Reducing Health Disparities Among Older Workers: New Lessons from Spatial Variation

SARAH ABRAHAM, RAJ CHETTY, SHELBY LIN, MICHAEL STEPNER, AND NICHOLAS TURNER

Key Findings and Policy Implications

This paper examines the variation in the relationship between income and mortality rates for adults aged 45-54 across geographic areas of the United States. It uses data on earnings, mortality, and geographic location from de-identified federal income tax records. The data cover every worker in the U.S. from 1999-2011 and include information on age, household income, county of residence, and deaths within this time period. The paper finds that:

- The spatial variation in how income relates to mortality is driven primarily by differences in mortality rates for low income individuals. Spatial variation in mortality rates is three times larger for those with annual incomes between $10,000 and $25,000 than for those with annual incomes of $75,000 or higher. The standard deviation of mortality for individuals below the national median income is 1,284 deaths per 100,000, compared to 497 deaths per 100,000 for above-median income.

- Within local areas, positive changes in income are associated with much larger decreases in mortality rates for the bottom third of the income distribution. Above these income levels, mortality rates fall relatively slowly with increasing income.

- Mortality rates for low-income individuals vary from 4,800 deaths per 100,000 in Yuma, AZ to 15,000 deaths per 100,000 in Vincennes, IN. Low-income mortality and the slope of the mortality-income gradient are strongly correlated with local health risk behaviors (smoking and obesity) and racial composition, but only weakly correlated with measures of health care access.

Understanding the composition of mortality variation in the population is important in evaluating policies to reduce mortality rates and disparities in mortality across population groups. While the findings do not identify the causal determinants of differences in mortality rates across subgroups of the population, they do suggest that focusing on the high mortality rates among low-income individuals in certain areas of the U.S. is likely to be a fruitful approach to reducing health disparities.

RAJ CHETTY is Professor of Economics at Harvard University and an NBER Research Associate.

SARAH ABRAHAM AND MICHAEL STEPNER are graduate students at Harvard University.

SHELBY LIN is in the PhD program at MIT.


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