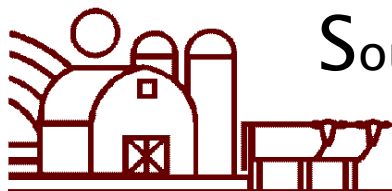


# Emergency Department Use by Medically Indigent Rural Residents



South Carolina

Rural Health Research Center



UNIVERSITY OF  
SOUTH CAROLINA

Arnold School of Public Health  
Department of Health Administration  
Columbia, SC 29208

DRAFT: JULY 10, 2003

# **Emergency Department Use by Medically Indigent Rural Residents**

July, 2003

Authors:

Kevin Bennett, MS  
Janice C. Probst, PhD  
Charity G. Moore, PhD  
Judith A. Shinogle, PhD

Funding acknowledgment:

This report was prepared under Grant No 6 UIC RH 00045-02 with the Federal Office of Rural Health Policy, Health Resources and Services Administration

Joan Van Nostrand, DPA, Project Officer

Cover acknowledgement:

[www.vgh.mb.ca/emergency.htm](http://www.vgh.mb.ca/emergency.htm)  
[www.hanoverhospital.on.ca/picture.html](http://www.hanoverhospital.on.ca/picture.html)  
[www.rurdev.usda.gov/ok/utilities.htm](http://www.rurdev.usda.gov/ok/utilities.htm)

## Executive Summary

### Study Purpose

Because EDs are required to provide some treatment to all patients, uninsured persons cannot be denied care. The need to handle all patients is believed to put significant financial strain on hospitals, particularly those in rural areas. The study reported here examined ED use, combining national data and South Carolina state data to estimate:

- Uncompensated charges in rural ED's nationally
- The ameliorating effects of rural community health centers (FQCHC's) on ED use by rural residents

### Key Findings

#### *ED visits*

- An estimated 211 million emergency department (ED) visits were made across the United States during 1999 – 2000, 37.4 visits per 100 persons per year. Just under a quarter of all visits (23.6%) were to rural ED's. "Rural" was defined as non-metropolitan counties.
- About one in five ED visits (20.5%) was made by African American patients, with the proportion of African Americans being higher in urban ED's (23.1%) than in rural ED's (12.0%).

#### *Self-pay visits*

- Of persons visiting ED's, 17.8% lacked health insurance to help them meet the costs of service.
- Self-pay visits were more likely to involve African American patients (25.6%) than were insured visits (19.2%).
- Self-pay patients were admitted to the hospital as a result of their ED visit at about half the rate (6.9%) of patients covered by a third-party payer (14.0%).

#### *Charges for ED visits*

- In South Carolina, the median charge for an insured ED visit that did not result in hospital admission was \$297, with urban and rural ED's having similar charges (\$309 and \$274, respectively). The median charge for a self-pay patient who was admitted was \$6,407 state-wide. Charges were higher in urban hospitals (\$6,957 ) than in rural hospitals (\$5,225).
- Projecting to the nation, an estimated \$8.8 billion in charges were generated at rural hospitals caring for persons who did not have insurance in 1999 and 2000, including both ED visits and any resulting hospitalizations. If one assumes that institutions typically only receive half of charges, this would represent \$4.4 billion that rural hospitals did not receive across 1999 – 2000.

#### *Reducing ED visits*

- The presence of a federally-qualified community health center in a patient's county of residence significantly decreased the ED visit rate, from 37.4 visits per 100 persons per year to 31.0 visits per 100 persons.

### **Policy Implications**

Two infrastructure programs appear particularly relevant for ameliorating the effects of uninsured patients on rural hospitals:

- Conversion of appropriate rural hospitals to Critical Access Hospitals, with increased reimbursement, offers one method for ensuring that rural hospitals remain viable in the face of continued high levels of uninsured patients in their ED's.
- Expanding community health centers into more rural counties. The research reported here supports the value of community health centers, with their expanded access for all populations, as a means of reducing ED use.

### **Future research**

- Future research should determine the proportion of rural ED visits that are potentially avoidable, as an additional means of assessing the adequacy of provider supply and patient access to care in rural areas.
- Future research should track whether population-based ED visit rates decline in communities that acquire community health centers as a result of planned expansion.