



## When a Community Has a Higher Rate of Uninsured Residents, Does That Affect Care for Those With Insurance?

Investigating the impact of high community rates of uninsurance on health care quality and access

### SUMMARY

In 2009 and 2010, researchers at the David Geffen School of Medicine at the University of California at Los Angeles (UCLA) and the RAND Corporation measured the impact of high local rates of uninsurance on access to care and the quality of care among adults with health insurance. The researchers studied 86,928 adults with private health insurance or Medicare in 200 metropolitan areas across the country.

### Methodology

The study was designed to surmount shortcomings in earlier studies that had found that high rates of uninsurance have a negative "spillover" effect on the health care of people with insurance.<sup>1</sup> For example, the research team:

- Relied on the household component of the Medical Expenditure Panel Survey for 1996–2006. Sponsored by the federal Agency for Healthcare Research and Quality, this national survey provides information on access to and use of health care. The survey also allowed the researchers to include comprehensive measures of individuals' health status and larger sample sizes than previous studies.
- Developed estimates of the percentage of the population in each metropolitan area that was uninsured using multiple years of data from the U.S. Census Bureau's Current Population Survey. Earlier studies had relied on surveys with smaller sample sizes for each metropolitan area.

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<sup>1</sup> Pauly MV and Pagan JA. "Spillovers and Vulnerability: The Case of Community Uninsurance." *Health Affairs*, 26(5): 1304–14, 2007; and Pagan JA and Pauly MV. "Community-Level Uninsurance and the Unmet Medical Needs of Insured and Uninsured Adults." *Health Services Research*, 41(3 Pt 1): 788–803, 2006.

- Included people aged 65 or older with Medicare coverage in the study. Earlier studies had examined only working-age adults (those 18–64).
- Used more rigorous analytical methods to account for differences across communities that might be related to the uninsurance rate in the community, such as in people’s health status and preferences for health care

RAND acted as a subcontractor to UCLA for the study. Jose J. Escarce, M.D., Ph.D., of the David Geffen School of Medicine at UCLA, and Carole Roan Gresenz, Ph.D., of RAND, served as principal investigators.

## Findings

The research team reported the following findings in “Spillover Effects of Community Uninsurance on Working-Age Adults and Seniors: An Instrumental Variables Analysis” published in *Medical Care*<sup>2</sup>:

- A higher rate of uninsurance in a community had a negative effect on access to care among working-age people with private insurance. For example, a 10-percentage-point increase in the uninsurance rate:
  - Lowered the probability that an insured individual had a usual source of care by 6.2 percentage points
  - Increased the probability that an individual reported difficulty receiving needed care by 7.7 percentage points
  - Reduced the probability that an individual reported an office visit to a health care provider during the prior year by 1.7 percentage points
  - Reduced the probability that an individual reported any expenditures for medical care by 1.4 percentage points
- A higher rate of uninsurance in a community had a negative effect on satisfaction with care among working-age people with private insurance. For example, a 10-percentage-point increase in the uninsurance rate:
  - Decreased the probability that an insured person reported being somewhat or very satisfied with the quality of care from their usual source by 1.9 percentage points
  - Increased the probability that an insured person reported very low satisfaction with the usual provider by 3.6 percentage points

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<sup>2</sup> Gresenz CR, Escarce JJ, “Spillover Effects of Community Uninsurance on Working-age Adults and Seniors: An Instrumental Variables Analysis.” *Medical Care*, 2011; 49(9):e14-21. Abstract available [online](#).

- Reduced the probability that an insured person was highly satisfied with care received during the previous 12 months by 2.5 percentage points
- A higher community uninsurance rate had a negative impact on access to care among seniors with Medicare coverage. For example, a 10-percentage-point increase in the uninsurance rate:
  - Increased the probability that a Medicare enrollee reported difficulty in receiving needed care, or reported not receiving care, by 1.7 percentage points
  - Increased the probability that a Medicare enrollee reported an unmet need for prescription drugs by 0.5 percentage point

However, the local uninsurance rate did not affect health care use rates among seniors, including the probability that a Medicare enrollee reported an office visit or any expenditures for medical care during the previous year.

- A higher community uninsurance rate had sizable negative effects on satisfaction with care among Medicare enrollees. For example, a 10-percentage-point increase in the uninsurance rate:
  - Decreased the probability that a Medicare enrollee was very satisfied with the quality of care from the usual provider by 3.6 percentage points
  - Increased the probability that a Medicare enrollee was unsatisfied with the usual provider by 3.6 percentage points
  - Decreased the probability that a Medicare enrollee rated health care quality as high by 6.8 percentage points
  - Decreased the probability that a Medicare enrollee was highly satisfied with care by 5.8 percentage points

### Significance to the Field

Because this study surmounts the methodology shortcomings of earlier ones, participants in policy debates can now credibly point to the deleterious effects of high rates of uninsurance on access to and quality of care in a community, according to the project directors.

### Lessons Learned

1. Creating contextual data files with longitudinally consistent variables is challenging because of changes over time in the ways in which various geographical catchment areas are defined. (Co-Principal Investigator/Gresenz)

## Funding

The Robert Wood Johnson Foundation supported this project through a grant of \$190,414 from January 2009 to June 2010.

## Afterward

The research team may write policy briefs on the findings from this study. The team is also planning two further studies on:

- The spillover effects of high community uninsurance rates on the uninsured
- The impact of high community uninsurance rates on health outcomes

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### Prepared by: Robert Crum

Reviewed by: Sandra Hackman and Molly McKaughan

Program Officer: Brian C. Quinn

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## BIBLIOGRAPHY

(Current as of date of the report; as provided by the grantee organization; not verified by RWJF; items not available from RWJF.)

### Articles

Gresenz CR, Escarce JJ, “Spillover Effects of Community Uninsurance on Working-age Adults and Seniors: An Instrumental Variables Analysis.” *Medical Care*, 2011; 49(9):e14-21. Abstract available [online](#).

### Meetings & Conferences

#### *Presentations*

Carole Roan Gresenz, “Spillover Effects of Community Uninsurance,” at the American Society of Health Economists, June 22, 2010, Ithaca, NY. Proceedings available [online](#).