HSR&D
Health Services Research & Development Service
MANAGEMENT BRIEF
Number 13 *Overviews of Health Care Topics for VA Senior Managers* January 2000

Rural Health – Improving Access to Improve Outcomes

"The availability of health care resources for veterans who live in rural settings is extremely important to the health and well-being of those veterans. HSR&D is working to identify ways to provide quality, cost-effective care in rural settings."

John G. Demakis, MD
Director, Health Services Research and Development

What is rural health?

A rural setting is usually defined as a town or county with fewer than 2,500 residents.[1] Rural health refers to health care provided for people who live in a rural setting. Many veterans live in such a setting and, depending on how far away they are from medical facilities, may have difficulty accessing adequate health care. Health care access is an individual's ability to obtain the health care they need or want in an appropriate timeframe. Access to adequate health care for rural veterans can be affected by several factors such as proximity to health care facilities and/or providers, and availability of services. There are many ways that health care for rural veterans can be improved. Some of these are adjusting the proximity between patients and providers; establishing alternative communication links (such as telecommunication) between patients and providers when distance factors cannot be changed; community outreach; implementing the use of mobile services; and integrating VA and non-VA health care. These are just some of the approaches that may be considered when planning improved health care for veterans in rural settings.

How does rural health impact veterans' health care?

VA medical centers tend to be located in urban settings.[2] Approximately 23% of all veterans live in rural areas[3] and thus may experience problems accessing treatment facilities and services. The degree of difficulty rural veterans have in accessing treatment depends on several factors that may include the distance the patient needs to travel to obtain health care and any obstacles to travel, such as the veteran's physical and financial status. For instance, if a veteran is in poor health, disabled and/or indigent, as are many rural veterans,[4] getting to a medical facility, much less a specialist, may be extremely difficult. Because of the difficulties in obtaining care, many veterans may put off preventive as well as necessary treatment, which results in poorer health and ultimately increased costs in health care.

Why is rural health important for VA managers?

Because most VA medical centers are located in urban settings, rural distance has become a crucial determinant in veterans' choices between VA and non-VA hospitals. HSR&D research shows that distance or travel time between the patient's home and the hospital is the most important determining factor affecting that choice.[5] Therefore, access to care is not only crucial to the health of veterans, it's important to the health of VA's health care system. However, health care interventions to improve access require careful evaluation by managers. It is important to determine whether interventions actually do improve access, and whether improved access results in improved outcomes. For example, while improving access might improve a range of patient- and system-level

outcomes (i.e., improved health status and patient satisfaction, control costs, promote quality, assure equity), these outcomes, at times, compete. Policy makers and managers seeking to monitor and improve health care need to have valid and reliable information about the multiple effects of decisions and programs that alter access.

Below are findings from some of the HSR&D studies that focus on rural health.

Impact of travel distance for health care on patients with mental illness

Studies have shown that veterans are less willing to travel for outpatient psychiatric care than they are for outpatient medical care.[2] The problem of access to appropriate mental health care would be particularly important during acute illness episodes that require immediate and, perhaps, frequent crisis interventions. A study supported by HSR&D and the National Institute of Mental Health Center for Rural Mental Healthcare Research tested the hypothesis that patients with poor geographic accessibility to ambulatory mental health services would be more likely to be hospitalized.

Study subjects included 109 patients who presented multiple times for care to the Psychiatric Evaluation Clinic in the Emergency Medicine Service of the VAMC in Little Rock, AR. Patients in the study were, in general, middle-aged, unmarried, unemployed, and Caucasian or African American.

Just over a quarter of the subjects (27.5%) lived farther than 60 miles from the Little Rock VAMC. While only 17% of those living less than 60 miles from the VAMC were admitted, 43% of those living more than 60 miles away were admitted. On average, patients who were admitted lived nearly twice as far from the VAMC as did those patients who were not admitted. These findings suggest that VA may need to consider its efforts to substitute intensive outpatient care in place of expensive inpatient treatment for rural veterans with emergent mental health problems.

Fortney JC, Owen R, Clothier J. Impact of travel distance on the disposition of patients presenting for emergency psychiatric care. Journal of Behavioral Health Services and Research, 26(1):104-8, 1999.
Study supported by HSR&D (HFP90-019) and the National Institute of Mental Health Center for Rural Mental Healthcare Research (NIMH P50 MH48197).

Mobile clinics improving the health status of rural veterans

Between 1992 and 1994, VA operated six mobile clinics in areas that were at least 100 miles from a VA health care facility. The objective of this program was to assess the health status of rural veteran patients using mobile clinics compared with patients receiving care in VA hospital-based, or standard, clinics. Because ascertaining the type of patients likely to be treated is a prerequisite for effective health planning, comparative data on these two groups of veterans is very valuable.

This HSR&D study showed that most patients in the program sought care for the management of chronic disease, and patients in both the mobile clinic and standard clinic groups had similar types of diseases. It was originally hypothesized that mobile clinic patients would be healthier than patients seen at VA standard clinics for several reasons: many patients seen at standard clinics are there for follow-up after hospitalization; and most standard clinics operate at near capacity thus limiting their service to those in greatest need. In contrast, the mobile clinics had just begun and did not limit patients by any set of selection criteria.

However, study findings showed that despite the similarities in presenting illness, mobile clinic patients' health status was statistically lower on all scales except emotional. For example, of the more than 6,000 patients seen at mobile clinics 64.2% reported fair or poor health, nearly 80% reported that their general health status limited their ability to work, and 46.5% believed their health had deteriorated over the previous year. Findings also showed that 56% had not used the parent (or closest) hospital in the previous two years. This may reflect the degree of illness in veterans living in rural America who do not have access to care. This study represents VA's continuing efforts to ascertain the needs of this large, underserved population.

Wray NP, Weiss TW, Christian CE, et al. The health status of veterans using mobile clinics in rural areas. Journal of Health Care for the Poor and Underserved, 10(3):338-348, 1999.
HSR&D study #SDR 91-015.

Travel distance is a barrier for rural veterans' use of VA medical/surgical care

As stated earlier, distance to providers is important when choosing a health care provider. This study assessed the relationship between travel distance and utilization rates of VA's medical/surgical inpatient care. Specifically, investigators set out to determine whether the variability in VA hospital usage rates indicates inequitable access to VA hospitals, and to estimate how usage is related to travel distance to a VA hospital, veterans' characteristics, and access to non-VA alternatives. Results of the study showed: **1)** use of VA decreases with travel distance only up to about 15 miles, after which use is relatively insensitive to further increases in distance; **2)** use rates and users' travel distances vary considerably among VA hospitals; **3)** usage rates for eligible veterans who are older than 65 years are less sensitive to distance than younger veterans even though the over 65 group is Medicare eligible and therefore has other choices; and **4)** non-VA hospitals are generally closer to veterans' residences than VA hospitals. Study investigators suggest several reasons for these findings, such as variability in population density and geographic distribution of VA hospitals that result in lengthy travel distances. Since VA's health system is organized into 22 networks, or VISNs, that provide both ambulatory and inpatient care to veterans, this research may help each network address concerns about the distribution of services for rural veterans.

Mooney C, Zwanziger J, Phibbs CS, et al. Is travel distance a barrier to veterans' use of VA hospitals for medical surgical care? Social Science & Medicine. In press, 2000.

HSR&D study #IIR 92-042.

References:

1. Wray NP, et al. The health status of veterans using mobile clinics in rural areas. *Journal of Health Care for the Poor and Underserved* 1999;10(3):338-348.
2. Fortney J, et al. The effects of travel barriers and age on the utilization of alcoholism treatment aftercare. *Journal of Behavioral Health Services & Research* 1998;25:108-116.
3. 1990 US Census Data from: Demographics Division. Analysis and Statistics Service, National Center for Veterans Analysis and Statistics, Office of Policy and Planning, DVA.
4. Wray NP, et al. Case Study: Evaluation of the VA Mobile Clinics Demonstration Project. *Journal of Health Care Management* 1999;44(2):133-147.
5. Health services research: advancing veterans health care. Washington DC: Health Services Research & Development Service. Office of Research & Development. VHA, 1997.

For more information about this issue of MANAGEMENT BRIEF, or to send comments, contact:

Gerry McGlynn, M.Ed., MDRC, Manager, Information Dissemination Program, 150 S. Huntington Avenue, Boston, MA 02130. Phone: 617-278-4433. Fax: 617-278-4438.

Visit the Research and Development web page at **http://www.va.gov/resdev** or the Intranet site at **http://vaww.va.gov/resdev**, or utilize the MDRC Fax-on-Demand system by calling 617-278-4492 to see additional MDRC publications and reports.

This is our thirteenth MANAGEMENT BRIEF. Please give us your suggestions and comments:

_____

_____

_____

_____

_____

_____

Name: _____

Title: _____

Phone: _____ Fax: _____

The MANAGEMENT BRIEF is produced by the Management Decision and Research Center, a program within VA's Office of Research & Development, Health Services Research & Development Service. The purpose of the MANAGEMENT BRIEF is to provide VA senior management with a concise and timely overview of a specific health care topic that includes topic definition, benefits, VA research activities, and resources for further information.