Eliminating Rural Disparities: Systematic Approach to Health Care Delivery

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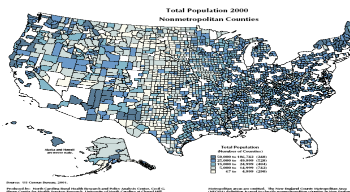
INTRODUCTION

Objective: This study explores health care disparities in rural America, with particular emphasis on rural communities in South Carolina. We describe the demographics of rural communities, the degree to which rural citizens are at risk for health disparities, and some of the unique challenges facing rural health. Our study concludes with several health policy recommendations based upon our review of the literature, analysis of state-wide data, and interviews with key individuals.

Definitions: According to the Office of Management and Budgets, a "metropolitan" area is a city with greater than 50,000 people. Anything non-metropolitan is considered rural, so according to this definition a city with less than 50,000 people is rural.

In figure 1, showing the demographics of rural America and South Carolina, we see that a surprising high percentage of surface area in the US is indeed considered rural.

Figure 1



US Bureau of Census; Office of Management and Budget, 1998.

Disparities in healthcare between rural and urban residents are well documented. Not only do rural residents as a whole have less access to healthcare, but also have worse health outcomes due to a delay in getting appropriate care. Rural residents have higher rates of uncontrolled diabetes, higher death rates from acute MIs and higher rates of being uninsured than their urban counterparts, although differences by race and ethnicity exist (See Figures 2-4).

Figure 2. Adult Admissions for Uncontrolled Diabetes Without Complications per 100,000 Population, by Race

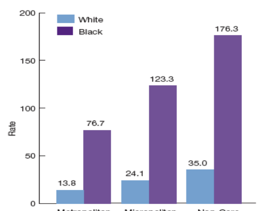
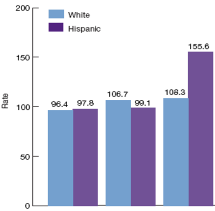
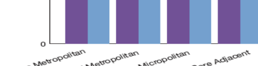


Figure 3. Deaths per 1,000 Adult Admissions for Acute Myocardial Infarction, by Race/Ethnicity





Source: Agency for Healthcare Research and Quality, "Fact Sheet on Health Care Disparities in Rural Areas: Selected Findings From the 2004 National Healthcare Disparities Report."
Key: Metropolitan=50,000 or more inhabitants, Micropolitan=10,000 to 50,000 inhabitants, Non-core= not metropolitan or micropolitan.

Figure 4. People Under Age 65 With Any Period of Uninsurance in Past Year, by Ethnicity

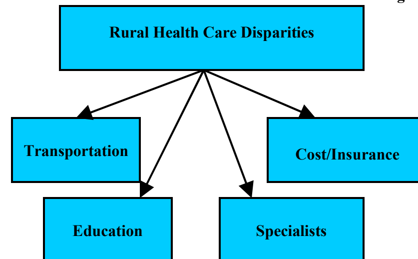
METHODS

A literature review was performed to determine the definition of rural and identify rural health disparities and in addition, raw data was analyzed from the SC State Budget and Control Board. The remainder of the information for this poster was collected mainly through conducting interviews and focus groups with rural patients and healthcare providers and community leaders and advocates for rural health.

RESULTS

We discovered that the main barriers to healthcare for rural residents are transportation, lack of education, and low income/lack of health insurance, and access to specialists (Figure 5). Therefore, in an effort to work towards parity in rural healthcare, we have attempted not only to document the aforementioned causes of the problems, but also to offer solutions to help solve them.

Figure 5



1. Transportation

Factors Affecting Rural Residents:

- 67% lower socioeconomic class
- 43% less likely to own a vehicle
- 40% higher injury rates
- more chronic health conditions

American Public Health Association Fact sheet 2004

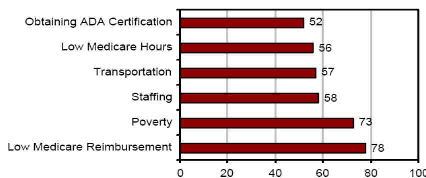
Transportation Issues:

- 80% rural areas have no public bus service
- 40% rural population lives in area without any type of public transportation system
- Federal government spends less than 10% of federal dollars for public transportation on rural areas

Rural Policy Research Institute www.rupri.org

Rural barriers to attending Diabetes Self Management Education

Figure 6



Graph from SC Rural Health Research Center 2004 http://rhr.sph.sc.edu/report/SCRHRC_KF_Diabetes.pdf

2. Education

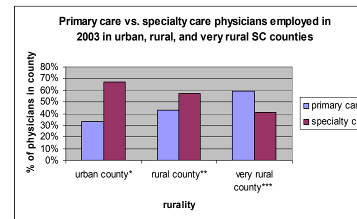
Rural Citizens and their education (See Figure 6):

- less likely to receive preventative screening services
- minorities visit health care providers less often and receive less education because of limited access to high quality specialty care and specialists.
- limited high quality educational facilities
- public educational system is under funded, which diminishes recruitment for certified teachers, and the facilities are often outdated and poorly maintained.
- higher percentages of high school dropouts
- live below the national poverty level
- tend to be less likely to have attended/graduated from colleges/universities
- it's important to remember that "access is not everything. Education starts at childhood to change ingrained behaviors." (from a rural health policy maker at SC's Office of Rural Health)

3. Access to Specialists

Patients in rural areas travel **2 to 3 times farther** to see medical and surgical **specialists** than those living in urban areas. Chan, et al, The Journal of Rural Health; 2006; 22(140). (See also Figure 7)
39 SC counties have **mental health** professional shortage areas; all **46** SC counties have **dental health** professional shortage areas. (US Department of Health an d Human Services; HRSA)

Figure 7



* Charleston county ** Georgetown county ***Abbeville county
Above counties were selected randomly to represent a cross-section of counties labeled as urban, rural, or very rural by the South Carolina Budget and State Control Board, Office of Research and Statistics; statistical data also obtained from the same source.

4. Cost and Insurance

- •Although 15.7% of the US population was without
- • health insurance coverage in 2004, approximately
- •20% of rural residents were uninsured. (Figures 8 and 9)

Health insurance and income level:

- " For the most part, rural = poorer. The most frustrating thing about caring for a poor, rural population is that they are poorly funded and a majority lack insurance or means to pay for the care they need." –from a Family Medicine Doctor in Kingstree, SC
- There is a larger prevalence of uninsured citizens in rural communities than in urban communities. Each day in rural SC, 112 people receive medical services that they cannot pay for.
- Medicare and Medicaid accounted for 55% of rural inpatient hospitalization payments in 1999
- Medicaid pays for a larger portion of emergency room visits and hospitalizations in rural SC than urban SC *(www.ors2.state.sc.us)*

4. Cost and Insurance *(continued)*

The rising costs of healthcare are due to the following:

- Advancements in technology
- Population characteristic changes (aging population, increased obesity, etc.)
- Increases in healthcare provider costs (mainly in-patient hospitalization, office-based visits and prescription costs)

(www.ahrq.gov)

Figure 8: Uninsured US Citizens

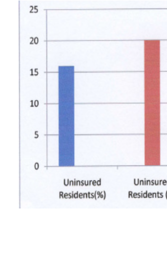
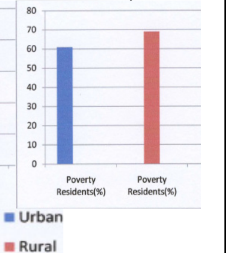


Figure 9: US Citizens Living Below the Poverty Line



Urban
Rural

HEALTH POLICY RECOMMENDATIONS

1. To Resolve Transportation Issues

Incorporate the use of Healthcare Coaches:

- Make transportation arrangements
- Provide referrals
- Make appointments for patients

2. To Resolve Education Issues

- Explore collaborative, university based specialty consults for rural community healthcare centers.
- Reform funding mechanism for public education

3. To Resolve Specialist Issues

- Extend scholarships and grants for healthcare providers willing to practice in rural areas
- Explore feasibility of using telemedicine to provide primary care practitioners in rural communities access to specialty care

4. To Resolve Cost/Insurance Issues

- Rural communities tend to have a prominent number of small businesses therefore it would be beneficial to implement the program to help insure the employees of those small businesses The South Carolina Small Employer Health Plan provides a state-wide small employer coverage option that covers all employees in a group *(www.covertheuninsuredsc.org/policy.asp),*
- Subsidize the premium in this plan for covered individuals/families who are underinsured
- State or federal government health insurance reform