Effects of Uninsurance during the Preceding 10 Years on Health Status among Rural Working Age Adults
Effects of Uninsurance during the Preceding 10 Years on Health Status among Rural Working Age Adults

Authors:

Janice C. Probst, PhD
Charity G. Moore, MSPH, PhD
M. Paige Powell, PhD
William Pearson, PhD
Amy Brock Martin, PhD

South Carolina Rural Health Research Center
220 Stoneridge Drive, Suite 204
Columbia, SC 29210
(803) 251-6317
Janice C. Probst, PhD, Director

September 2005

Funding acknowledgement:

This report was prepared under Grant No. 6 U1C RH 00045-03

Office of Rural Health Policy
Health Resources and Services Administration
US Department of Health and Human Services
Rockville, Maryland
Joan Van Nostrand, DPA, Project Officer
Executive Summary

Our study sought to determine if individuals with longer periods of uninsurance, in multivariable analyses controlling for income, poverty and health status/behavior at the beginning of the time period, will be more likely to be overweight, to report experiencing hypertension or diabetes, or to describe their health as “fair” or “poor.” We also looked to see if the effects of uninsurance would be greater in rural than in urban respondents, and greater for minority rural populations than for white rural populations.

Key Findings

Effects of Uninsurance

- In a population just reaching age 40, continuous health insurance coverage across the preceding 8 to 10 years was not associated with better self-perceived health, as measured using the SF-12 Physical Component Score, than interrupted coverage. A positive relationship between insurance coverage and health in unadjusted analysis, which remained after controlling for race and residence, ceased to be significant after age, education, marital status, and poverty during youth were held constant.
- Similar results were found when health status was dichotomized into “fair to poor” versus better self-perceived health.
- Health insurance was not significantly related to the probability that a respondent would report a high BMI (obesity), or would have been diagnosed with hypertension or diabetes.
- Continuous insurance coverage was significantly related to better mental health, as measured by the SF-12 Mental Component Score. The effect persisted in multivariable analysis controlling for residence, race, and demographic characteristics.

Effects of Rural Residence and Race

- Rural residents reaching age 40 in 1998 or 2000 were less likely to have been continuously insured between 1989 – 2000 than were their urban peers. Among whites, 57.2% of rural residents were continuously insured versus 66.4% of urban residents (p=0.0009). Similar but non-significant trends were found among African Americans (37.0% versus 44.7%; p=0.1098) and among Hispanics (37.7% versus 44.1%; p = .4114).
- With differences in insurance coverage, residence, education, marital status, age, and poverty in young adulthood held constant, African Americans and Hispanics in the study did not perceive themselves to have poorer physical or mental health than whites. The effects of lack of insurance were not greater in rural than in urban areas and were not greater for minority rural populations than for white rural populations (no significant interactions).
- The odds that an individual would experience obesity, and hypertension and diabetes varied by race. Obesity and diabetes were more common among both African Americans and Hispanics at age 40 than among whites. Diabetes was more likely to be reported by African American respondents (Table 10).
- Over the 1989 – 1998/2000 period, slightly more than a third of rural minority respondents (37%) were continuously insured. While rural whites were more likely to be
continuously insured (57%) than rural minorities, 43% of rural whites experienced periods without insurance. Rural whites were significantly less likely to report continuous insurance than were urban whites.

**Policy Recommendations**

- The Department of Health and Human Services should evaluate how its component agencies can best support local programs working to improve access to care for uninsured populations. Working with organizations such as the American College of Healthcare Executives, the American Hospital Association, and the National Rural Health Association, DHHS should ensure that best practices among such local efforts are identified and shared. Technical assistance materials developed to document best practices should be available to, and understandable by, non-specialist community leaders.

- The Secretary of the Department of Health and Human Services should work with the National Association of Rural Health Clinics, the National Rural Health Association, and the National Association of Community Health Centers to define model approaches to involving RHCs in the care of uninsured persons. It would be particularly valuable to document collaborations among RHCs, CHCs, and other service providers, and to communicate the information broadly to state and local planners.

- In partnership with Area State Offices of Rural Health and local mental health professional organizations, Area Health Education Consortia are encouraged to develop strong educational programs in mental health screening, treatment, and referral for family medicine, internal medicine, and general surgery resident physicians, and for nurses. Such educational content is needed both during practitioner training and as part of continuing medical education programs.

- State Area Health Education Consortia are encouraged to partner with local middle and high schools in an attempt to promote health careers, both as a means of encouraging children to higher educational attainment and as a way of growing a local health labor force. Such activities should be particularly promoted in rural areas.

- State Area Health Education Consortia are encouraged to partner with agencies in their state responsible for implementation of the WIA, in order to identify health careers job training opportunities that may benefit rural residents and institutions.

**Research Recommendations**

- The youngest members of the NLSY-79 cohort reach age 40 in 2005. When public use data are available for the full NLSY-79 cohort, the analysis reported here should be repeated. With larger sample sizes, many limitations of the present analysis may be obviated. For example, more detailed definitions of “rural” and “insured” will be possible.

- Poverty at ages 19 – 21 appears to have lasting effects on perceived mental and physical health. This long-term effect may result from culture as learned in youth, from employment choices, or from other factors not included in the present analysis. Identification of factors which ameliorate the effect of early poverty, which may include education, employment in varying occupations, and so on, is essential.