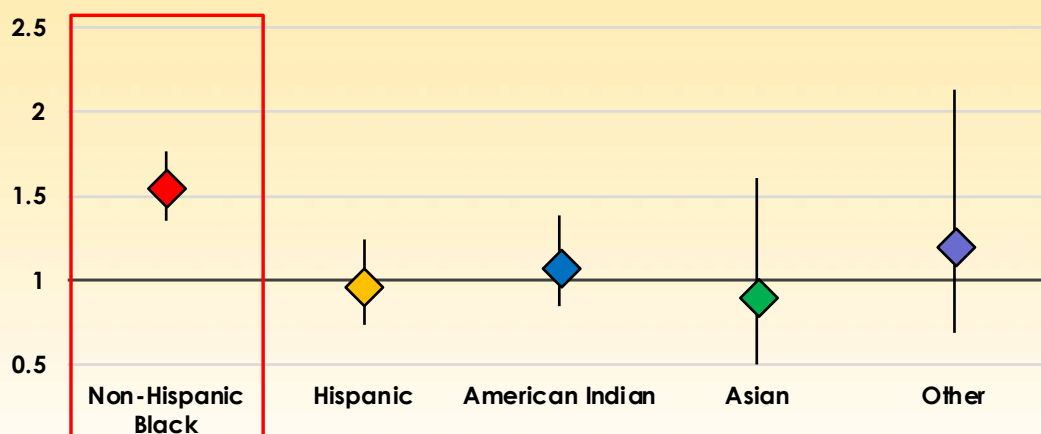


Adjusted for year, sex, US born, marital status, education, employment status, poverty status, age, and insurance coverage; Reference group=non-Hispanic White



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## Adjusted Odds of Self-Rated Fair/Poor Health



Adjusted for year, sex, US born, marital status, education, employment status, poverty status, age, and insurance coverage; Reference group=non-Hispanic White



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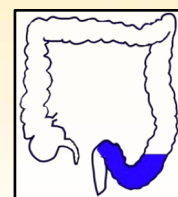
## Disparities in Access to Care



## Disparities in Access to Care

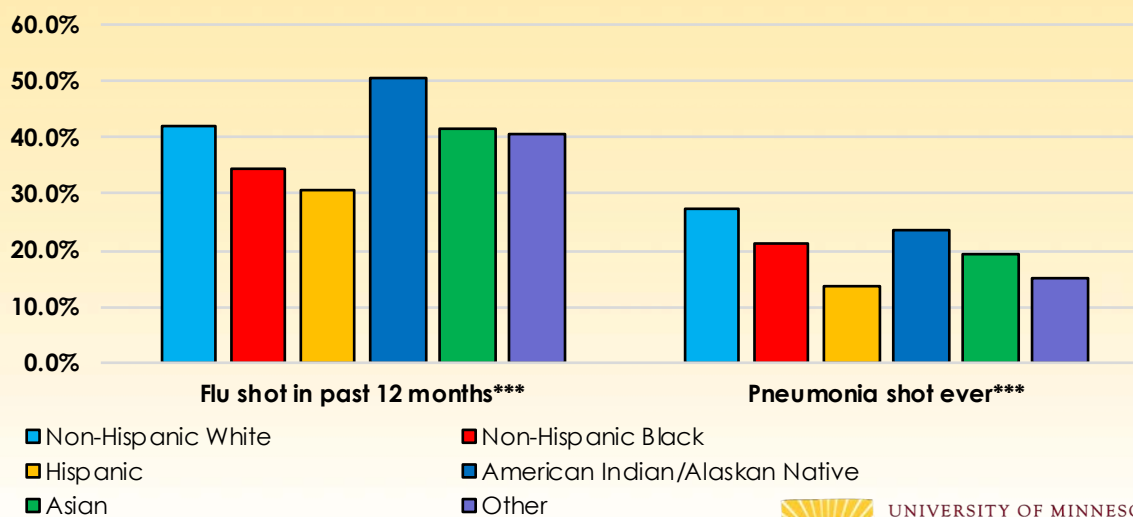


# Disparities in Access: Preventive Care Services



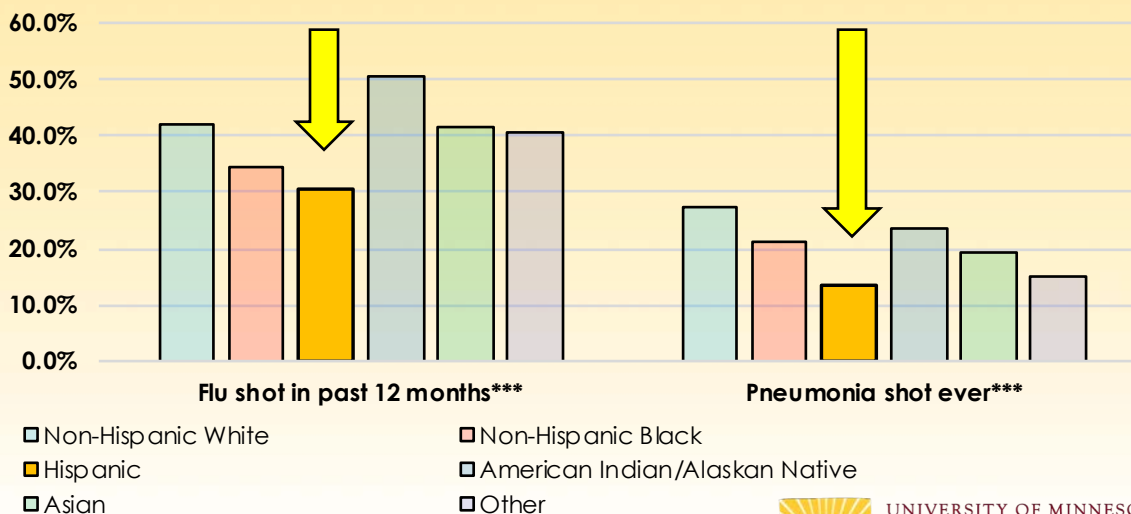
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## Disparities in Preventive Care: Vaccinations



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## Disparities in Preventive Care: Vaccinations

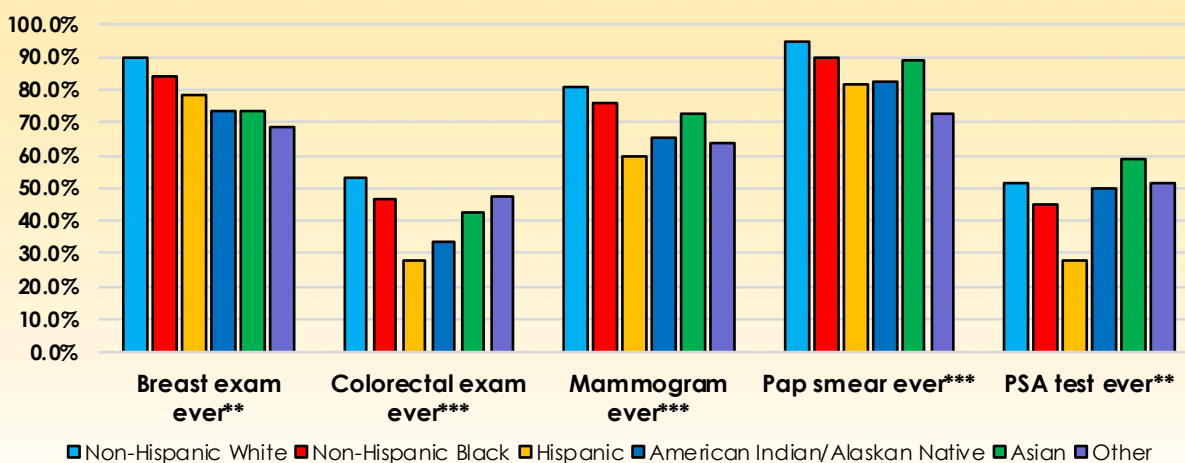


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## Disparities in Preventive Care: Screenings

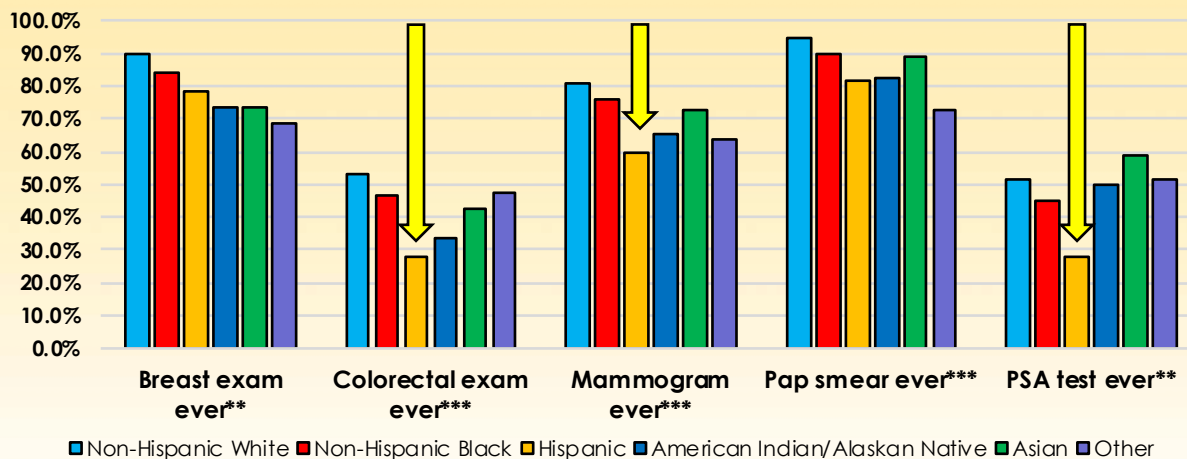


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## Disparities in Preventive Care: Screenings



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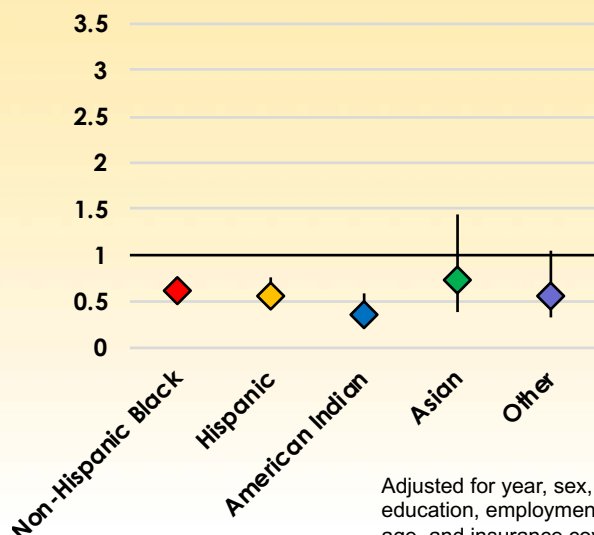
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## Disparities in Access to Care: Reasons for Foregoing or Delaying Care



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## Disparities in Access to Care: Odds of Delayed Care Due to Cost

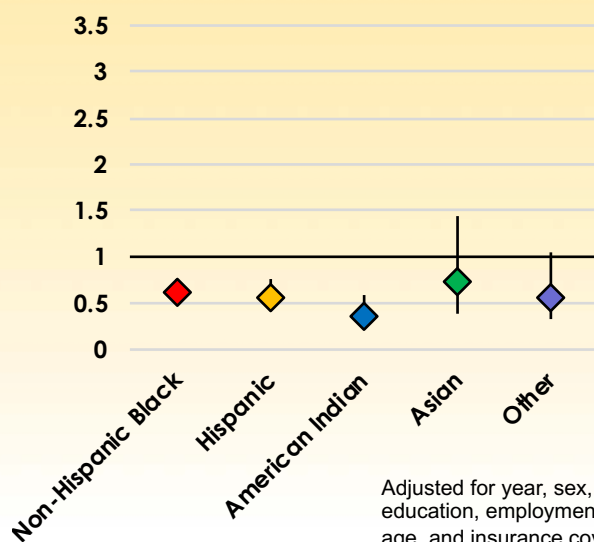


Adjusted for year, sex, US born, marital status, education, employment status, poverty status, age, and insurance coverage; Reference group=non-Hispanic White

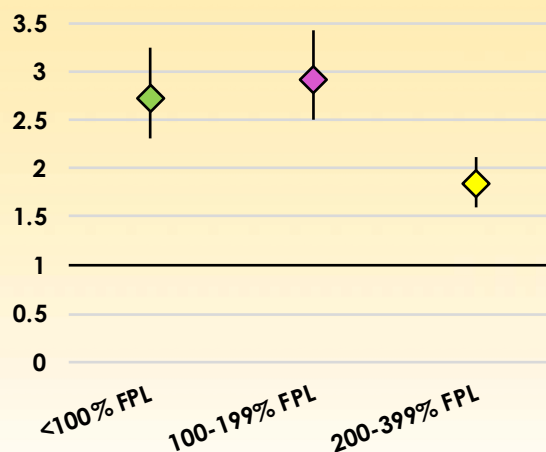


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## Disparities in Access to Care: Odds of Delayed Care Due to Cost



Adjusted for year, sex, US born, marital status, education, employment status, poverty status, age, and insurance coverage; Reference group=non-Hispanic White and 400%+ FPL

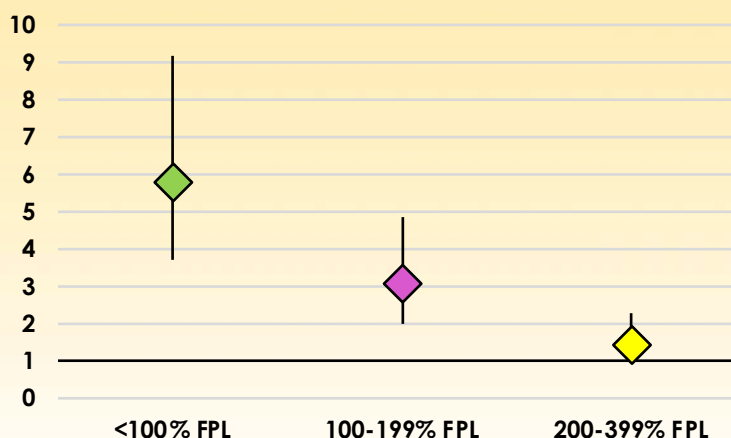


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## Disparities in Access to Care: Needed Medical Care, but Didn't Get it Due to Cost

	AOR	95% CI
African American	1.38	(1.02, 1.88)
Hispanic	1.07	(0.60, 1.91)
American Indian	1.98	(1.33, 2.95)
Asian	0.42	(0.12, 1.39)
Other	1.44	(0.62, 3.35)

Adjusted for year, sex, US born, marital status, education, employment status, poverty status, age, and insurance coverage; Reference group=non-Hispanic White and 400%+ FPL

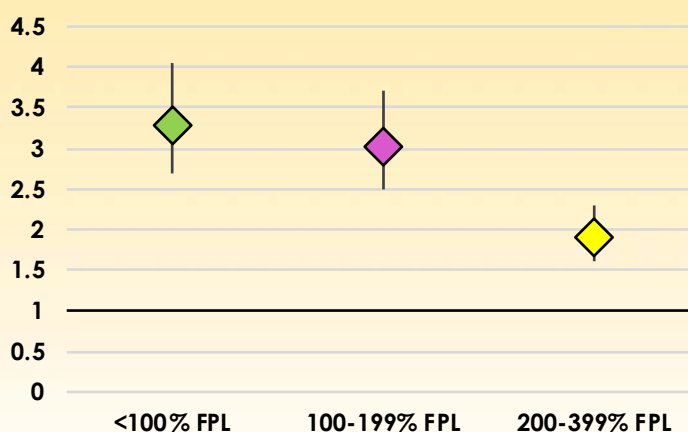


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## Disparities in Access to Care: Needed Medication, but Didn't Get it Due to Cost

	AOR	95% CI
African American	1.14	(0.96, 1.36)
Hispanic	0.98	(0.70, 1.38)
American Indian	0.58	(0.39, 0.88)
Asian	0.69	(0.36, 1.34)
Other	0.99	(0.30, 3.27)

Adjusted for year, sex, US born, marital status, education, employment status, poverty status, age, and insurance coverage; Reference group=non-Hispanic White and 400%+ FPL



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## Key Takeaway Points

- There are disparities among rural counties and rural residents by race and ethnicity, with non-Hispanic Black, Hispanic, and Indigenous rural residents tending to fare the worst
- Some disparities are mediated by differences in socioeconomic status



## Implications

- Investing in rural communities financially and via employment opportunities may improve access
- Additional work is needed, however, to address lasting impacts of structural racism in order to improve the health of *all* rural residents and communities





## Conclusion

- Research should look beyond just disparities in health and health care by rural/urban location and by race and ethnicity
- The intersection of rurality and race and ethnicity is especially important to address
- With rural populations becoming increasingly diverse, this will only become more urgent



## Thank You!

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