

Research to  
Improve Care for Veterans  
in Rural Areas



DISCOVERY — INNOVATION — ADVANCEMENT

## RURAL HEALTH

VA Research and Development is working to  
further increase access to high-quality health care  
for Veterans in rural areas.



Veterans Health Administration  
**Research & Development**  
Improving Veterans' Lives — [www.research.va.gov](http://www.research.va.gov)



## A Message to Our Veterans

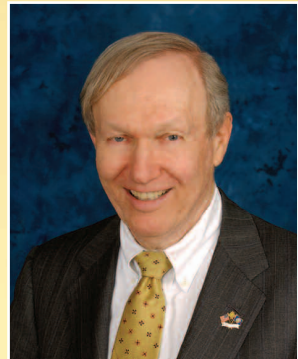
### VA Research—Improving Health Care for Veterans in Rural Areas

Many Veterans who rely on VA for health care live in remote areas—in some cases, hundreds of miles from the nearest VA facility. Of the 5.6 million Veterans who received care from VA in 2006, about 40 percent lived in rural areas.

**Providing comprehensive, high-quality health care to Veterans in rural areas is a challenge. But it is one that VA has been meeting head-on and with remarkable success—in large part thanks to the innovation and dedication of VA researchers. This success story, which is still being written, can be traced back to the 1990s, when the Veterans Health Administration underwent a transformation.**

VA dramatically improved its quality of care by introducing performance incentives, new ways of tracking patient outcomes, and an electronic medical record that has become the gold standard in health care. These and other improvements inspired the 2007 book *Best Care Anywhere*.

VA also restructured itself: No longer a hospital-driven system, it would now provide an integrated continuum of care with an emphasis on outpatient and home-based services. Telehealth, using technology such as the telephone or videoconferencing, came to play a key role, enabling doctors, nurses, and other health professionals to care for patients in remote locations. VA also developed a secure Web portal called My HealtheVet that allows Veterans—including those in rural areas—to log on and access key parts of their medical and military health record, refill prescriptions, and track personal statistics such as blood pressure and blood sugar.



**Joel Kupersmith, M.D.**  
Chief Research and Development Officer  
Department of Veterans Affairs


Integral to these changes were studies undertaken by VA researchers to highlight areas of need and to evaluate and document the safety, effectiveness, and economic feasibility of new models of care delivery.

Pioneering studies are still taking place today, especially with regard to the Internet and other communication technologies. Some of these studies focus specifically on Veterans in rural areas. Other studies have a broader focus but explore issues or possible solutions that are highly relevant and applicable to rural care. In either case, our investigators are working closely with VA's Office of Rural Health to maximize the impact of their research.

**We take pride in the accomplishments of VA researchers on behalf of Veterans in rural areas and are pleased to highlight some of these efforts in this brochure.**



## Spotlight on VA Research

 Nearly 40 percent of Veterans who rely on VA for their health care live in rural areas. Over the past 10 to 15 years, VA has launched several initiatives to expand and ensure access to high-quality health care for these Veterans. VA researchers have been instrumental in these efforts by developing and evaluating new technologies, interventions, and models of care.

VA uses a three-pronged strategy to meet the needs of rural Veterans:

- Providing additional sites for care
- Using new technologies
- Partnering with non-VA providers

VA researchers have played a critical role in each of these areas.

## Providing additional sites for care

Since the mid-1990s, the VA health care system has expanded geographically to include hundreds of Community Based Outpatient Clinics (CBOCs) where Veterans can access primary care and other services. About half of these clinics are in rural areas. VA has also expanded the use of home-based primary care to serve Veterans who live in rural areas, as well as those who are homebound because of illness, disability, or frailty.

Examples of research in this area include the following:

- In a database study that included more than 63,000 patients, VA researchers confirmed that CBOCs improve access to primary care and other services in a cost-effective manner.
- VA researchers surveyed nurse managers in 46 primary care clinics—half at VA medical centers and half at CBOCs—to identify any gaps in mental health services. The survey found that integration of care and services overall was comparable between the two types of clinics.

VA researchers found similar outcomes and satisfaction ratings between a group of Veterans with PTSD who received group therapy in person and another group that received treatment via videoconferencing.

## Recent Milestones in Health Care for Veterans in Rural Areas

1995	2003	2004
VA establishes its first Community Based Outpatient Clinics, in part to better serve Veterans in rural areas.	VA implements national home telehealth program.	VA researchers publish the first of two major studies documenting the increased health care needs of Veterans in rural areas.  VA establishes national training center for telehealth staff in Lake City, Fla.

“We need to think about Veterans who live in rural settings as a special population, and we need to carefully consider their needs when designing health care delivery systems.”

Dr. William B. Weeks, Physician-researcher, VA and Dartmouth Medical School, noted expert on rural health

## Using new technologies

In the past decade, VA has developed a robust telehealth program that uses technologies such as the telephone, Internet, videoconferencing, email, text messaging, and digital photography to expand health services for Veterans in rural areas.



**These efforts have been guided by studies such as these:**

- VA researchers reported on the effectiveness of a program in which Veterans with diabetes undergo specialized imaging of their retinas during eye exams at local VA clinics, and the images are sent electronically to off-site experts who check for signs of diabetes-related retinal disease.

- A VA research team found that small rural clinics without on-site psychiatrists could successfully adapt a team model of depression care—shown effective in larger VA settings—by using telemedicine technologies such as the telephone and videoconferencing.

## Partnering with non-VA providers

Through contracts and partnerships with community-based providers and agencies such as the Indian Health Service (IHS), VA is able to expand its network of services for Veterans living in remote areas. These collaborative efforts address needs in areas such as primary care, mental health care, long-term care, and hospice care.

**Examples of research projects in this area include:**

- A VA study examined patterns of health care usage among Veterans eligible for care from both VA and the IHS. The researchers documented barriers to care—such as distances between VA and IHS facilities—and made specific recommendations for addressing these issues and boosting information-sharing between the two federal agencies.
- VA investigators are studying the feasibility of implementing telemedicine-based depression care in small rural Community Based Outpatient Clinics (CBOCs) managed by community-based providers under contract with VA.



2005

VA researchers publish innovative study demonstrating the effectiveness of Web-based care management for diabetes, which affects more than a million VA patients.

2006

Additional studies by VA researchers confirm the increased health care needs of Veterans in rural areas.

2007

VA establishes Office of Rural Health.



## Ensuring Access for OEF/OIF Veterans

According to the National Rural Health Association, more than 40 percent of Veterans returning from Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) are from rural areas. Many of these Veterans are coping with issues such as PTSD or traumatic brain injury. VA researchers are studying the particular health care challenges of these Veterans and working to develop solutions to meet their needs. Here are two examples of current studies:

A study titled **“Geographic Access to VHA Rehabilitation Services for OEF/OIF Veterans”** is tracking a group of 8,000 to 10,000 Veterans who suffered traumatic injuries to identify what types of VA services they are receiving and to explore issues that may be affecting their access to care.

In a project titled **“Telephone-Based Care for OEF/OIF Veterans with PTSD,”**

VA researchers are examining the effectiveness of telephone-based counseling as an adjunct to standard care for PTSD.



## Exploring New Technology

VA researchers have led the way in exploring the use of telehealth—health care provided through means such as the telephone, Internet, videoconferencing, email, and text messaging—to promote more timely and effective health care for Veterans. These technologies are particularly important for Veterans in rural areas, but they have also come to play a role in the delivery of efficient, high-quality health care for other Veterans as well—such as those who are homebound because of illness or disability.

**Researchers at the Portland (Ore.)**

**VA Medical Center** compared text-enabled cell phones to more conventional means—phone, fax, or email—as a way for Veterans to send their home-based blood-pressure readings to VA clinics. Veterans who used text messaging achieved their blood-pressure goals an average of two weeks sooner than those who used other methods.

**A research team with the Pacific Island Division of VA’s National Center for PTSD** found that videoconferencing could be an effective means to provide coping skills for Veterans in rural areas who are affected by PTSD.

**Investigators with the Defense and Veterans Brain Injury Center** (a collaborative project between the Department of Defense and VA) are exploring the use of interactive Web-based systems to enhance medical and rehabilitative care, social support, and vocational training for Veterans in rural areas who are recovering from traumatic brain injuries.

2008

VA creates Veterans Rural Health Advisory Committee to advise the Secretary.

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