

# Is Foreclosure a Public Health Epidemic?

## Housing, wealth and health disparities

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Craig Pollack, MD, MHS

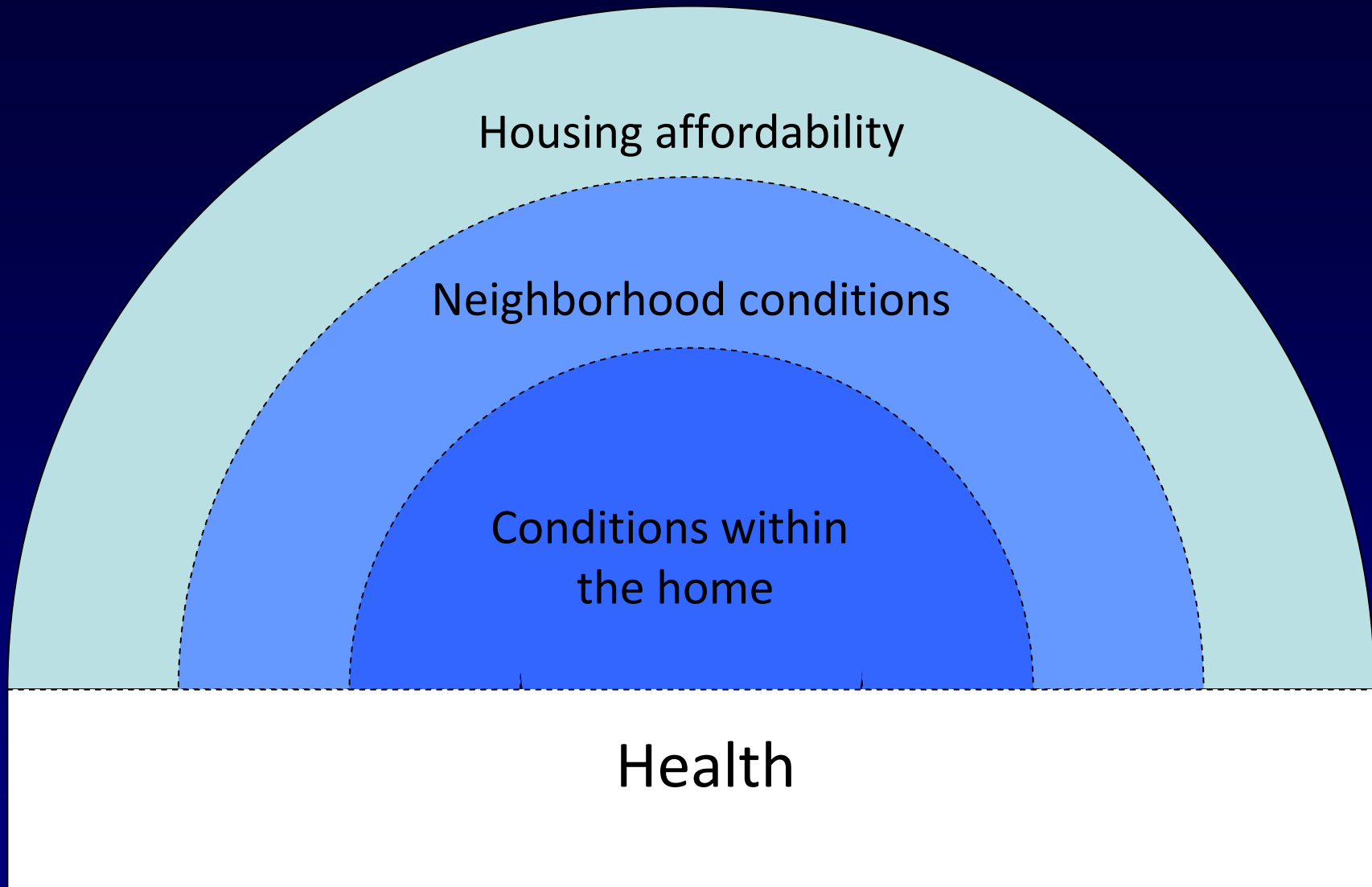
November 2008

# Housing, wealth, and health

1. Brief bio and research interests
2. Framework of housing affordability, wealth, and health
3. Pilot study of foreclosure in Philadelphia

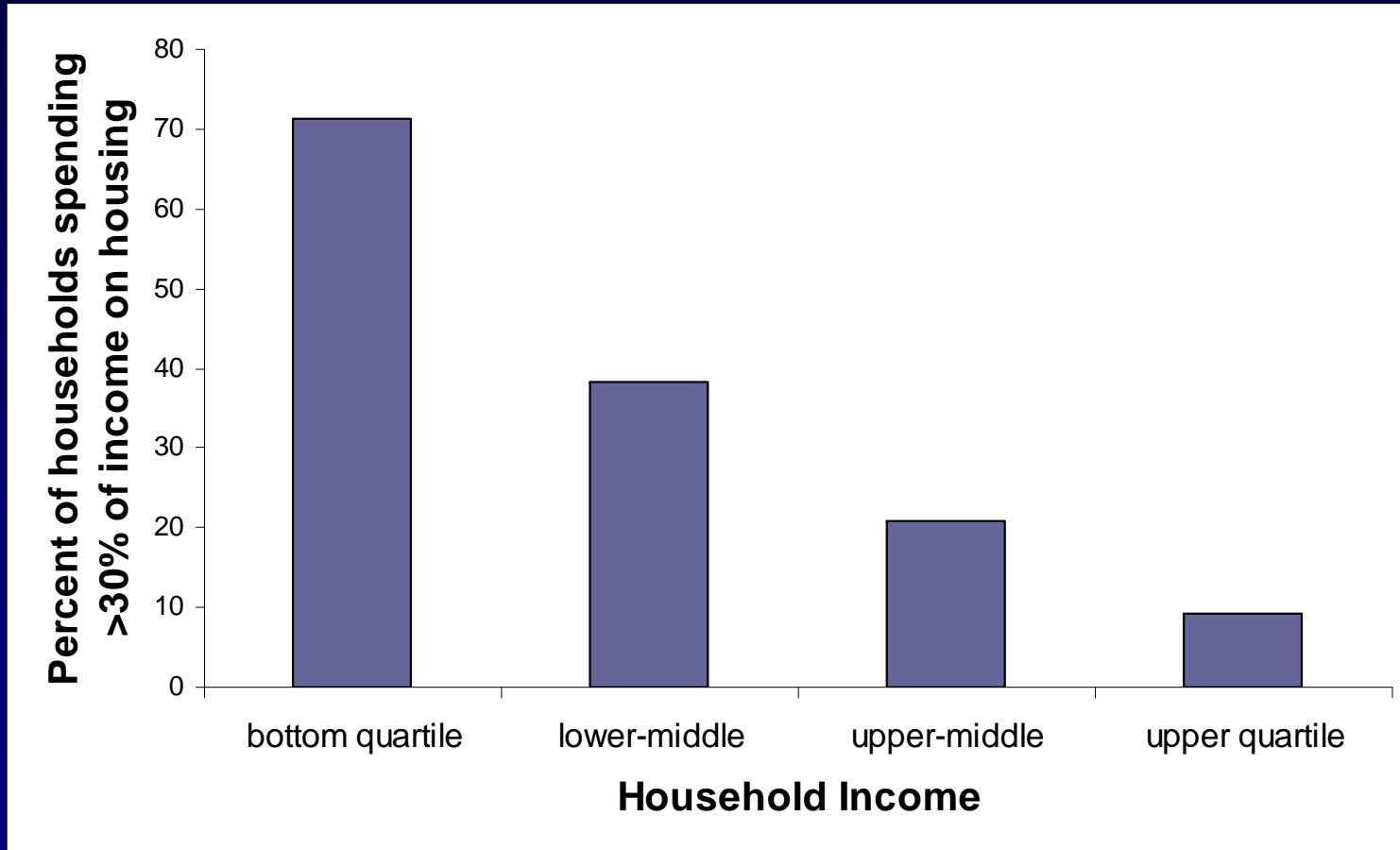
# Disparities research areas

- Primary care doctor for vulnerable populations
- Housing, wealth and health
- Health care focused including insurance design and health care delivery



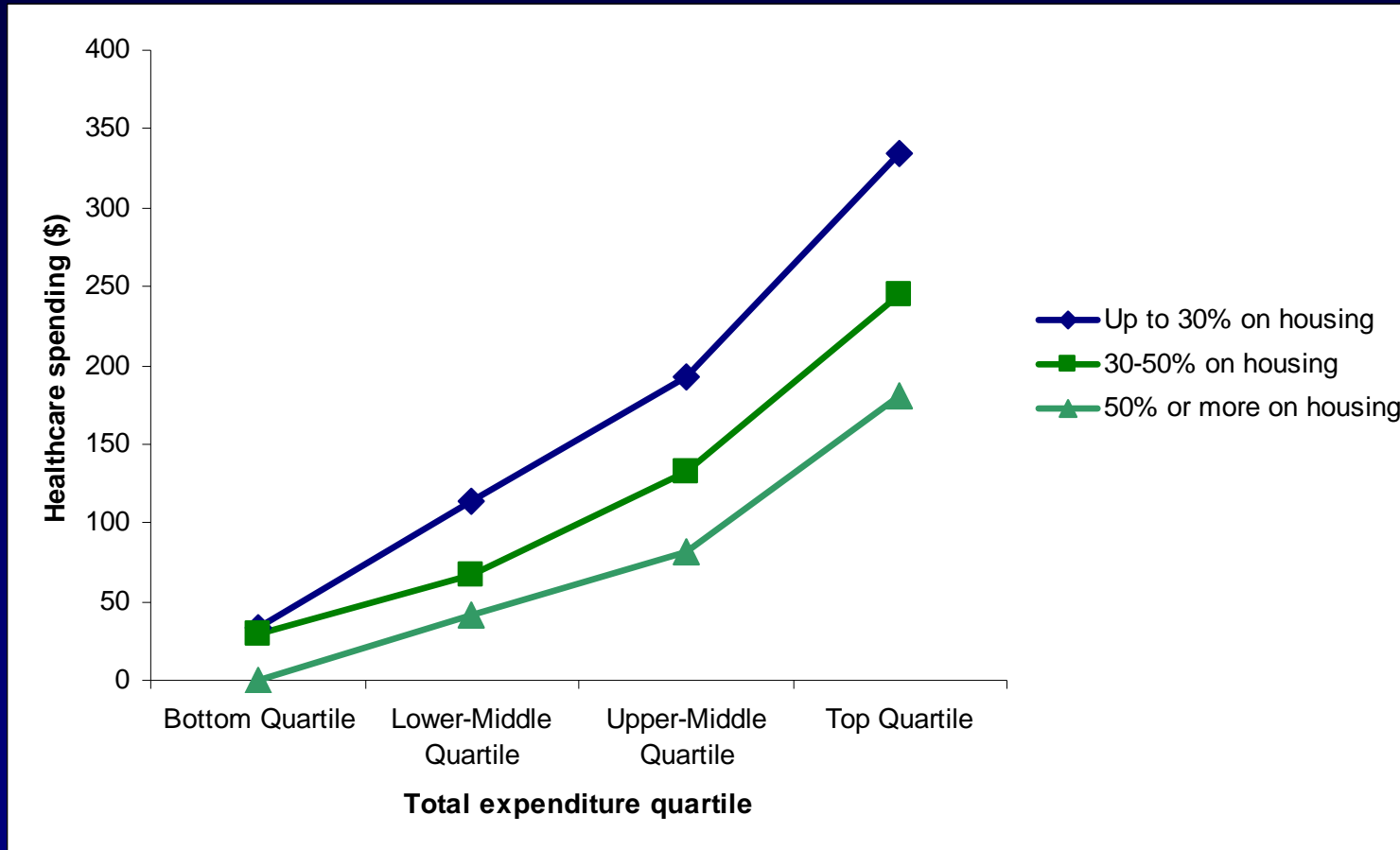
Pollack CE, Egerter S, Sadegh-Nobari T, Dekker M, Braveman P, "Where We Live Matters for Our Health: The Links Between Housing and Health," Robert Wood Johnson Foundation Commission to Build a Healthier America, Issue Brief 2, September 2008.

# Percent of households living in unaffordable housing



Based on the 2006 American Community Survey from The State of the Nation's Housing 2008

# Healthcare spending by housing affordability



Based on the 2003 Consumer Expenditure Survey from The State of the Nation's Housing 2006

# Evidence linking unaffordable housing and health

- Among the poor, uninsured spend more money on housing (\$88), food at home (\$40), education (\$35) and alcohol and tobacco (\$20) compared to the insured.
- Among low income adults, 23.6% of subjects had housing instability. Housing instability was associated with:
  - » not having a usual source of care (AOR 1.31, 1.08 to 1.59)
  - » postponing needed medical care (AOR 1.84, 95% CI 1.46 to 2.31)
  - » postponing medications (AOR 2.16, 95% CI 1.70 to 2.74)

Levy H, DeLeire T. What do people buy when they don't buy health insurance and what does that say about why they are uninsured? NBER Working Paper No. 9826

Kushel MB, Housing instability and food insecurity as barriers to health care among low-income Americans. JGIM, 2006.

# Reconsidering SES, focusing on wealth

- Wealth = assets – debts
- Home ownership associated with wealth
- Represents accumulated resources over time
- Can buffer against effects of temporary low income or other financial shock

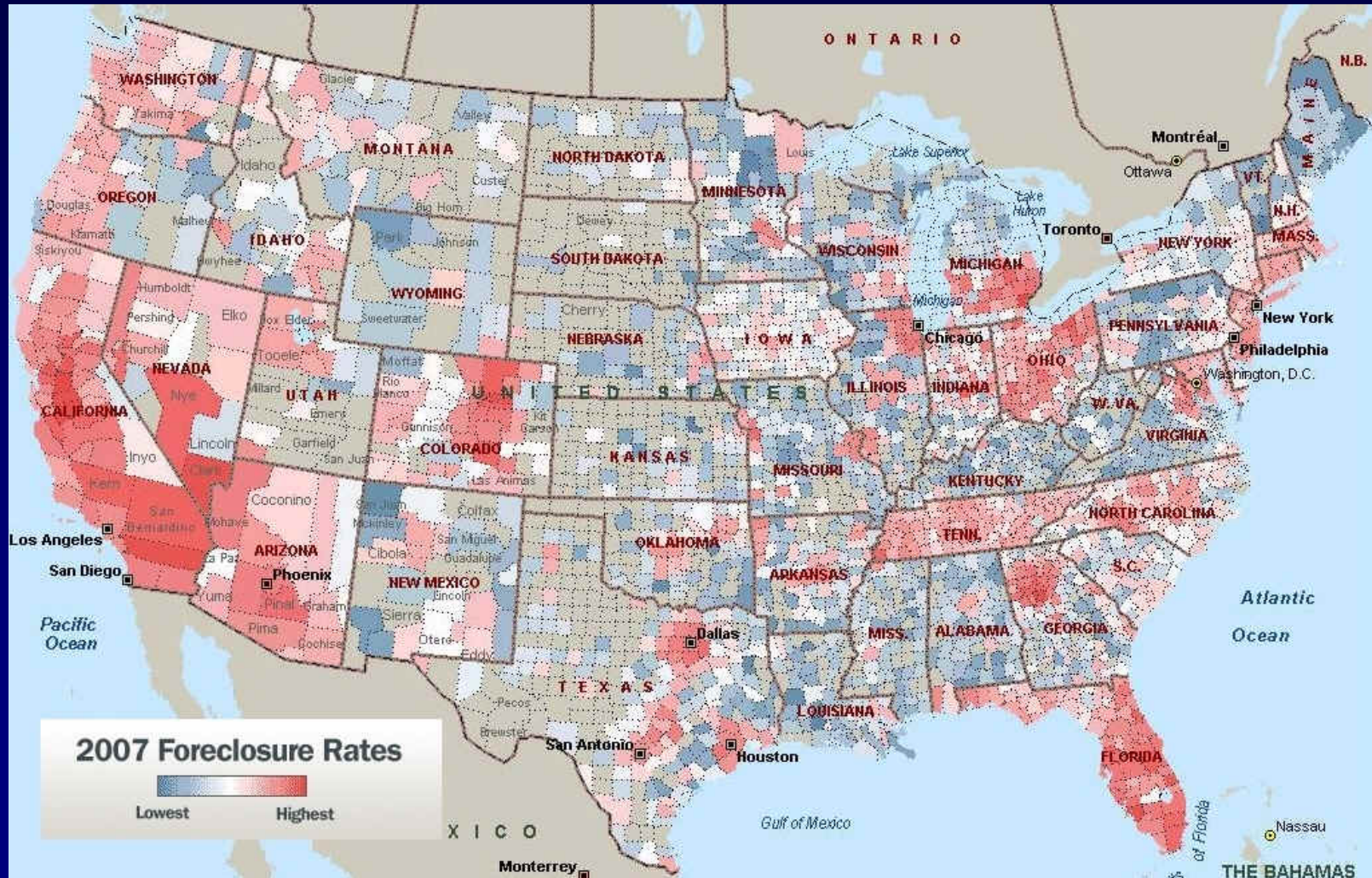
# Wealth as a measure of SES

- Wealth is significantly associated with many health measures after controlling for income and/or education.
- Black/white disparities in health decreased after controlling for wealth.
- Validation of simpler measures needed.

# Foreclosure is the extreme of unaffordable home ownership and loss of wealth

- What does the current foreclosure crisis tell us about housing affordability, socioeconomic status, and health?

# Foreclosure is a national crisis



# Foreclosure is local

- In Pennsylvania, 52,069 homeowners delinquent on mortgages as of December 2007
- 5,378 properties in Philadelphia had foreclosure filings in the past three months

# Research questions

1. What is the current health status of people undergoing foreclosure?
2. Do people believe health is a contributing factor in their foreclosure?
3. What are the selection biases involved in recruiting people through a community-based organization?

# Study Design and Recruitment

- Partner with community organization to recruit people undergoing foreclosure
  - » Consumer Credit Counseling Services (CCCS) of Delaware Valley
  - » ACORN Housing
- Survey handed out at initial counseling session to assess baseline health status
- Data collection July-October 2008

# Socio-demographic information (N=247)

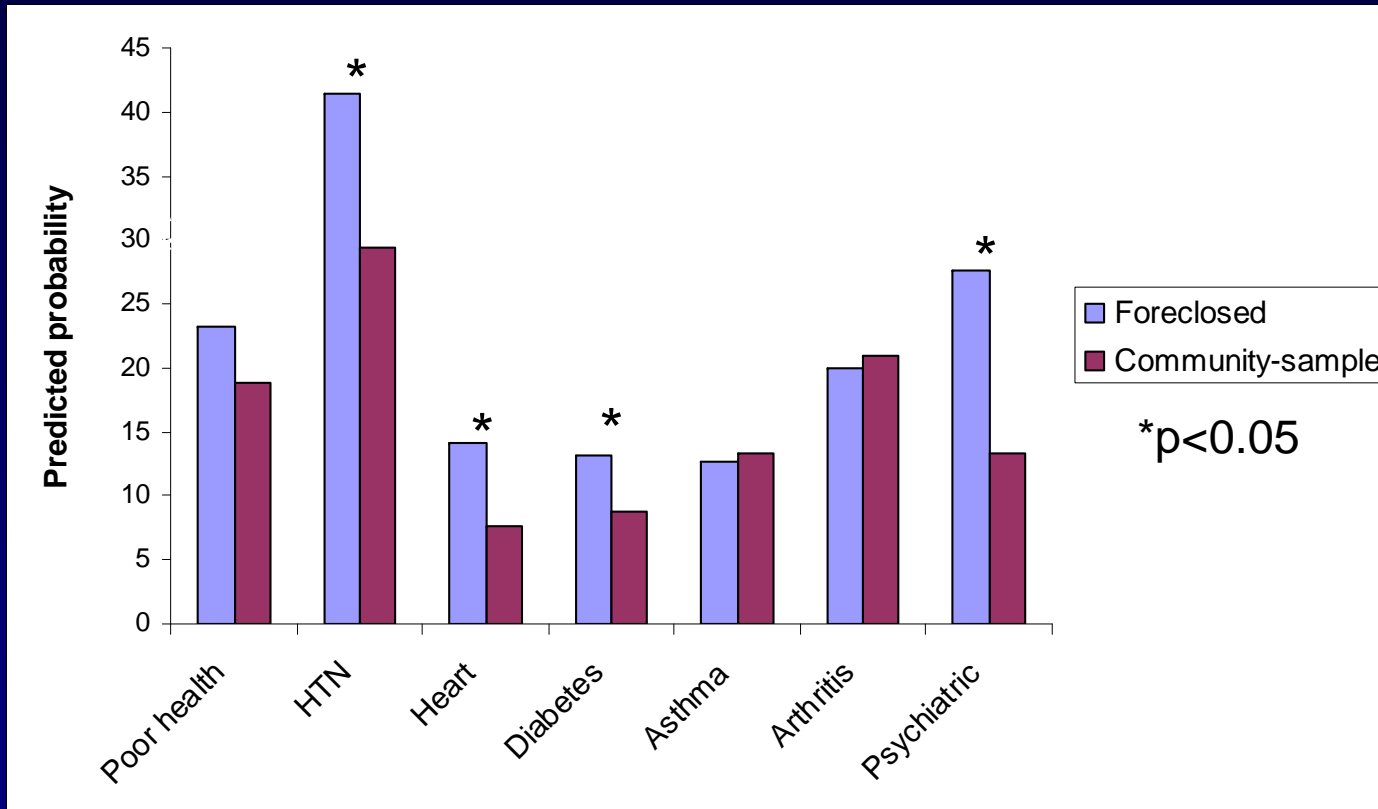
## Demographic information

- » 60% female
- » Median age = 47 years old (22-88)
- » 62% with children living at home
- » 44% African American

## Socioeconomic status

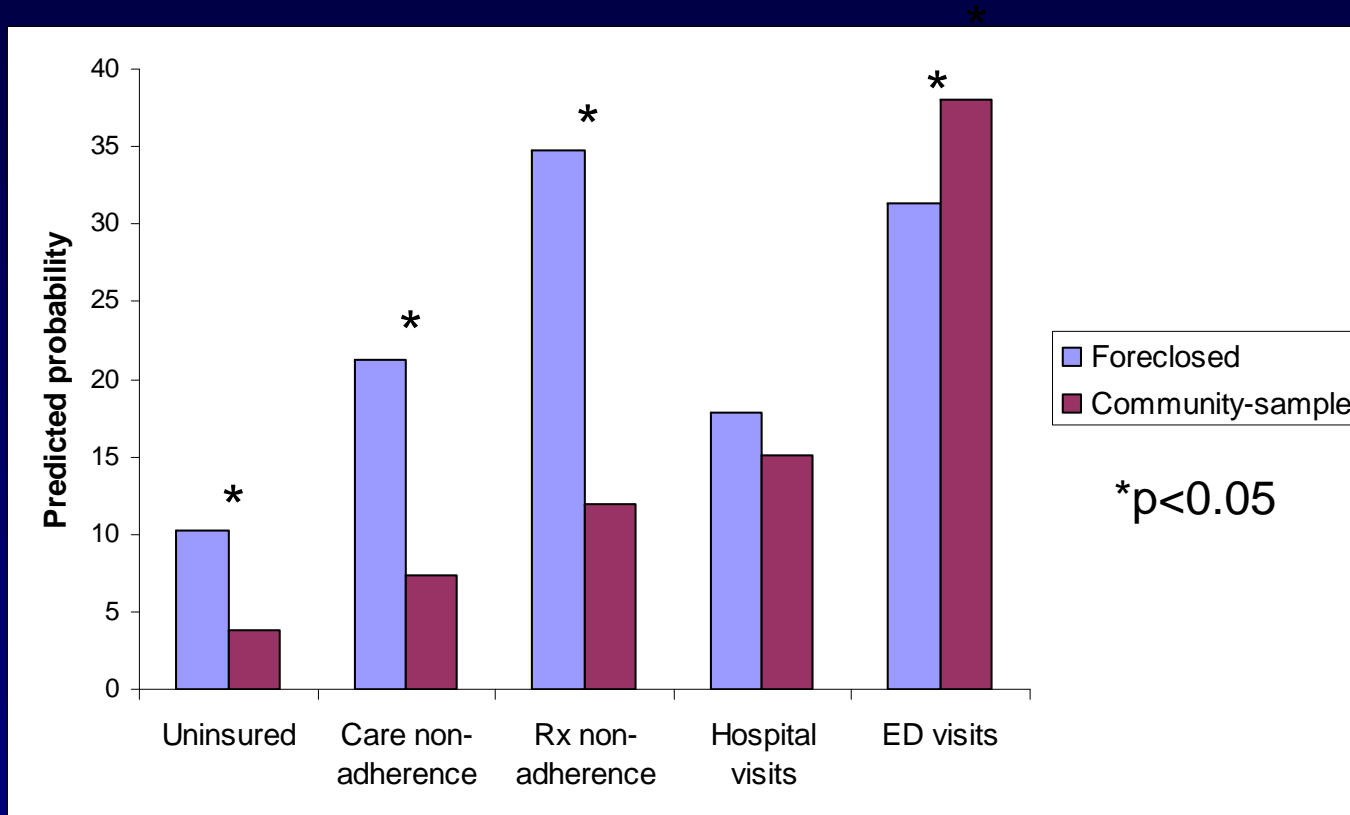
- » 35% with a high school degree or less.
- » 21% unemployed
- » 52% with household incomes <200% of FPL

# Baseline health status



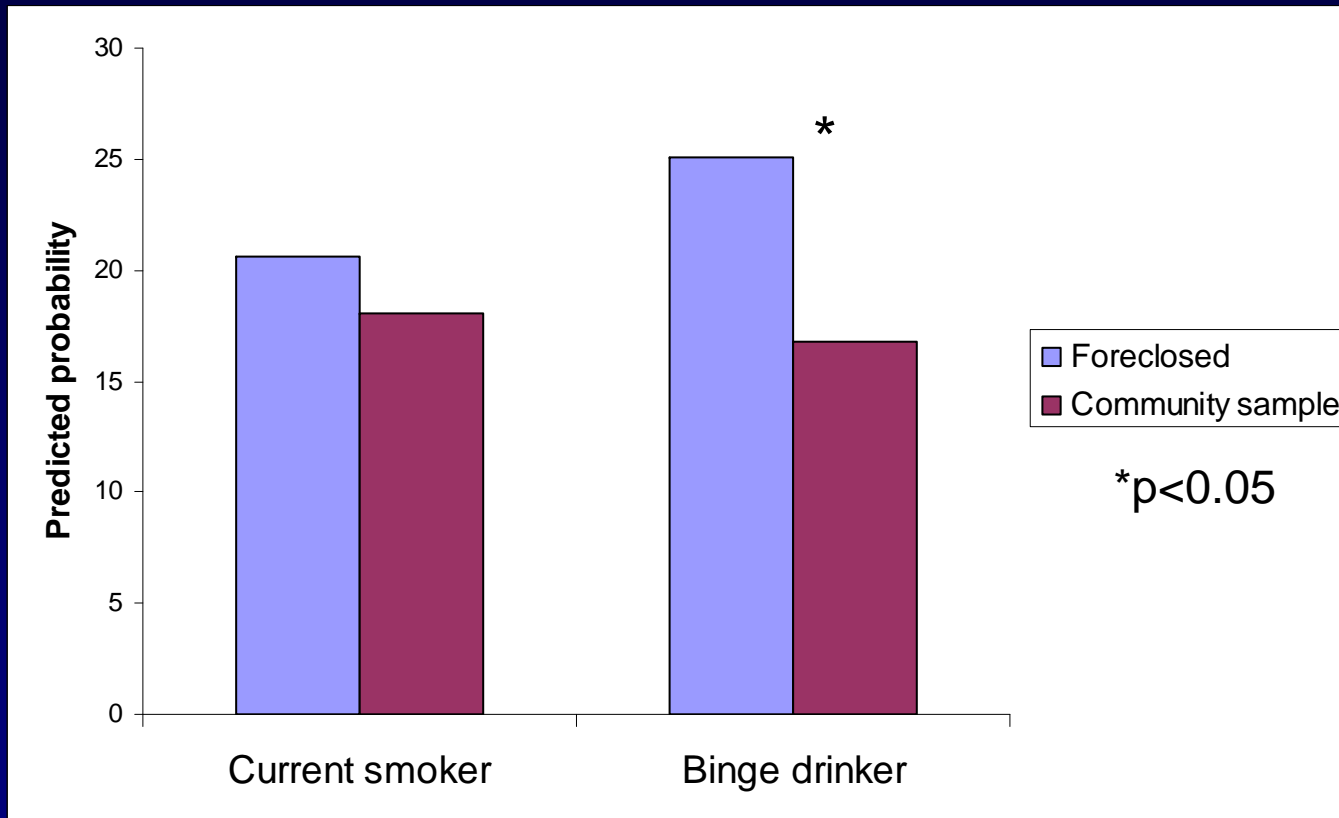
Adjusted for age, gender, race/ethnicity, living in Philadelphia, education, and 200%<FPL

# Healthcare utilization



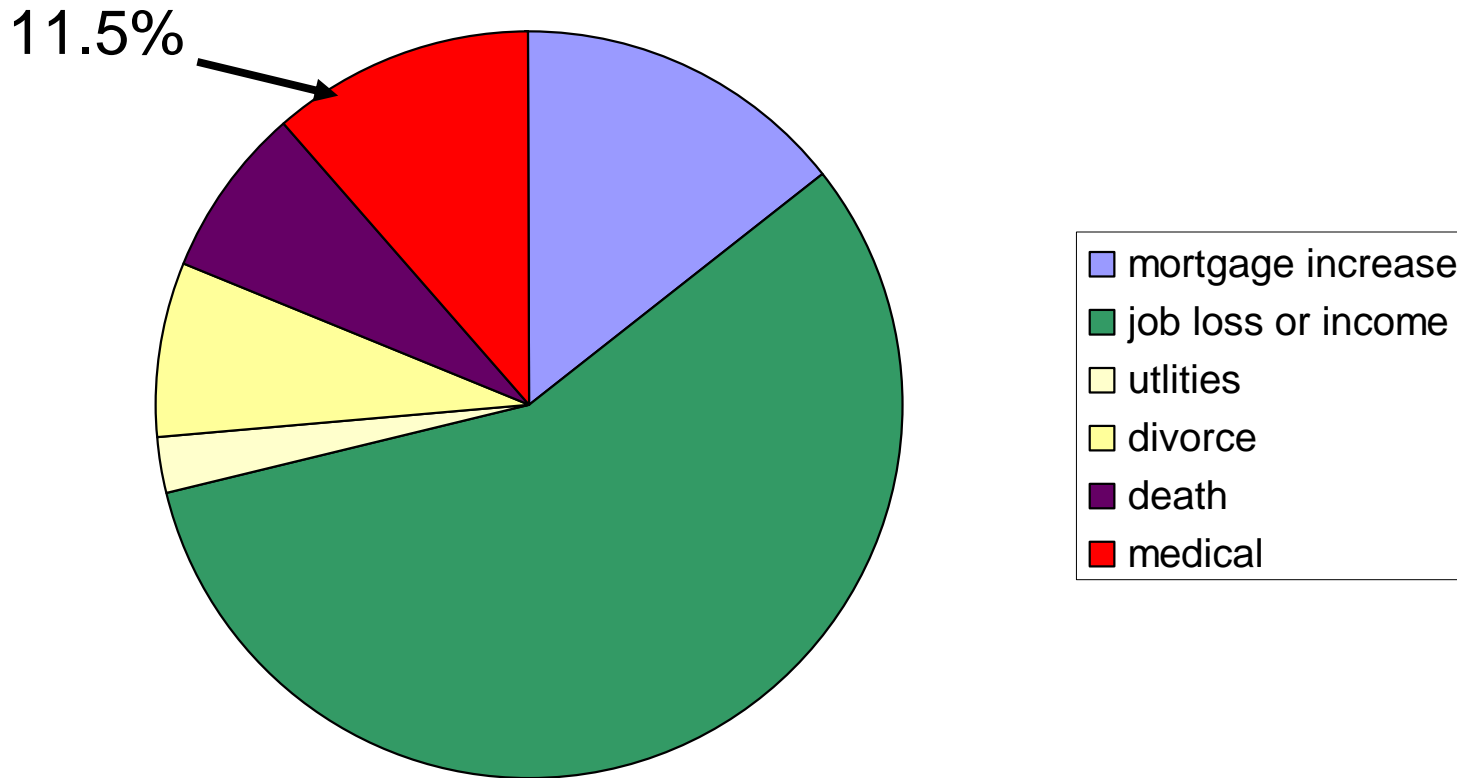
Adjusted for age, gender, race/ethnicity, living in Philadelphia, education, and 200%<FPL

# Health-related behaviors



Adjusted for age, gender, race/ethnicity, living in Philadelphia, education, and 200%<FPL

# Reasons for foreclosure



# Medical reasons for foreclosure

- Insured and uninsured both equally likely to report medical reason as primary cause of foreclosure
- Overall, medical spending and debt was high
  - » 27% had medical bills in excess of \$1000 not covered by insurance
  - » 25% owed money to medical creditors

# Assessing sample selection bias

1. Comparison to properties that underwent foreclosure in Philadelphia (N=1,238)
  - » Our sample had higher home values but similar values of their home loans
2. Comparison to all clients who presented to the Consumer Credit Counseling Services during study period (n=731)
  - » Similar age, race/ethnicity, gender, and value of home loans
  - » Our sample had higher median home values and higher monthly incomes.
3. Other biases and limitations include recall bias, self-report, cross-sectional study design

# Implications

- Foreclosure occurs to vulnerable populations with high rates of chronic conditions and high degrees of cost-related non-adherence.
- The dominant story that adjustable rates and ill-informed borrowers is driving the crisis may be incomplete.
- Policy makers may target mortgage counseling agencies as sites of public health interventions.

# Next steps on foreclosure

- Follow sample over time
  - » Health impact of foreclosure
  - » Philadelphia's policy response
- Alternative ways to study foreclosure
  - » Link foreclosure records to the University of Pennsylvania hospital system

Foreclosure filings in  
Philadelphia 2005-2008,  
N=20,496



Limit to owner-occupied  
homes, N=16,755



Link by name and  
address to UPHS data,  
N=1,908



Use claims data to  
assess health and health  
care utilization

# Take away messages

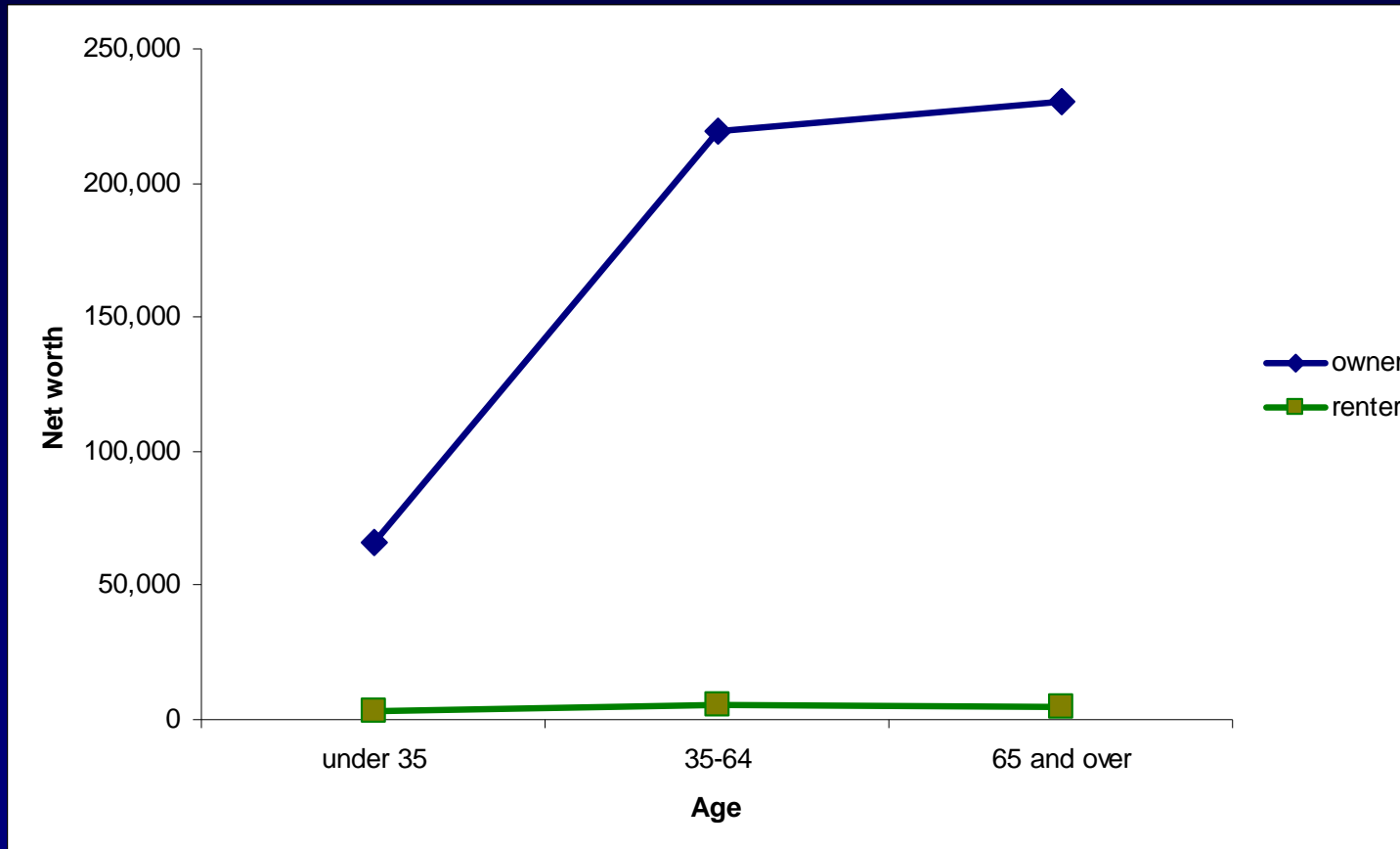
- Lack of housing affordability is associated with trade-offs that may harm health.
- Wealth may help us better understand the ways that SES impacts health and health care.
- Foreclosure affects already vulnerable populations.

# Acknowledgements

- RWJF Clinical Scholars Program
- Department of Veterans' Affairs
- Catherine Cubbin, Paula Braveman, Susan Egerter
- Katrina Armstrong
- Julia Lynch
- Consumer Credit Counseling Services of Delaware Valley and ACORN Housing

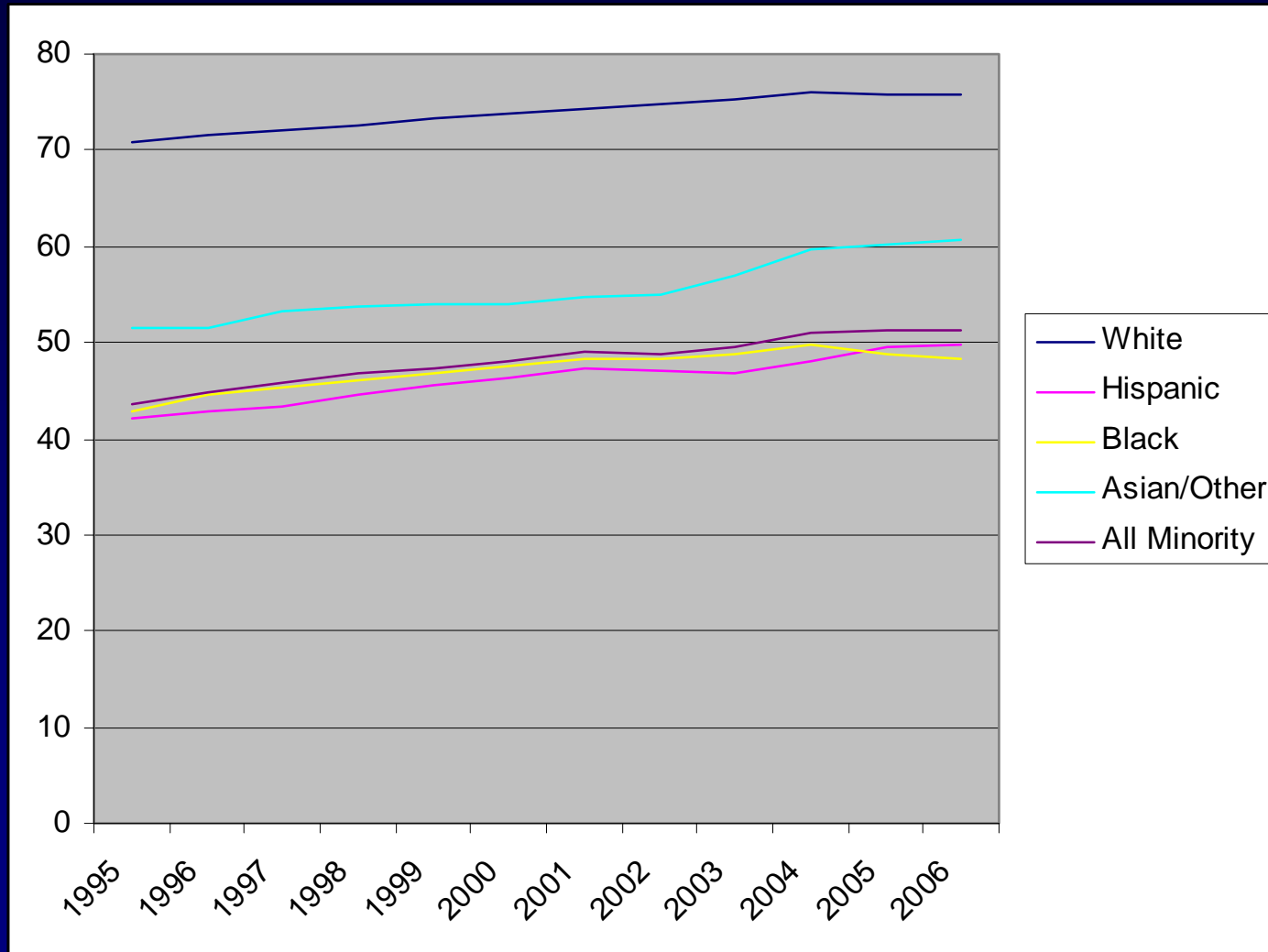


# Net worth of homeowners versus renters

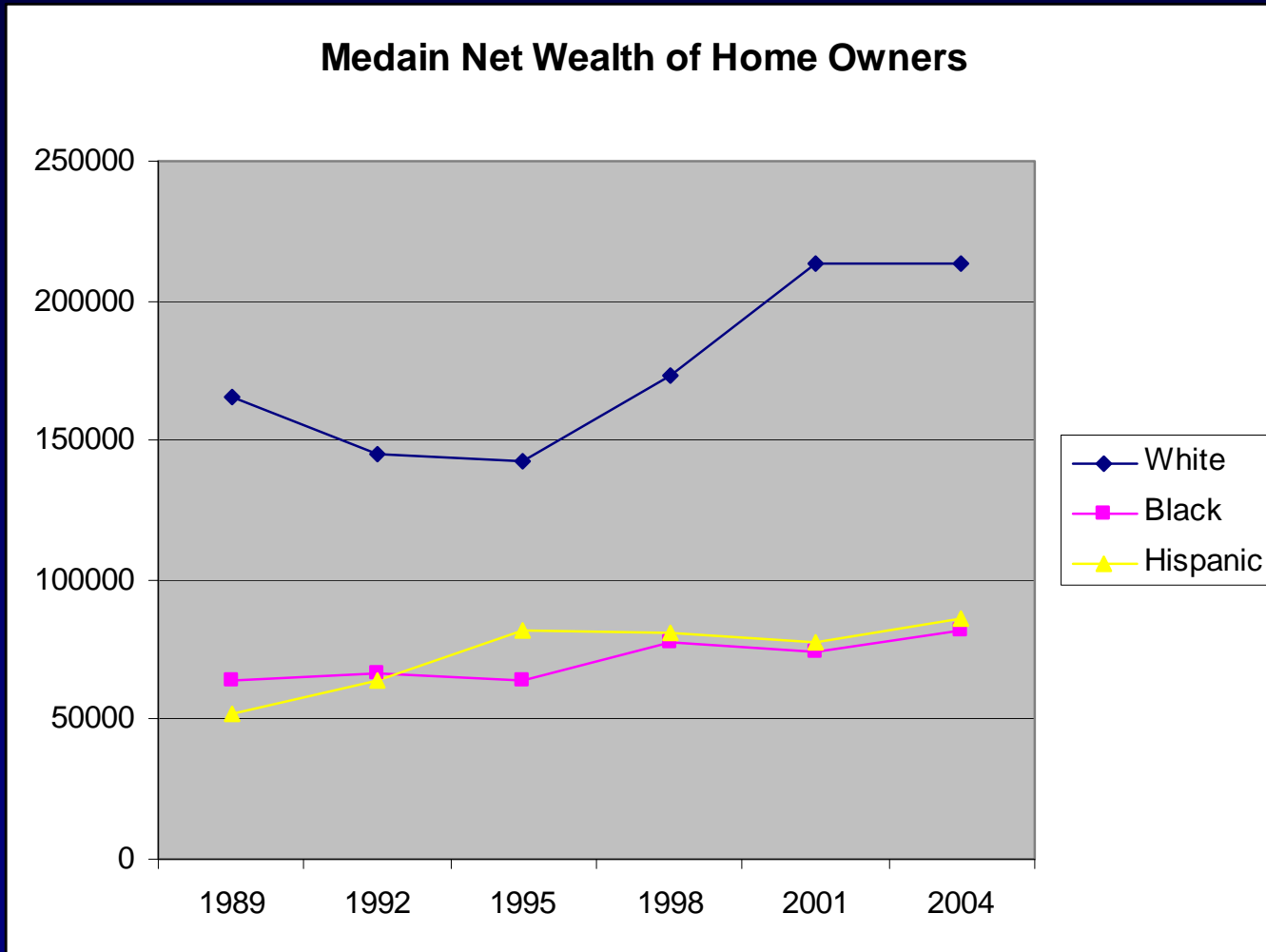


From Survey of Consumer Finances, 2004  
In The State of the Nation's Housing 2007

# Homeownership by race/ethnicity



# Homeowners and Wealth



# Income is not a proxy for wealth

Median net worth by household income quintile, SIPP, 2000

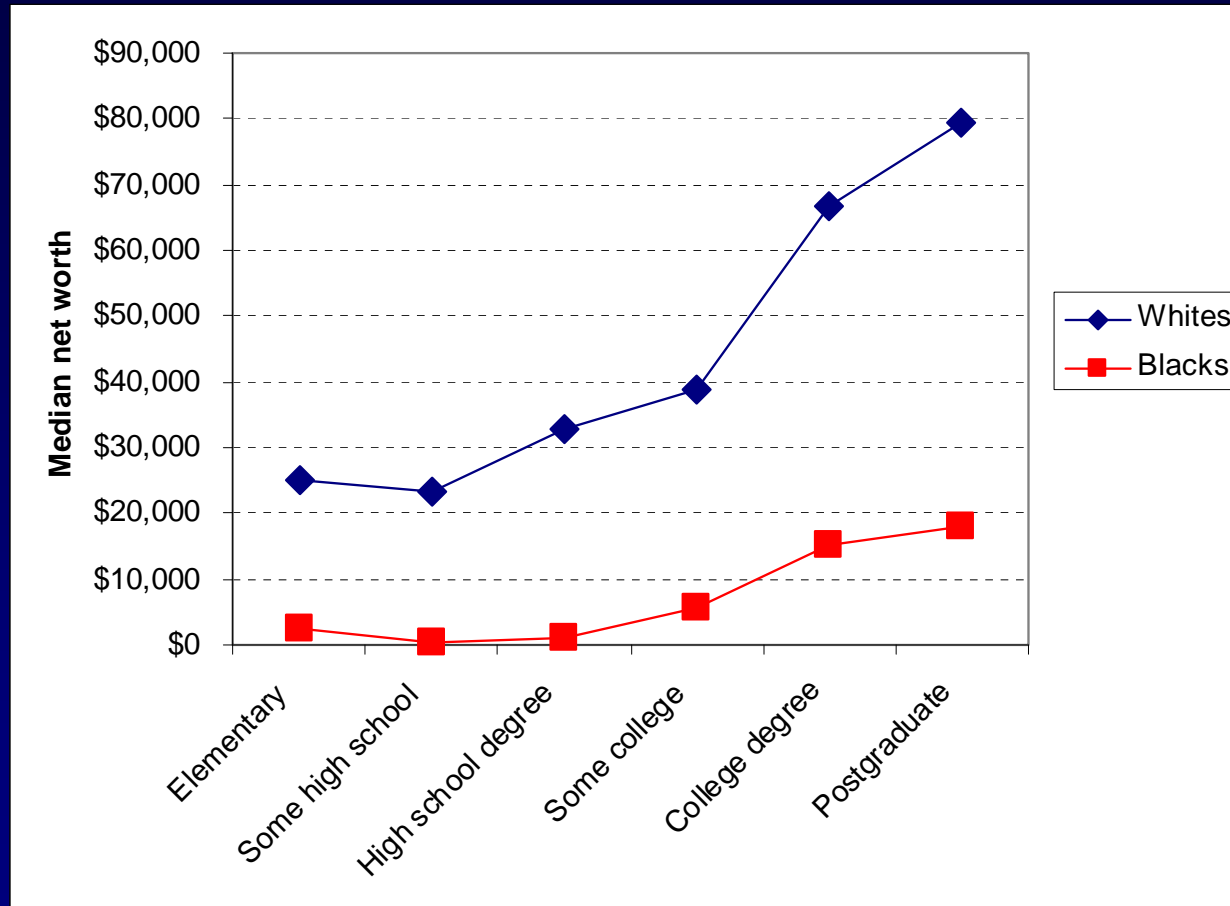
Quintile	Black	Hispanic	White
lowest	\$57	\$500	\$24,000
2 <sup>nd</sup>	\$5,275	\$5,670	\$48,500
3 <sup>rd</sup>	\$11,500	\$11,200	\$59,500
4 <sup>th</sup>	\$32,600	\$36,225	\$92,842
highest	\$65,141	\$73,032	\$208,023

lowest quintile: White wealth 400x that of Black wealth

other quintiles: White wealth 3-9x that of Black wealth

# Education is not a proxy for wealth

## Median Net Worth by Level of Education



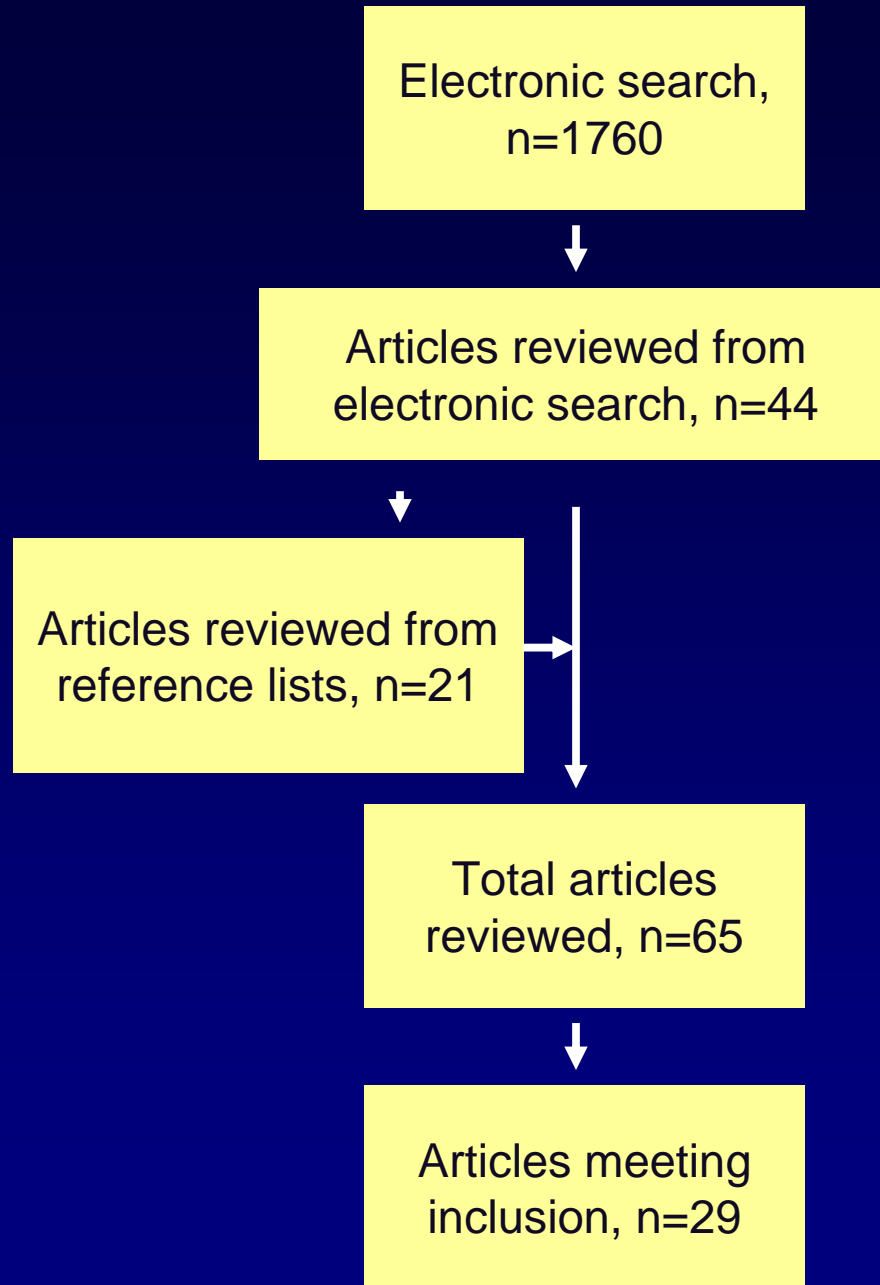
SIPP, 1987 panel, from Oliver ML and Shapiro TM, "Black Wealth/White Wealth,"  
New York: Routledge, 1995.

# Research question

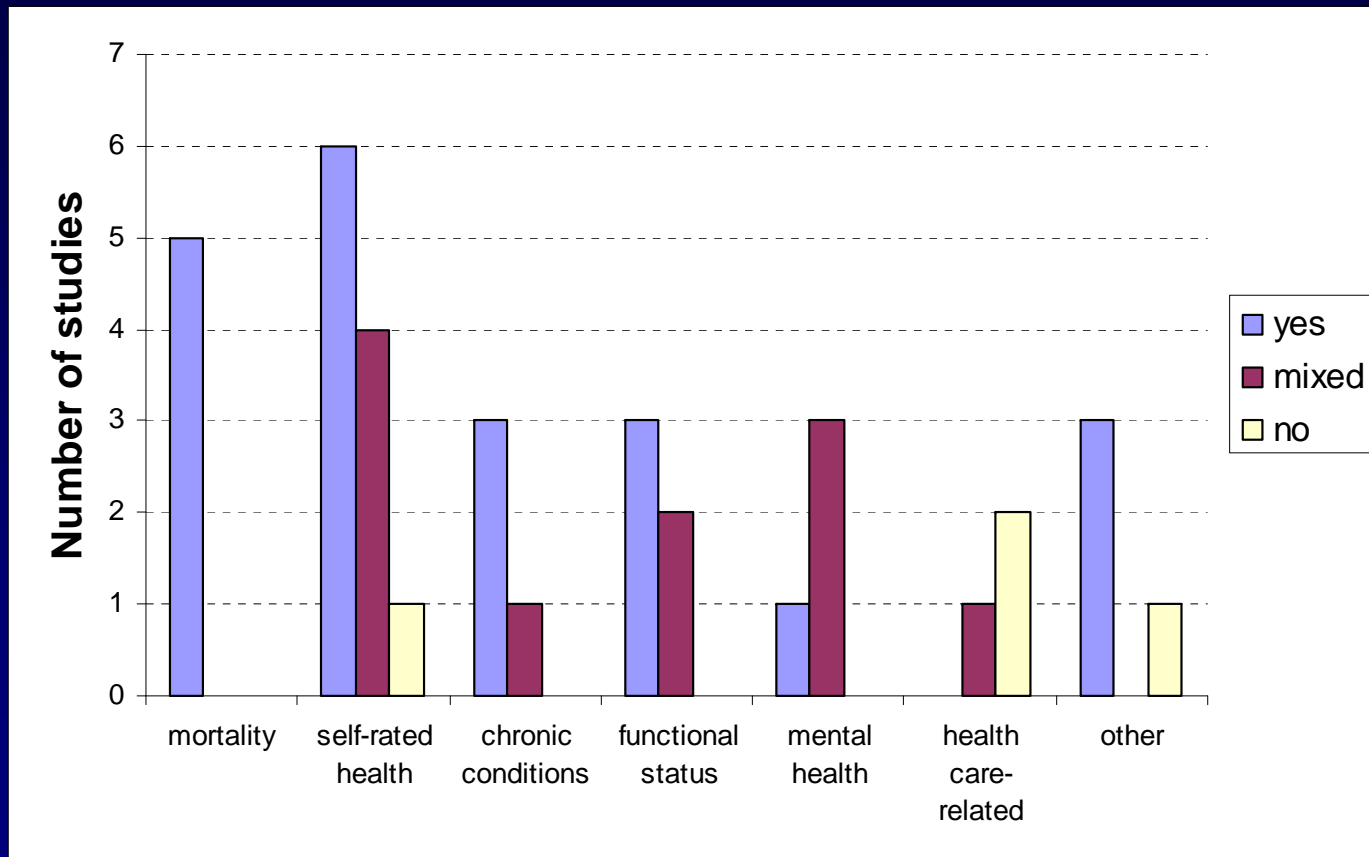
- Is wealth significantly associated with health after controlling for education and/or income?

# Systematic review

- U.S.-based
- 1990-2006
- Pubmed, EconLit, Web of Science
- 'wealth term' + 'health term'
- Health as dependent variable
- Controlled for at least 1 other SES measure



# Wealth is significantly associated with health



Pollack CE, Chideya S, Cubbin C, Williams B, Dekker M, Braveman P, "Should Health Studies Measure Wealth? A systematic review," *American Journal of Preventive Medicine*, 33: 250-264, 2007.

# Philadelphia responds

Moratorium on Sheriff Sales

March 2008



Residential Mortgage Foreclosure Diversion Pilot Program

April 2008

- Established Hotline to connect owners with advocates
- Conciliation Conference for owner-occupied properties
- Resume Sheriff Sales post-conferences