

Health Care Access and Use among the Rural Uninsured

**NRHA Annual Meeting
Austin, TX
May 5, 2011**

Muskie School of Public Service

**Erika Ziller, Jennifer Lenardson, Andrew Coburn
Maine Rural Health Research Center**



**Rural Health Research
& Policy Centers**

Funded by the Federal Office of Rural Health Policy

www.ruralhealthresearch.org

Background

- Rural residents are more likely to be uninsured, particularly when they live in small, remote places.
- Uninsured have poorer access to care, delay care, and obtain care at levels of greater acuity than the insured & more intensive settings (e.g., the ED)

Background

Limited studies comparing rural-urban impact of being uninsured:

- Rural uninsured have better access to a usual source of care but use fewer services than urban uninsured (Larsen & Fleishman 2003).
- Rural uninsured are more likely to experience preventable hospitalizations compared to their urban counterparts (Zhang, Meuller & Chen, 2008).

Purpose

- Assess health care access and use for the rural uninsured compared to:
 - the urban uninsured
 - the rural insured

- Assess whether differences between uninsured rural and urban residents differ from those of their insured counterparts.

Methods

Data: Pooled years from the 2002 - 2007 Medical Expenditure Panel Survey (MEPS).

Sample: 173,000 individuals under age 65, of whom nearly 30,000 (17% unweighted) lived in a rural area.

Methods

Variables:

Independent: Rural residence
Uninsured all year

Dependent: Self-reported access
Health care use

Analyses: Weighted bivariate and multivariate analyses with adjustment for complex sample design; difference-in-difference models.

Measures

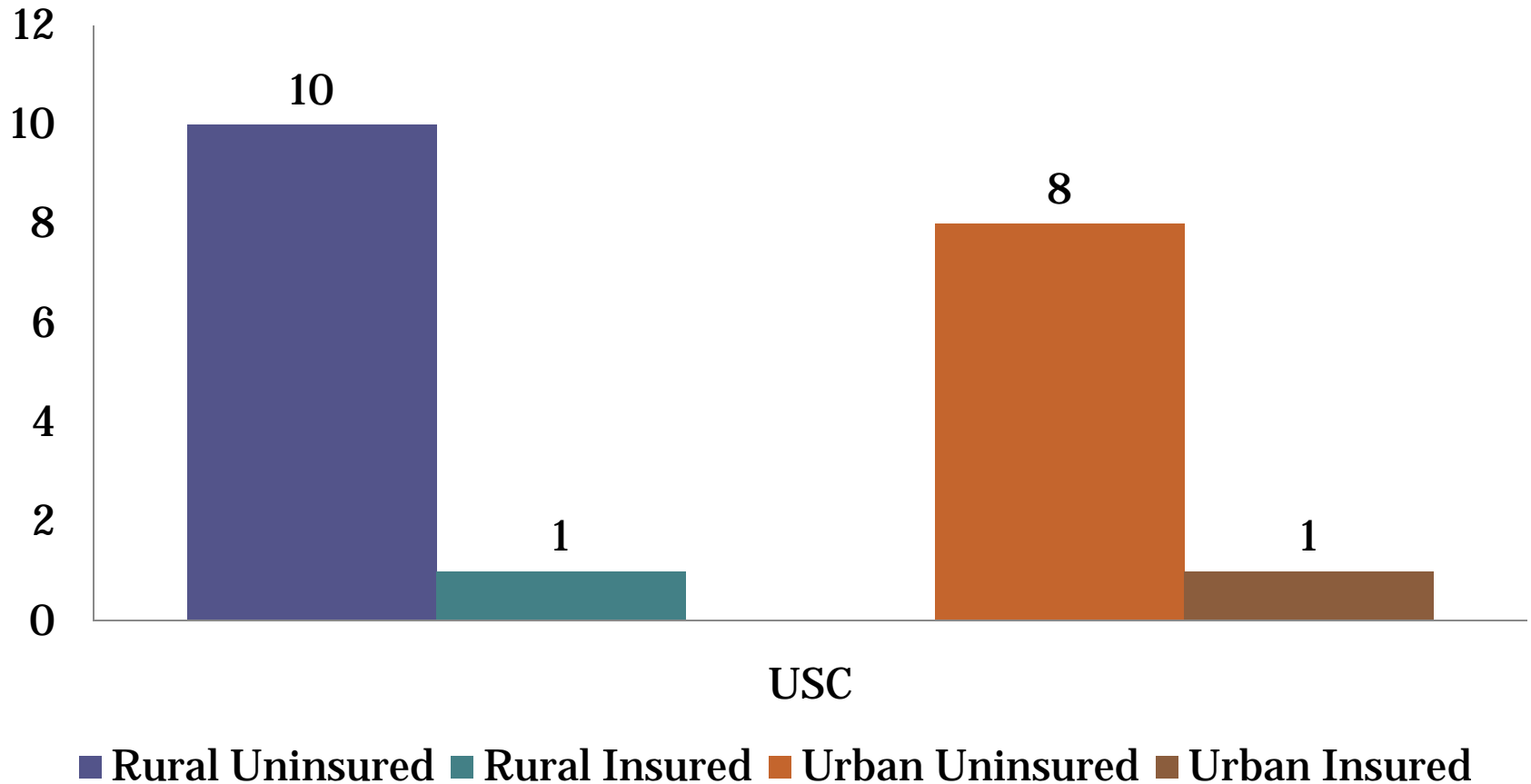
Access

Reported usual source of care (USC)

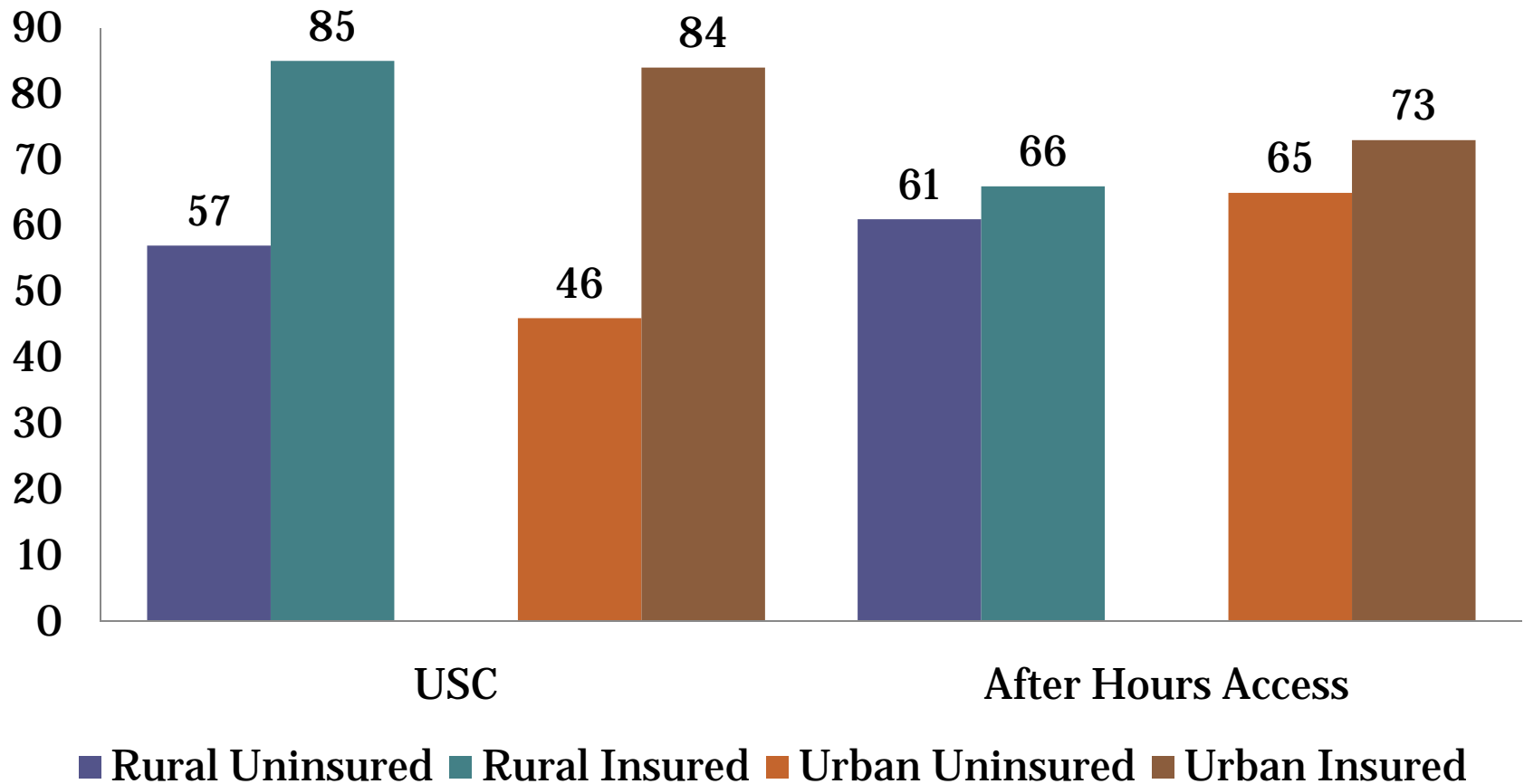
Reported delays/forgone health care

Use: Any ambulatory use, ER use, prescription drug use, office-based physician visits, office-based non-physician visits.

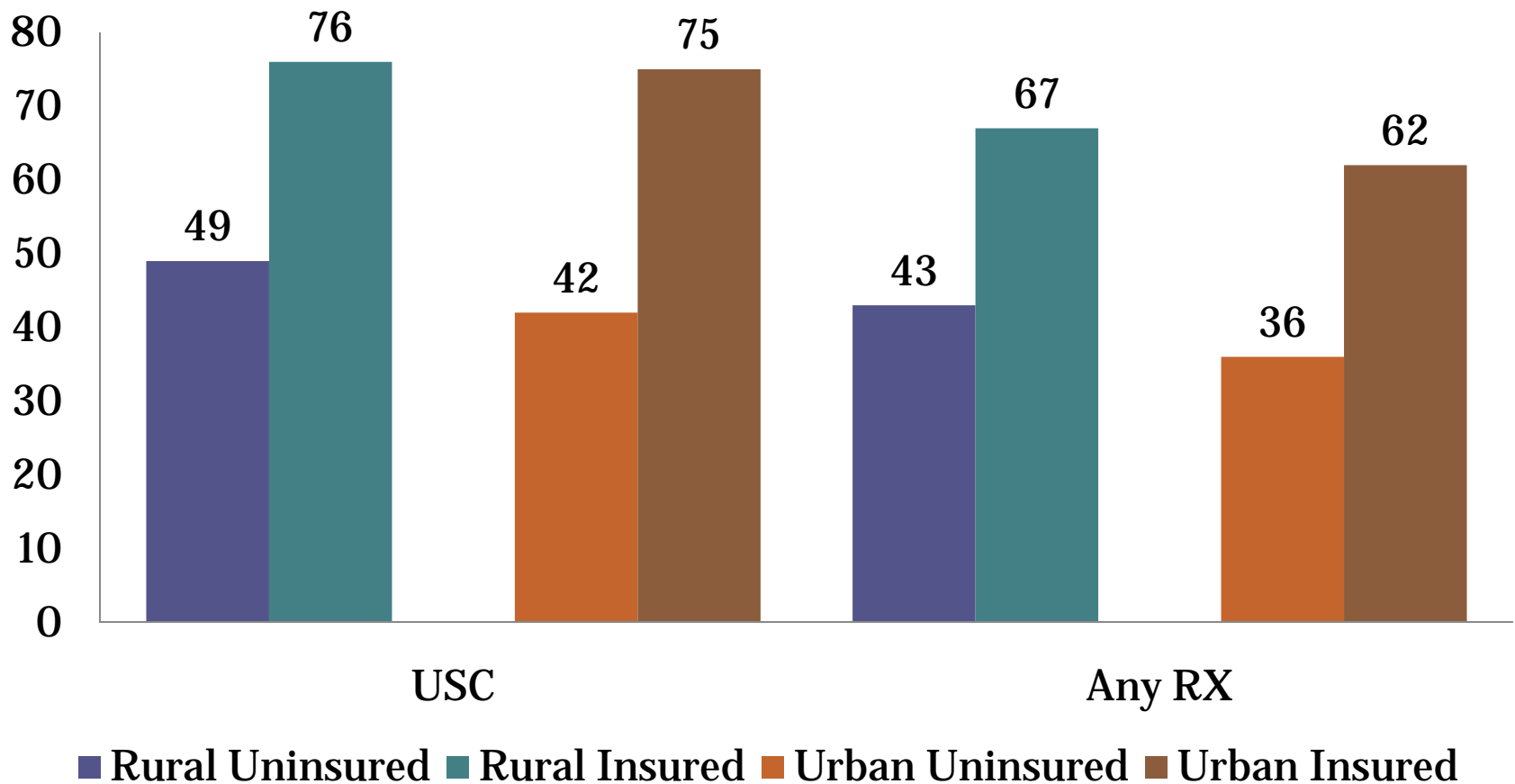
Delayed or Forgone Care



Usual Source of Care



Any Ambulatory Care Visit



Multivariate Analyses

- Difference-in-differences logistic regression models where rural residence and uninsurance are interacted

- Dependent variables:
 - Has a USC
 - Delayed/Forgone Care
 - Received Ambulatory Care
 - Obtained a Prescription Medication

Multivariate Analyses

- Simple models included rural residence, uninsured status, and interaction
- Control variables included: age & age squared, gender, marital status, income, education, health status and region of residence.

Multivariate Findings

- No difference-in-difference for delayed/forgone cost based on residence
- Prescription drug use revealed a significant difference-in-differences in the simple models that disappeared once control variables were added.

Multivariate Findings

- Odds of having a usual source of care and of having an ambulatory visit showed significant difference-in-differences, even after controlling for other factors.
- The difference in odds of having a USC or ambulatory care visit are higher for the rural uninsured, controlling for use patterns of the rural insured.

Conclusions

- Regardless of residence, the uninsured are 6 to 7 times as likely to delay or forego medical care due to cost.
- Uninsured rural residents are less likely to have a USC and to use all types of health care services than are rural residents with coverage.

Conclusions

- The uninsured face access barriers but disparities based on insurance status are smaller in rural than urban areas for several measures, controlling for multiple factors.
- Rural residents face some unique barriers including difficulty obtaining care after hours, travel distances, and poor dental access.

Conclusions

- Rural providers may be more willing to provide some services to their uninsured patients than are urban providers.
- Recent study found 86% of RHCs offer free/discounted care to un/underinsured.
- Rural providers may face large uncompensated care burdens.

Limitations

- Health care access is a complicated phenomenon and not easily measured by large national surveys.
- Having a USC is particularly ambiguous in a rural context, because it may reflect limited supply.

Contact Information

Erika Ziller, Senior Research Associate

Maine Rural Health Research Center
Muskie School of Public Service
University of Southern Maine
PO Box 9300, Portland, ME 04104-9300

eziller@usm.maine.edu
207-780-4615



Rural Health Research
& Policy Centers

Funded by the Federal Office of Rural Health Policy

www.ruralhealthresearch.org