Testimony of

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Subcommittee on Primary Health and Aging

Hearing on Dying Young: Why Social and Economic Status
May Be a Death Sentence in America

November 20, 2013

Thank you Chairman Sanders and Ranking Member Burr for the opportunity to speak today about the social and economic factors that have caused many Americans to have shorter and less healthy lives than the generations that have gone before them.

My name is David Kindig, and I am Emeritus Professor of Population Health Sciences at the University of Wisconsin School of Medicine and Public Health. I have worked my whole career in what we now call population health, beginning as a pediatric resident in an Office of Economic Opportunity Neighborhood Health Center in the South Bronx and serving as the first Medical Director of the National Health Service Corps in 1971.

This hearing shines needed light on something that many citizens and policy makers don't yet understand….that while health CARE is necessary for health, it is not the only or even the most important factor in producing longer life and lives of high quality and productivity. As my colleagues have already pointed out, modern epidemiology and social science have established that health is produced by many factors including medical care and health behaviors and, importantly, components of the social and physical environment in which we live in like income, education,

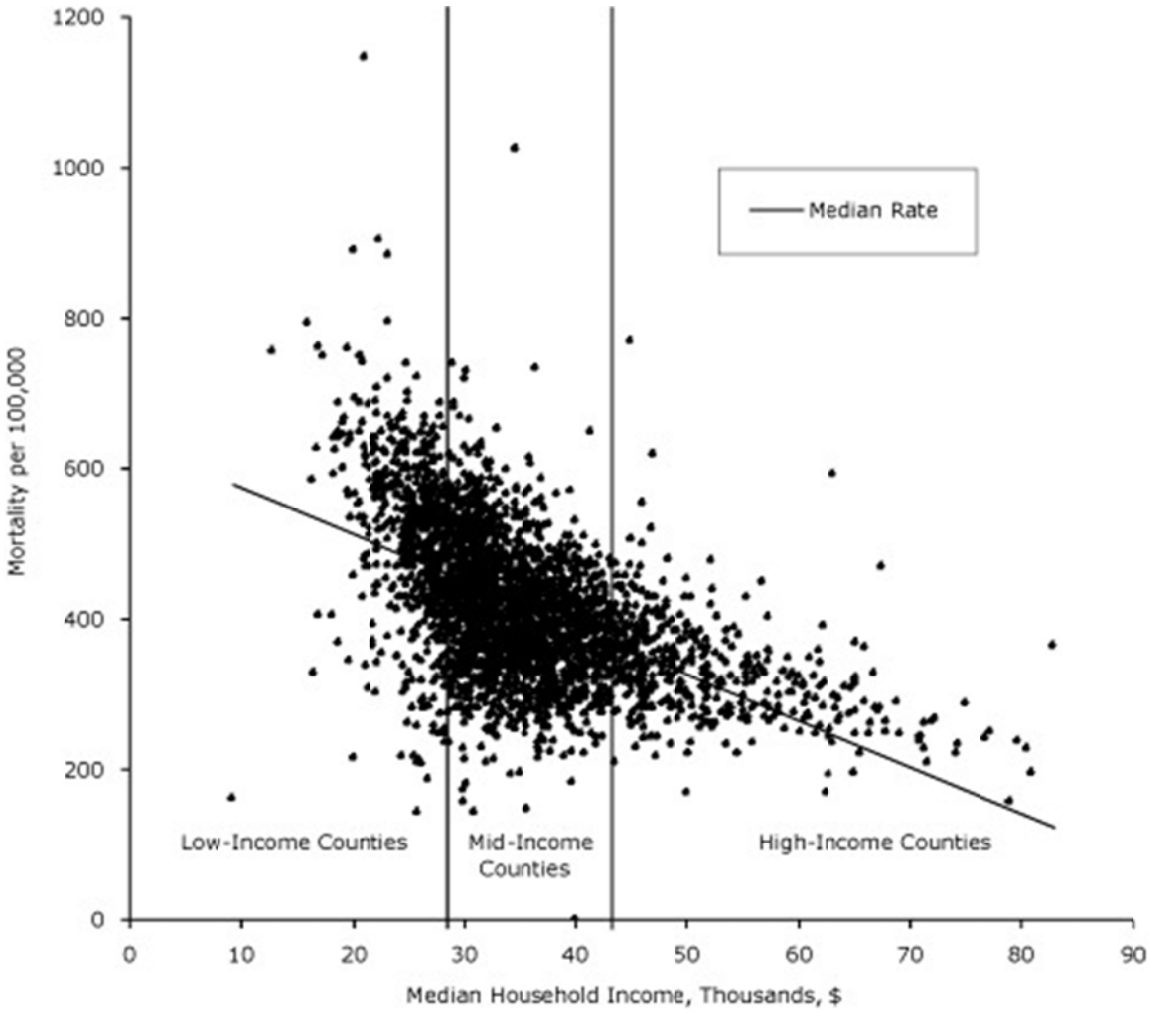
social support, and the structure of our neighborhoods. The bottom line is that we will not improve our poor performance unless we balance our financial and policy investments across this whole portfolio of factors.

For many years I ran the Population Health Institute at the University of Wisconsin School of Medicine and Public Health, and with my colleagues created the initial *County Health Rankings* www.countyhealthrankings.org . An easy-to-use snapshot, the Rankings look at the overall health of nearly every county in all states. They compare counties on a range of factors that influence health such as tobacco use, physical inactivity, and access to health care, and more importantly, social and economic factors, including education, employment and income. In fact, these latter factors are assigned the largest weight at 40%. (www.countyhealthrankings.org/our-approach).

We initially did this for 7 years for only the 72 Wisconsin counties. I will never forget the morning of the first Wisconsin release, I got a call from an early morning radio talk show in rural Wisconsin and the first question asked was "Dr. Kindig , does this report mean that the income level in our county is as important as the number of persons with health insurance"? I could not have dreamed of a better and more sophisticated question to begin this program. I answered that this was certainly the case although we don't know for sure the exact balance in every county since all places vary in both their health outcomes and the factors producing those outcomes. Today this same model is used all across the country in the national *County Health Rankings and Roadmaps* program, and many communities are using it to prioritize health needs and solutions across their community. In early 2013, six communities were awarded the initial *RWJF Roadmaps to Health Prize*; to be eligible they had to show excellence in all the determinants including social and economic factors The initial six Prizes were awarded to two communities in Massachusetts and one each in California, Louisiana, Michigan, and Minnesota. (http://www.countyhealthrankings.org/roadmaps/prize/about-prize).

As my colleagues here have indicated, the last several decades have shown a growing awareness of such a broad perspective. Currently, I am Co Chair of a new Institute of Medicine Roundtable on Population Health Improvement , whose vision states in part "outcomes such as improved life expectancy, quality of life, and health for all are shaped by interdependent social, economic, environmental, genetic, behavioral, and health care factors, and will require robust national and community-based actions and dependable resources to achieve it…...the roundtable will therefore facilitate sustainable collaborative action by a community of science-informed leaders in public health, health care, business, education and early childhood development, housing, agriculture, transportation, economic development and non-profit and faith-based organization."

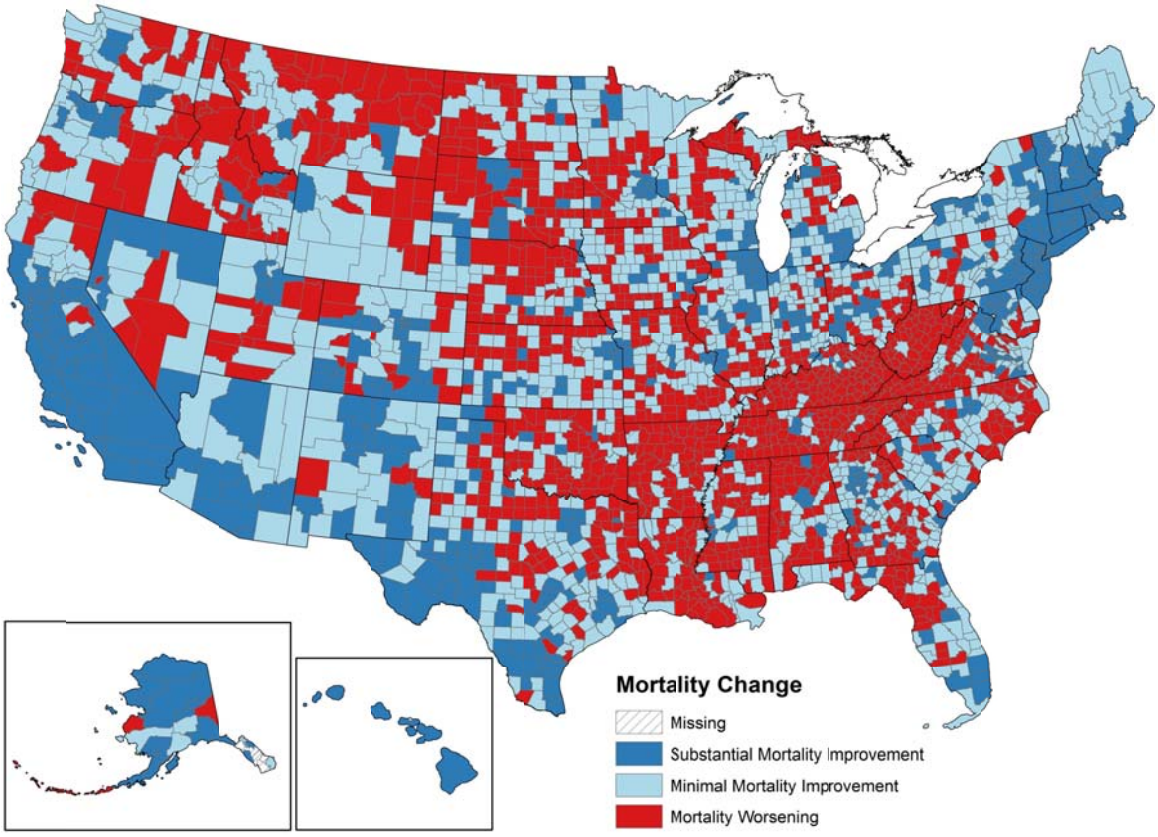
I will briefly mention a few of the studies my colleagues and I have conducted on this topic. The first of two I did with my graduate student Erika Cheng in which we showed a four fold variation in county death rates substantially influenced by median family income level.



Cheng ER, Kindig DA. Disparities in premature mortality between high- and low-income US counties. Prev Chronic Disease 2012 (9):110-120.

An $8900 increase in median family income was associated with an 18% reduction in death rates in low income counties and 12% in high income counties.

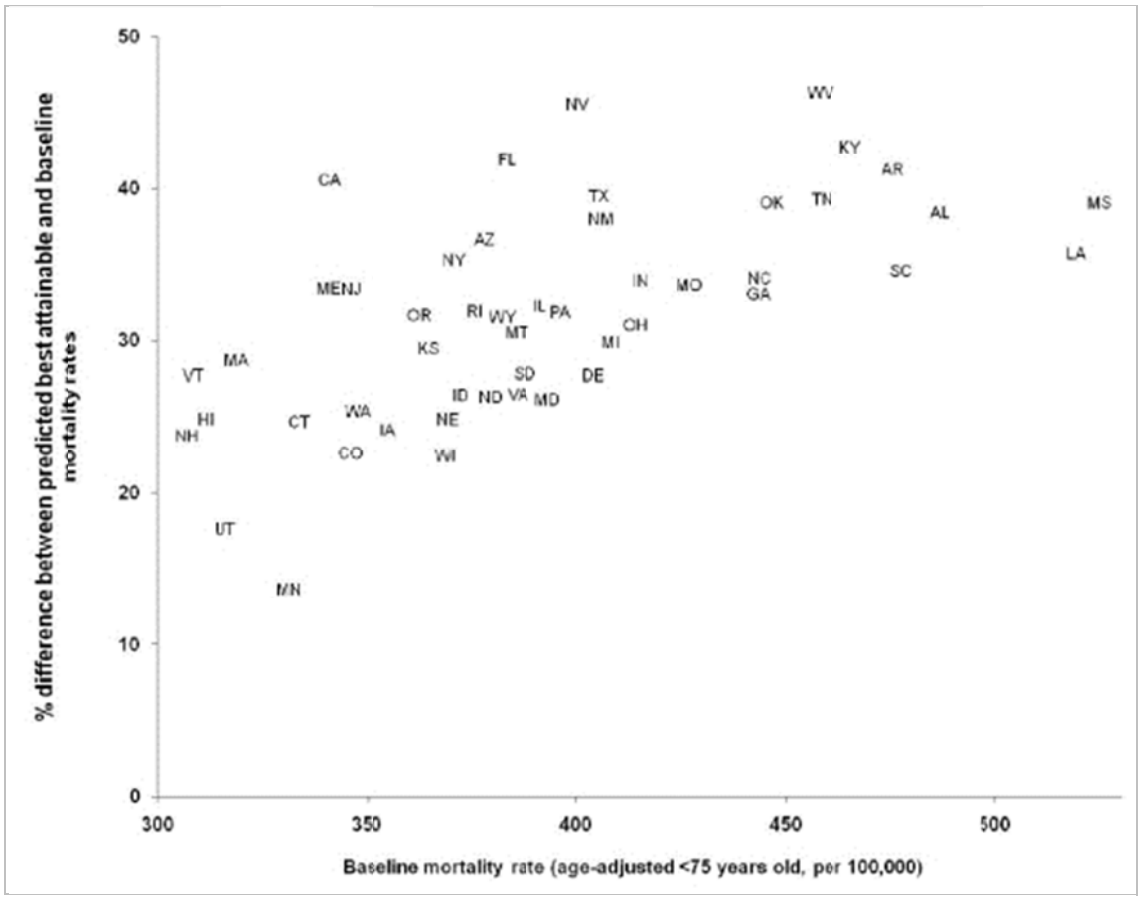
In the second study, shown on the map before you, we examined the change in mortality rates across US counties over the past decade, and showed surprisingly that mortality rates for females had actually worsened in 42% of counties, those shown in red, primarily in the south and west regions.



Source: Kindig, D and Cheng, E. Even As Mortality Fell In Most US Counties, Female Mortality Nonetheless Rose In 42.8 Percent Of Counties From 1992 To 2006. Health Affairs 2013 32(3): 451-458

We found several factors associated with this worsening, the most important being college education, smoking, and median household income. In this study no medical care factors such as percent uninsured or number of primary care physicians were associated with this worsening over time.

We also examined "How Healthy Could a State Be", in which we modeled how state mortality rates could improve if they each had the highest level of all the determinants that any state had already achieved.



Source: Kindig, DA, Peppard, P and Booske, B. "How healthy could a state be?." *Public health reports* 125(2) (2010): 160-167.

We found that even the healthiest state New Hampshire could improve mortality by 24% and the least healthy, West Virginia by 46%. The factors most associated with this improvement were reducing smoking rates, increasing insurance, increasing high school and college graduation rates, increasing median family income, and increasing employment.

So we know that much more than health care is needed, even though of course, everyone needs access to affordable quality care. Evidence for investments in efforts like early childhood education is strong, resulting in such new investments in many communities. An Institute of Medicine committee on Health Literacy I chaired (*A Prescription to End Confusion*) found that 40% of American adults do not have adequate literacy skills to effectively navigate the health care system. But in a time

of limited resources we do not know enough to guide exact choices of the most cost effective investment balance across all determinants in a given community. This is why my colleague John Mullahy and I published a Commentary in JAMA titled "Comparative Effectiveness of What: Evaluation Strategies for Improving Population Health" (2010, 304 (8):901-902) in which we argued that now that we are realizing that social factors play such an important role in health outcomes, we need private foundations and the federal government to much more aggressively fund the kind of studies beyond medical care alone that will help us make the best investment and policy choices across the social determinants for a healthier future.

But we know enough to act now. Many children born in poverty will have shorter and unhealthier lives determined by the time they get to middle school. I have been looking at these maps for my entire career and am frankly very tired of it. At a time when the important issue of medical care access and cost is front page news every day, I commend this Committee for bring attention to the other determinants of health which are at least as important in changing the color of these maps.

Thank you for the invitation to appear before you today to discuss these important issues. I look forward to your questions.