Community Uninsurance and Unmet Health Care Needs
Is There a Spillover Effect for Rural Areas?

Michael Castro (castrom@bgsu.edu)
Department of Sociology
Bowling Green State University

Background

- The majority (85%) of the uninsured in the U.S. were adults aged 18 to 64 (DeNavas-Walt, Proctor and Smith 2013).
- The percent of adults that have experienced an unmet need for healthcare is increasing from 11.4% in 2004 to 14.6% in 2010 (CDC 2011).

The Spillover Effect

- Communities with high uninsurance rates have faced greater strain on healthcare resources (IOM 2003, 2009).
- Lower levels of medical specialists.
- Less operating hours.
- The insured have also been adversely affected by high levels of community uninsurance through a reduced level of access to healthcare resources.

Prior Research

- The Spillover Effect is significantly affecting the insured but not the uninsured (Paglin et al 2006).
- However, prior studies have examined the community effect using urban areas or specific states.
- Rural residents less likely than urban residents to visit a doctor (Ormond, Zuckerlman, & Lilja 2000) and are less likely to get screened for future health problems (Casey, Call, & Klingner 2001).

Andersen Behavioral Model of Health Service Use

- Characteristics of the individual play an important role in the outcome of access to healthcare (Andersen 1968; 2005; Andersen et al 2004; Andersen 2008).
- Predisposing, enabling, and need based characteristics.
- Community level characteristics also play a role on individual characteristics as well as the outcome.

Current Study

H1: Insured individuals are more likely to have an unmet medical need in the past 12 months in areas with high rates of community uninsurance.

H2: Individuals in rural areas will experience higher levels of unmet need than individuals in urban areas.

H3: The Spillover Effect for insured individuals will be stronger in rural areas than in urban areas.

Data

- Behavioral Risk Factor Surveillance System - 2010 & 2011 Annual Survey Data
- Respondents Aged 18 to 64
- Predisposing, enabling, and need characteristics
- Small Area Health Insurance Estimates - 2010 & 2011 Annual Estimates of Uninsurance Rates
- Linked Together by FIPS codes.
- Final Sample of 535,140 respondents.

Measures

- Unmet Need
  - "Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?"
- Predisposing Measures
  - Age, Sex, Race/Ethnicity
- Enabling Measures
  - Insurance Status, Usual Source of Care, Education, Income, Marital Status, Western Status
- Need Measures
  - Health Status
- Uninsurance Rate

Table 5: Odds of an Individual Experiencing an Unmet Need Split by Insurance Status

Results

Conclusions

- The Spillover effect is present in urban areas.
- Unmet need is lower in rural areas than in urban areas.
- Race differences of unmet need disappear after controls are included.
- The Spillover Effect is present in urban, suburban, and large urban areas. But in small rural areas the likelihood of unmet need increases for the insured and uninsured significantly.

Limitations

- Not able to distinguish type of insurance.
- Don’t know full-time/part-time status of respondent.
- What is Urban/Rural?
- Some smaller counties are aggregated groups of counties.