



# Veterans Rural Health: Perspectives and Opportunities

Department of Veterans Affairs  
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**Submitted by:**  
Booz Allen Hamilton  
1101 Wootton Parkway, 8th Floor  
Rockville, MD 20852

In cooperation with

Georgetown University  
3700 Reservoir Road, NW, St. Mary's Hall 238  
Washington, DC 20057

Booz | Allen | Hamilton

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## Executive Summary

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Assuring appropriate health care resources, access, and delivery in isolated, rural communities remains a profound challenge for the nation's health care system, but the rapidly growing and distinctive issues faced by veterans in rural settings are especially complex and daunting. In response to these burgeoning challenges, the Department of Veterans Affairs (VA) established the Office of Rural Health (ORH) with the mission to address the needs of rural veterans and to improve access and quality of care for veterans residing in rural areas by building on current programs and developing new methods to provide the best solutions to the challenges that rural veterans face. Public Law 109-461, Section 212, mandates that the Director of the Office of Rural Health develop a plan to conduct, coordinate, promote, and disseminate research in order to positively impact rural veterans, as well as to develop, refine, and promulgate policies, best practices, lessons learned, and innovative and successful programs to improve care and services for veterans who reside in geographically isolated areas.

This report supports the ORH strategic and operational planning process by consolidating findings from the published literature, capturing perceptions and recommendations proffered by a range of rural health experts, scanning current legislative requirements, and offering specific programmatic suggestions to improve the health and welfare of rural veterans and to enhance the capabilities of the ORH. One of the goals of this report has been to reach into the rural health community to capture perspectives and identify opportunities for leveraging the robust rural health research infrastructure and for expanding local networks and collaborations to better evaluate new care delivery models, experiment with innovative technologies, and develop more effective strategies to deal with the challenges presented by rural health care for the veteran population.

### Veterans Rural Health: Perspectives

A preliminary review of the published literature provides perspectives on the key questions: (1) how do veterans in rural areas compare with veterans in urban areas with respect to unique health care needs or access challenges, (2) what unique health concerns are rural veterans likely to face, and (3) how effective are current strategies and programs in meeting those needs and concerns. In general, the veterans rural health published literature appears to be weak in systematic data collection or rigorous controlled studies, as most studies were descriptive, involved small sample sizes, and had limited geographical scope and generalizability to larger veteran populations. Nonetheless, the studies provide useful information about potential areas of need and about future research directions and demonstration projects.

Access to a full and comprehensive spectrum of appropriate, quality health care services is the central challenge facing many rural communities. Veterans' rural health needs, especially among returning Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF) veterans, present these communities, veterans and their families, and the Veterans Health Administration (VHA) with additional distinctive challenges. Several observational studies suggest that rural veterans face disparities in both health status (primarily quality-of-life measures) and utilization (perhaps reflective of access or payer-mix

issues), but there appears to be limited outcomes research specific to rural veterans. The disease burden among rural veterans appears to be high, with particular challenges in mental health and long-term care. The published literature suggests that greater travel distances and financial barriers to access are likely to impede access, undermine coordination, and threaten quality of care for many rural veterans. The VA continues to employ a number of strategies to more effectively serve rural veterans. Evaluations of these approaches in the published literature suggest that while practice patterns may differ in rural settings, the expansion of Community-Based Outpatient Clinics, Outreach Clinics, and Care Coordination Home Telehealth approaches are effective strategies for improving access. Much is unknown about the multiple determinants of access, the disparities and access barriers that exist, and the impacts on care and clinical outcomes, but the VHA's Office of Research and Development (ORD) plans to expand its focus on rural health access and quality issues.

Rural health experts and rural health researchers provide important perspectives for the ORH as it builds capacity and further refines its policies and programs. The ORH reached out to a number of rural health leaders and organizations and conducted a series of structured interviews during October and November 2007. Some of the perspectives they offered include:

- There is significant variability across communities; no single model or definition of rural is sufficient
- Urban models do not always work in rural communities
- There is limited availability of veteran-specific rural health research
- Collaborations with the rural health research community will be essential
- Quality measurements are difficult in rural settings
- Access issues are often more complex and multi-faceted in rural settings
- Perceptions about fee-based care vary but are generally positive in local rural communities
- Leveraging local infrastructure is an important strategy for reaching rural veterans
- Public-private partnerships must overcome very practical challenges
- ORH must collaborate with the Federal Office of Rural Health Policy
- ORH must collaborate with local and regional constituencies and institutionalize collaborations
- Progress requires long-term commitments to local communities
- VA organizational culture may be a barrier
- Private home based services require training and improved reimbursement mechanisms
- Health information technologies need to be simpler and more cost-effective
- Telemedicine investments are not panaceas
- Workforce recruitment and retention goals apply to a broad spectrum of health professionals
- Continuity of care and care coordination are critical
- Prevention services are often ignored
- Effective strategies also integrate technical assistance and an information clearinghouse

Reviews of the rural health research centers funded by the Office of Rural Health Policy, Department of Health and Human Services, and the sponsored projects funded by the Agency for Healthcare Research and Quality (Appendix C) demonstrate that there are experienced rural health researchers and ongoing projects that will serve as valuable resources for promoting a better understanding of veterans rural health needs and determining effective strategies to improve access and quality of care for rural veterans.

A preliminary review of VA Program Offices and VHA initiatives suggests that there are many important programs in place that address rural veteran needs. It will be important to more closely examine ORH policies and initiatives in the context of existing VA programs to limit duplication of efforts and improve coordination across internal VA programs. Connecting to the broader rural health community and coordinating outreach and communications, as well as sharing best practices and rural health research findings, should prove to be an important contribution by the ORH to the work of the VA Program Offices.

A review of current legislative initiatives within the 110<sup>th</sup> Congress also points to some specific research and planning requirements for the ORH and identifies a number of mandated programs. Legislative scanning and more detailed analyses of the feasibility of programmatic implementation will have to be an ongoing activity for the ORH.

## Veterans Rural Health: Opportunities

The VA has a network of facilities and resources employing strategies for reaching rural veterans; yet, there are perceptions often echoed in the literature and among rural health experts that the VA falls short of expectations in reaching all rural veterans and that the VA must more effectively collaborate with the existing rural health infrastructure. This broader rural health care infrastructure includes a network of facilities, resources, agencies, and stakeholders with valuable experience in reaching rural residents. Many of the directions for research and exploration of new care delivery models aim to better understand the dynamics of how rural veterans seek and receive care and to better understand the effectiveness and impacts of various strategies that might be pursued by the VA or supported by the ORH. This report provides specific ideas for further consideration in three categories:

- Potential directions for studies and assessments
- Potential demonstration and pilot projects
- Outreach, education, and training

The ORH has a broad mandate to engage in policy and planning, to consolidate and support research, to promote best practices, and to improve the quality and access to care for rural veterans. As a new office, the ORH must be effective in internal marketing and outreach within the VA, to overcome institutional resistance and resolve jurisdictional issues with all program offices, and must reach out to the rural communities. To be effective, it must call upon effective advisory bodies, build its own organizational capacity, establish robust information management and decision support systems, create effective platforms for collaboration, and support and disseminate focused and relevant research and programmatic initiatives. This report outlines opportunities and potential next steps in each of these categories, as well as providing additional planning considerations for the ORH.

This focus on ORH capacity building, however, must be effectively balanced with the imperative and pressure to deliver measurable results expeditiously. The ORH is already aggressively engaged and plans to test innovative ideas through targeted demonstration projects, continue to expand outreach and network development activities, formalize partnerships that are most promising, and build a strong analysis and research capability. The ORH will support expansion of successful best practice models, promote effective policies that improve access and quality of care for rural veterans, and establish broad-

based outreach, education, and training programs to provide better information and technical assistance and to build stronger partnerships with rural veterans and rural health care providers. ORH will help improve coordination of a range of VHA services to ensure that the needs of rural veterans are being considered as program development and implementation takes place. The ORH will also help build the partnerships that will allow other federal and non-federal rural health leaders and organizations to contribute ideas and resources in helping the VA fulfill its commitment to rural veterans.

## Introduction

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Assuring appropriate health care resources, access, and delivery in isolated, rural communities remains a profound challenge for the nation's health care system, but the rapidly growing and distinctive issues faced by veterans in rural settings are especially complex and daunting. In response to these burgeoning challenges, the Department of Veterans Affairs (VA) established the Office of Rural Health (ORH) with the mission to address the needs of rural veterans and to improve access and quality of care for veterans residing in rural areas by building on current programs and developing new methods to provide the best solutions to the challenges that rural veterans face. Public Law 109-461, Section 212, mandates that the Director of the Office of Rural Health develop a plan to conduct, coordinate, promote, and disseminate research in order to positively impact rural veterans, as well as to develop, refine, and promulgate policies, best practices, lessons learned, and innovative and successful programs to improve care and services for veterans who reside in geographically isolated areas.

The establishment of the ORH represents an opportunity to improve the lives of veterans in rural areas through effective research, policy, and practice. The ORH has been building its organizational capacity while taking direct actions to more effectively improve the lives of rural veterans. The Veterans Health Administration (VHA) has a panoply of programs and initiatives that have been serving rural veterans for many years, and the VA continues to lead with innovations in telemedicine, quality measurement, information technology, home health care, long term care services, mental health, patient care and outreach. One of the goals of this report has been to reach into the rural health community to capture perspectives and identify opportunities for leveraging the robust rural health research infrastructure and for expanding local networks and collaborations to better evaluate new care delivery models, experiment with innovative technologies, and develop more effective strategies to deal with the challenges presented by rural health care for the veteran population.

This report supports the ORH strategic planning process by consolidating findings from the published literature, capturing perceptions and recommendations proffered by a range of rural health experts, scanning current legislative requirements, and offering specific ideas and suggestions for further consideration. This report is designed to provide the ORH with a landscape of policy and programmatic issues and opportunities. As an environmental scan, it is not intended to be comprehensive, conclusive, or fully generalizable. This report should, however, serve as a useful platform which the ORH will use as it moves forward in its mission to improve care and services to veterans in rural communities. The report includes the following sections: Summary of methodology; overview of findings from structured interviews and published literature; ideas or potential opportunities for further consideration; and perspectives to help guide the strategic planning process.

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## Methodology

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In order to identify potential strategic directions for the ORH, four key sources of information were reviewed: Published literature, to assess the scope and nature of veteran-specific rural health research; structured interviews with recognized rural health researchers and subject matter experts, to qualitatively identify both research gaps and perspectives on the ORH's emerging role; the research activities of the Office of Rural Health Policy, Department of Health and Human Services (ORHP) and other relevant federal agencies, to identify opportunities for research partnerships; and input obtained from the VA Program Offices and the Office of Research and Development, to better catalogue internal competencies and avoid duplication of services or initiatives.

### Phase 1: Review of Published Literature and Federally Sponsored Research

- **Published Literature:** A qualitative review of the published literature was conducted to gain a better understanding of veterans rural health research issues. The compiled literature included articles and reports referred to us by rural health experts, written materials collected by ORH leaders, and limited literature searches on pertinent rural veteran topics. The scope of work did not include a systematic review of the published literature or an evidence synthesis effort (these are currently underway through the VHA's Office of Research & Development).
- **Federally Sponsored Research:** Given the critical role of the Office of Rural Health Policy (ORHP), Health Resources and Services Administration, Department of Health and Human Services, the programs and annual report of the ORHP were reviewed in detail, along with the research agendas of the ORHP-funded rural health research centers. Current and former leaders from the ORHP were interviewed to gain perspectives on ORH development. A list of rural and veteran focused research sponsored by the Agency for Healthcare Research and Quality (AHRQ) was also compiled.

### Phase 2: Perspectives from Rural Health Experts and Researchers

- **Structured Interviews:** Structured interviews were conducted with 31 rural health researchers, subject matter experts, and experienced rural health leaders. Additional comments were collected from VISN Rural Health Consultants, a meeting of national Veteran Service Organization leaders, and various informal communications. To ensure honest and open communications, it was decided to follow a non-attribution policy. The data collection process spanned from mid-October 2007 to mid-December 2007.

### Phase 3: Review of VA Programs and Legislative Requirements

- **VA Program Offices:** The ORH conducted a preliminary activities review of VA Program Offices and the Office of Research & Development in order to get a global view of VA activities that may pertain to veterans rural health (see Appendix E). Further, comments were collected from the VA's Rural

Health Working Group and various informal communications. A more comprehensive review and specific input from the VA Program Offices will be required in the future.

- **Legislative Initiatives:** The bills introduced in the 110<sup>th</sup> Congress were reviewed to determine requirements that might be relevant for the ORH (see Appendix A).

#### Phase 4: Identification of Specific Opportunities for Further Consideration

- **Research Directions:** Ideas for research, studies, and assessments compiled from the structured interviews and literature were categorized into general groups, to encourage the development of specific research questions for further development.
- **Demonstrations and Pilot Projects:** The VHA defined a number of focus areas to explore potential demonstrations or pilot projects supported by the ORH. Ideas collected from the interviews, stakeholder meetings, and reviewed literature are compiled under each focus area.
- **Outreach, Education, and Training:** Ideas pertaining to educational and training resources for rural veterans and rural health researchers were developed from the interviews and compiled for further consideration.

#### Phase 5: Mapping Out Future Directions

The final section outlines some preliminary ideas that may be included in the ORH Business Plan. It focuses on ORH capacity-building, establishment of a network of advisory bodies, development of data-driving decision analytic capabilities, and the organizational structures that may support more focused and efficient research activities, educational programs, and broad-based partnerships. It provides ideas for potential platforms for collaboration and additional planning considerations.

At the request of ORH, specific recommendations for future action are left to the VHA leadership to decide. Moreover, as a preliminary environmental scan of opportunities for ORH action, the focus of the report has been on collecting, organizing, and offering a varied mix of perspectives and ideas to help the ORH formulate its operational business plan. Next steps will require more detailed analyses of individual ideas identified in this report, to include feasibility, compliance, and budgetary reviews.

## Overview of Findings: Interviews and Published Literature

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In order to better understand rural health, the Office of Rural Health (ORH) conducted a baseline review of the published literature, structured interviews with rural health experts, a catalogue of internal VA programs and initiatives, and a compilation of ideas for research and/or demonstration projects to aid its operational planning efforts.

### Published Literature

An initial review of the published literature was conducted to gain perspectives on the following questions: (1) how do veterans in rural areas compare with veterans in urban areas with respect to unique health care needs or access challenges; (2) what unique health concerns are rural veterans likely to face; and (3) how effective are current strategies and programs in meeting those needs and concerns. The purpose of examining these questions was to identify areas for future research, to identify best practices or innovative strategies to address ORH goals of improving access and quality of care, and to develop collaborative models to help build rural community capacity. In general, the veterans rural health published literature appears to be weak in systematic data collection or rigorous controlled studies, as most studies were descriptive, involved small sample sizes, and had limited geographical scope and generalizability to larger veteran populations; nonetheless, the studies provide useful information about potential areas of need and about future research directions.

### *Assessing Veterans Rural Health Needs*

Access to a full and comprehensive spectrum of quality health care services is the central challenge facing many rural communities; unique veterans' rural health needs may present additional challenges. Several observational studies have suggested that rural veterans face disparities in both health status (primarily quality-of-life measures) and utilization (perhaps reflective of access or payer-mix issues), but there appears to be limited health outcomes research specific to rural veterans:

- **Veterans in Rural Areas:** Many rural counties had the highest concentration of veterans in the civilian population aged 18 and over from 1990 to 2000, according to the 2000 US Census.<sup>1</sup> In FY 2007, the VHA had over 7.8 million total enrollees and served about 5.5 million unique patients.<sup>2</sup> Of the enrollee population, approximately 36% (2,850,173) resided in rural areas and 1.5% (118,685)

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<sup>1</sup> National Rural Health Association. Rural veterans: a special concern for rural health advocates. July 2004.

<sup>2</sup> VHA Office of the Assistant Deputy Under Secretary for Health for Policy and Planning. Selected VHA Statistics: FY2006-2007. January 8, 2008; "total enrollees" includes non-enrolled veteran patients and "unique patients" includes enrolled veterans, non-enrolled veterans, and non-veterans, State Nursing Home, CHAMPVA, and readjustment counseling-only patients.

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resided in highly rural areas.<sup>3</sup> 39% (1,878,624) of veteran patients served resided in rural areas and 1.6% (79,464) resided in highly rural areas.<sup>4</sup> Compared to urban counterparts, rural residents tend to be poorer, live in areas more likely to be federally designated Health Professional Shortage Areas or Medically Underserved Areas, have higher disease burdens and worse health outcomes.<sup>5</sup> Death rates for working-age adults are highest in the most rural (and most urban) areas, and residents in rural areas had the highest death rates for unintentional injuries in general and motor-vehicle injuries in particular.<sup>6</sup>

- **Rural Disease Prevalence:** Most disease categories are significantly more prevalent in rural veteran populations than in urban veteran populations, even after adjustment for age, gender, employment status, priority level, comorbidity, and US Census region where the veteran lived.<sup>7</sup> Although this implies a higher burden of illness and greater need for health services, rural veterans appear to use fewer services than do their urban counterparts, to include in mental health, substance abuse, primary care, inpatient and specialty care.<sup>8</sup>
- **Rural Veteran Mental Health and Long-Term Care Burden:** Rural veterans with mental illness appear to experience greater burdens in obtaining access and continuity of care and are likely to incur greater health care costs than their urban counterparts.<sup>9</sup> The challenges of serving the long-term care needs of smaller, more widely dispersed rural populations are widely recognized and has been associated with poorer access to a limited supply of providers, to differential rural consumers' characteristics, and substitution of services across providers.<sup>10</sup> Each community has a unique set of capacities and characteristics, and the VA has a number of programs and initiatives that seek to address rural long-term care needs (see Appendix E), but the long-term care burden in rural communities has not been clearly established.
- **Quality of Life Scores:** Veterans in rural settings have lower health-related (physical and mental) quality-of-life scores than their urban or suburban counterparts.<sup>11</sup> This may reflect access and/or quality of care challenges in rural settings, but this has not been clearly established. Further, the relationship of quality of life scores to health outcomes and time trends in quality of life scores has not

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<sup>3</sup> Definitions: Urban – areas defined by U.S. Census as urbanized areas; Rural – all other areas excluded in U.S. Census defined urbanized areas; Highly Rural – any rural area within a county with less than 7.0 civilians per square mile.

<sup>4</sup> Hawthorne K. Office of Rural Health Update. December 2007.

<sup>5</sup> Wilhite SD. Rural health disparities and access to care. Presented to the Institute of Medicine Committee for Guidance in Designing a National Health Care Disparities Report. National Rural Health Association. March 20, 2002.

<sup>6</sup> Centers for Disease Control and Prevention, National Center for Health Statistics. United States Health 2001 with rural and urban health. Hyattsville, MD: National Center for Health Statistics, 2001.

<sup>7</sup> Weeks WB, Wallace AE, Wang S, Lee A, Kazis LE. Rural-urban disparities in health-related quality of life within disease categories of veterans. *The Journal of Rural Health*. Summer 2006;22(3):204-211.

<sup>8</sup> Wallace AE, Weeks WB. Health status and access to care for veterans who live in rural settings: research results, implications, and plans for future work.

<sup>9</sup> Wallace AE, Weeks WB, Wang S, Lee AF, Kazis LE. Rural and urban disparities in health-related quality of life among veterans with psychiatric disorders. *Psychiatric Services*. June 2006;57:851-856.

<sup>10</sup> Bolda EJ, Seavey JW. Rural long term care integration: developing service capacity. Maine Rural Health Research Center. February 2002.

<sup>11</sup> Weeks WB, Kazis LE, Shen Y, Cong Z, Ren XS, Miller D, Lee A, Perlin JB. Differences in health-related quality of life in rural and urban veterans. *American Journal of Public Health*. October 2004;94(10):1762-1767.

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been documented. Non-metropolitan VA patients younger than 65 consistently reported the worst physical and mental health status and reduced access to care in a large national survey involving veterans/nonveterans, VA users/nonusers, metropolitan/nonmetropolitan, and age groups between 18 and 65-plus.<sup>12</sup>

- **Emergency Medical Services:** Rural areas have an important need for well-coordinated emergency medical services, or pre-hospital emergency care, for rural veterans. Injury rates tend to be higher, travel distances to acute care facilities tend to be longer, and the resources and capacities to treat complex illnesses or traumas may be unavailable.<sup>13</sup> Improved care coordination and training resources for emergency medical personnel (that highlight unique veteran specific needs) may be important strategies to improve quality of care for rural veterans.
- **Rural Veterans Access to VA Facilities:** In FY2005, 23% of VHA enrollees were characterized as living in rural areas while only 11% of VHA facilities were located in rural areas; 21% of rural enrollees were more than 60 minutes away from primary care services, 42% were farther than 90 minutes away from acute care services, and 3% of enrollees in rural areas were more than 4 hours away from tertiary care.<sup>14</sup> According to more recent testimony by Dr. Gerald M. Cross, over 92% of enrollees reside within one hour of a VA facility, and 98.5 percent are within 90 minutes.<sup>15</sup> The ORH continues to monitor drive time standards for rural veteran populations and may have more current information.
- **Drive Time Impacts on Health Services Utilization:** Greater travel requirements have been shown to reduce utilization across a range of health and behavioral health services.<sup>16</sup> Long travel distances to care have been associated with lower utilization by veterans for outpatient care<sup>17</sup> and for medical-surgical care.<sup>18</sup> Veterans in inpatient substance abuse treatment programs are less likely to obtain aftercare in outpatient mental health clinics if they live farther away from their source of aftercare.<sup>19</sup>
- **Financial Barriers to Access:** Financial barriers, like geographic barriers, can impede access, undermine coordination, and threaten the quality of care. During site visits conducted in response to the Capital Asset Realignment for Enhanced Services (CARES) Initiative, the financial barriers veterans cited were related primarily to the uncertainty of VA financial support when veterans receive care in private sector hospitals. Legislation limits the extent to which the VA can reimburse for non-

<sup>12</sup> West A, Weeks WB. Physical and mental health and access to care among nonmetropolitan Veterans Health Administration patients younger than 65 years. *Journal of Rural Health*. January 2006;22(1):9-16.

<sup>13</sup> Office of Rural Health Policy. Quality through collaboration: the future of rural & frontier emergency medical services in the U.S. health system.

<sup>14</sup> Office of the Assistant Deputy Under Secretary for Health for Policy and Planning, Veterans Health Administration, Department of Veterans Affairs. FY2005 Geographic access to Veterans Health Administration services. March 2007.

<sup>15</sup> Cross GM. Statement of Gerald M. Cross, Acting Principal Deputy Under Secretary for Health, Department of Veterans Affairs. Subcommittee on Health, House Committee on Veterans' Affairs. April 18, 2007.

<sup>16</sup> Tucker JA, Davison JW. Waiting to see the doctor: the role of time constraints in the utilization of health and behavioral health services. In *Reframing Health Behavior Change with Behavioral Economics*. Edited by Bickel WK, Vuchinich RE. 2000.

<sup>17</sup> Burgess J, DeFiore D. The effect of distance to VA facilities on the choice and level of utilization of VA outpatient services. *Social Sciences and Medicine*. 39(1):95-104.

<sup>18</sup> Mooney C, Zwanziger J, Phibbs C, Schmitt S. Is travel distance a barrier to veterans' use of VA hospitals for medical-surgical care? *Social Sciences and Medicine*. 50(12):1743-55.

<sup>19</sup> Schmitt SK, Phibbs CS, Piette JD. The influence of distance on utilization of outpatient mental health aftercare following inpatient substance abuse treatment. *Addictive Behaviors*. August 2003;28(6):1183-1192.

authorized care, and veterans seeking such care are often left with sizable invoices after being discharged from private sector institutions. These situations lead to significant veteran anxiety when private sector admissions are proposed (even if pre-authorized) and may cause some veterans to refuse a recommended admission. Even contracted care, depending on how the contract is written, may leave veterans financially liable to some extent.<sup>20</sup>

- **Veterans Eligible Under Multiple Payer Systems:** Veterans are eligible for care under multiple payer systems. 36.4% of enrollees had coverage through one other form of coverage; 30.5% had two additional forms of coverage; 12.5% had three or more sources of coverage in addition to VA. Based on 2005 data, using a survey of 42,095 VA enrollees, almost 79% of enrollees had some type of additional public or private health insurance coverage beyond the VA: 55% had Medicare Part A, 40.7% had Medicare Part B, 25.9% had Medigap, 9.4% had Medicaid, 27.8% had private insurance, and 11.6% had Tricare or Tricare for Life (Department of Defense).<sup>21</sup> Studies suggest that dual-eligible (VA and Medicare) older veterans may choose different systems of care for different health care services; and rural veterans may substitute emergency room visits for routine primary care.<sup>22</sup>

Veterans returning from Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) present unique health care challenges for health care providers in rural areas as well.

- **Rural OIF/OEF Veterans:** Enlistment rates are higher in rural areas.<sup>23</sup> Consequently, soldiers from geographically rural areas make up a disproportionately high share of casualties in Iraq and Afghanistan.<sup>24</sup> About 44% of all soldiers killed during OIF were from communities of less than 20,000 residents.<sup>25</sup> This suggests that the VA may face increasing demands for services among rural veterans in future years.
- **Mental Health Problems Among Returning Veterans:** In a study of the initial cohort of US soldiers returning from Iraq, 20.3% of active and 42.4% of reserve component soldiers were found to need mental health care. Problems included interpersonal conflicts, alcohol dependency, post traumatic stress disorder, and depression.<sup>26</sup> Among OIF/OEF veterans who have accessed the VA health care system, 32% have mental disorder ICD-9 diagnoses.<sup>27</sup>
- **Post Traumatic Stress Disorder:** From October 2001 through May 2006, 29,041 OIF/OEF veterans visiting VA Medical Centers or Clinics had a probable diagnosis of post traumatic stress disorder

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<sup>20</sup> Site visit summary provided by Kara Hawthorne, Office of Rural Health.

<sup>21</sup> Office of the Assistant Deputy Under Secretary for Health for Policy and Planning. Veterans Health Administration enrollee insurance coverage. Prepared January 9, 2008.

<sup>22</sup> Weeks WB, Bott DM, Lamkin RP, Wright SM. Veterans Health Administration and Medicare outpatient health care utilization by older rural and urban New England veterans. *Journal of Rural Health*. 2005;21(2):167-171.

<sup>23</sup> National Priorities Project. [http://nationalpriorities.org/index.php?option=com\\_content&task=view&id=254](http://nationalpriorities.org/index.php?option=com_content&task=view&id=254)

<sup>24</sup> O'Hare W, Bishop B. US rural soldiers account for a disproportionately high share of casualties in Iraq and Afghanistan. Durham, NH: University of New Hampshire, Carsey Institute. Fall 2006.

<sup>25</sup> National Public Radio, All Things Considered. Iraq War Takes Uneven Toll at Home. April 3, 2004.

<sup>26</sup> Milliken CS, Auchterlonie JL, Hoge CW. Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq War. *Journal of the American Medical Association*. 2007;298(18):2141-2148.

<sup>27</sup> Murphy FM. President's New Freedom Commission on Mental Health. March 2006.

(PTSD).<sup>28</sup> The Land Combat Study, using anonymous standardized surveys for PTSD, demonstrated that 15-17% of soldiers from combat units screen positive for PTSD 3-12 months after returning from deployment to Iraq. The Post-Deployment Health Assessment (PDHA) and Post-Deployment Health Reassessment (PDHRA) data showed that 19% of veterans returning from OIF endorsed 2 of 4 PTSD screening questions, and that National Guard and Reserve Component veterans had higher rates of mental health concerns, to include PTSD, during and after deployment.<sup>29</sup> Of course, conditions like PTSD span across non-OIF/OEF veterans as well.

- **Traumatic Brain Injury:** The *President's Commission on Care for America's Returning Wounded Warriors* estimated that there were 2,726 traumatic brain injuries, as of July 2007.<sup>30</sup> According to the Congressional Budget Office, based on the Department of Defense medical census, from October 2001 through December 2006, 1,950 OIF/OEF veterans (2,669 through July 2007) were identified as being evaluated or treated for conditions related to traumatic brain injury (TBI), of which two-thirds of the diagnoses were for mild TBI, from which most patients should recover naturally.<sup>31</sup> The number of soldiers requiring "lifetime continual care" are in the several hundreds at this time. The long-term effects of traumatic brain injury are unknown, but it has been postulated that, as the current veteran population ages, geriatric patients with TBI may have an increased demand for health care services.
- **Rehabilitation and Disability:** As of September 30, 2006, more than 50,500 US soldiers have suffered non-fatal wounds in OEF/OIF, and survivors now have higher levels of injuries than in past conflicts.<sup>32</sup> The amputation rate is 3.3% among all wounded troops. As of December 2006, more than 1.4 million have deployed to combat operations in Iraq and Afghanistan, and over 690,000 have separated from service and become eligible for VA health care services.<sup>33</sup> Although we did not find literature on disability and rehabilitation needs specific to rural veterans, the higher percentage of veterans coming from rural settings suggests that disability and rehabilitation needs may also become higher in rural settings in the coming years.

### *Evaluating Current Strategies and Programs*

There are a number of VA programs and initiatives that aim to improve access and quality of care for all veterans, with a particular focus on those in rural settings, and there have been significant improvements in recent years. For example, VA users of mental health services lived an average of 24 miles from the

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<sup>28</sup> Denominator was 184,524 veterans seeking care from VA Medical Centers during this period; Cross G. Statement of Dr. Gerald Cross, Acting Principal Deputy Under Secretary for Health, Department of Veterans Affairs. Subcommittee on Health, House Committee on Veterans' Affairs. September 29, 2006.

<sup>29</sup> Hoge CW. Statement by Colonel Charles W. Hoge, Director of Division of Psychiatry and Neuroscience, Walter Reed Army Institute of Research. Committee on Veterans' Affairs, Subcommittee on Health. Hearing on Post Traumatic Stress Disorder and Traumatic Brain Injury. September 28, 2006.

<sup>30</sup> Report of the President's Commission on Care for America's Returning Wounded Warriors. *Serve, support, simplify.* July 2007.

<sup>31</sup> Goldberg MS. Statement of Matthew S. Goldberg, Deputy Assistant Director for National Security. *Projecting the Costs to Care for Veterans of U.S. Military Operations in Iraq and Afghanistan.* Committee on Veterans' Affairs, U.S. House of Representatives. October 17, 2007; further, Congressional testimony by Dr. Gerald Cross (September 29, 2006) also notes that 1,304 OIF/OEF veterans were identified as having been evaluated or treated for a condition possibly related to TBI (from October 2001 through May 2006), although he notes that there is no medical code specific to TBI.

<sup>32</sup> Department of Veterans Affairs, Office of Public Affairs. *America's Wars.* September 30, 2006.

<sup>33</sup> Goldberg MS. *Projecting the costs of care for veterans of U.S. military operations in Iraq and Afghanistan.* CBO Testimony. Committee on Veterans' Affairs. October 17, 2007.

nearest VA facility in 1996 but now only live 13.8 miles away.<sup>34</sup> Evaluations and assessments of the effectiveness and impacts of VA programs generally tend to be anecdotal in the literature, but a few published studies are highlighted below:

- **Primary Care Practice in Rural Settings:** Data from 1999 indicates that rural VHA hospitals serve fewer individual patients, have fewer patients per provider, have fewer integrated specialty care services, and have higher numbers of primary care personnel per individual patient relative to urban VHA hospitals. However, within rural settings, primary care providers had a broader range of patient care responsibilities and provided more inpatient care and care coordination than their urban counterparts. Quality of care indicators for rural and urban VHA hospitals showed no difference in the composite chronic disease or preventive care indices across settings, but patients using rural VHA hospitals rated their overall quality of care higher than those using urban VHA hospitals.<sup>35</sup>
- **VA Quality of Care:** A Rand study found that VA patients received about two-thirds of the care recommended by national standards (compared with about one-half in the national sample of US health care providers), that VA patients received 70% of recommended care among chronic care patients (compared with 60% in the national sample), and 65% of recommended preventive care (compared to 45% in the national sample).<sup>36</sup> The report, however, did not differentiate between rural and urban settings.
- **Telemedicine Approaches:** VA researchers' findings suggest that collaborative care models can be successfully adapted using telemedicine to address rural disparities.<sup>37</sup> For example, telemedicine was shown to improve access for diabetic retinal screenings and a current study, *Diabetes Telemedicine Consultation: A Systems Improvement Intervention*, is evaluating and documenting the processes of outreach consultation by using joint clinics using teleconferencing as an intervention to improve the system of care delivery, quality of care, and management of diabetes at Community Based Outpatient Clinics (CBOCs).<sup>38</sup> The VA's *Implementing Telemedicine-Based Collaborative Care for Major Depressive Disorder in Contract CBOCs* is a study aimed at evaluating new models of care to improve access in remote areas.<sup>39</sup> A recently completed study found significant increases in quality of life and other positive factors on several different scales when using telemedicine to complement pharmacotherapy in the treatment of depression in rural patients.<sup>40</sup>
- **CBOC Expansion:** A VA study indicated that CBOCs (2000-2001) provided veterans with improved access to primary care and other services, while containing costs.<sup>41</sup> However, an analysis of a merged VA and Medicare dataset for older Medicare-eligible veterans in rural New England suggests that access to CBOCs improved utilization for primary care services for some older veterans but that

<sup>34</sup> Cross GM. Statement of Gerald M. Cross, Acting Principal Deputy Under Secretary for Health, Department of Veterans Affairs. Subcommittee on Health, House Committee on Veterans' Affairs. April 18, 2007.

<sup>35</sup> Weeks WB, Yano EM, Rubenstein LV. Primary care practice management in rural and urban Veterans Health Administration settings. *The Journal of Rural Health*. Spring 2002;18(2):298-303.

<sup>36</sup> Asch SM, McGlynn EA, Hogan MM, Hayward RA, Shekelle P, Rubenstein L, Keeseey J, Adams J, Kerr EA. Comparison of quality of care for patients in the Veterans Health Administration and patients in a national sample. *Annals of Internal Medicine*. 2004;141(12).

<sup>37</sup> Veterans Health Administration. VA research on access to care and rural health. Internal document, 2007.

<sup>38</sup> Veterans Health Administration. VA research on access to care and rural health. Internal document, 2007.

<sup>39</sup> Veterans Health Administration. VA research on access to care and rural health. Internal document, 2007.

<sup>40</sup> Fortney JC, Pyne JM, Edlund MJ, Robinson DE, Mittal D, Henderson KL. Design and implementation of the telemedicine-enhanced antidepressant management study. *General Hospital Psychiatry*. 2006;28(1):18-26.

<sup>41</sup> Veterans Health Administration. VA research on access to care and rural health. Internal document, 2007.

this population relied more on the private sector (funded by Medicare) for most of their specialty and inpatient care needs; further, a large majority relied on the private sector for most of their primary, specialty, and inpatient care needs while using the CBOCs primarily for supplemental care (e.g. pharmacy benefits). This suggests that the efficiency of adding more access points in rural settings needs to be further evaluated and that the continued expansion of CBOCs may create duplicative and possibly wasteful services that lack proper care coordination.<sup>42</sup> A study by John Fortney found that most VA patients living in areas served by CBOCs did not receive care there and that CBOCs had relatively little impact on utilization and cost.<sup>43</sup> For ambulatory services with a focus on conditions such as alcohol dependence, angina, chronic obstructive pulmonary disease, depression, diabetes, and hypertension, CBOCs were found to not have a significant impact on access to care for those living in areas served by CBOCs.<sup>44</sup>

- **High-Technology Medical Services:** Insurance coverage and out-of-pocket costs were strongly associated with veterans obtaining percutaneous transluminal coronary angioplasty outside the VHA system; travel distance was not.<sup>45</sup> This suggests that veterans preferences for using multiple systems of care for high-technology health care services may have less to do with access issues and more to do with care coordination and out-of-pocket cost burdens.
- **Post Traumatic Stress Disorder:** A recent Institute of Medicine (IOM) report<sup>46</sup> found that exposure-based therapies used by the VA, such as prolonged exposure therapy and cognitive processing therapy, are effective in treating post traumatic stress disorder (PTSD). Both kinds of therapy may be amenable to telemedicine approaches. The effectiveness of pharmacotherapy in treating PTSD, however, requires more research.
- **Traumatic Brain Injury (TBI):** TBI may present life-long impairments and disabilities (physical, cognitive, behavioral, emotional, and social). The VA has implemented the Polytrauma System of Care, which includes four primary Polytrauma Rehabilitation Centers and 17 new Polytrauma Network sites (as of September 2006), to enhance access, ensure care coordination and case management, and serve as resources to other medical facilities. The newest Quality Enhancement Research Initiative (QUERI) center provides a research focus on polytrauma and blast-related injuries.<sup>47</sup> We were unable to find literature that addresses the effectiveness of the Polytrauma System of Care on TBI diagnosis and management, but a common criticism has been that these network sites are not located in rural communities and that rural veterans with TBI have significant access barriers in reaching these services. Only three of the nine VA and one civilian centers in the Defense and Veterans Brain Injury Network are located in two of the 18 states with the highest rates

<sup>42</sup> Weeks WB, Mahar PJ, Wright SM. Utilization of VA and Medicare services by Medicare-eligible veterans: the impact of additional access points in a rural setting. *Journal of Healthcare Management*. March-April 2005.

<sup>43</sup> Fortney JC, Maciejewski ML, Warren J, et al. Does improving geographic access to VA primary care services impact patients' patterns of utilization and costs? WICHE Center for Rural Mental Health Research. 2005.

<sup>44</sup> Fortney JC, Maciejewski ML, Warren JJ, Burgess JF. Does improving geographic access to VA primary care services impact patients' patterns of utilization and costs? *Inquiry: A Journal of Medical Care Organization, Provision, and Financing*. 2005;42(1):29-42.

<sup>45</sup> Weeks WB, O'Rourke DJ, Ryder LB, Straw MM. Veterans' system-of-care preferences for percutaneous transluminal coronary angioplasty in a rural setting. *Journal of Rural Health*. Spring 2003;19(2):105-8.

<sup>46</sup> Committee on Treatment of Post traumatic Stress Disorder, Institute of Medicine. *Treatment of post traumatic stress disorder: an assessment of the evidence*. National Academy of Sciences, 2008.

<sup>47</sup> Cross G. Statement of Dr. Gerald Cross, Acting Principal Deputy Under Secretary for Health, Department of Veterans Affairs. Subcommittee on Health, House Committee on Veterans' Affairs. September 28, 2006.

of rural veterans, and the “eleven western states and other southern states with high numbers of rural veterans have very limited access to these centers once discharged from inpatient care.”<sup>48</sup>

The Veterans Health Administration also has an extensive array of programs and initiatives (see Appendix E), and a closer evaluation of each program needs to be integrated into ORH policy recommendations in the future. Research plans by the VA’s Health Services Research and Development Service are expected to address:<sup>49</sup>

- Multiple determinants (e.g., patient, geographic, environmental, and VA system factors) that impact access to the VA health care system and specialized VA services, including mental health care and long term care
- Disparities in access, including by geographic location (rural/urban), and by VA facility, and impacts on care and outcomes; unmet health care needs related to access, including potential differential selection to use VA
- Special issues and barriers to access for vulnerable veteran populations such as rural veterans; use of new health technologies to facilitate access; and development and assessment of innovative interventions to address access barriers and disparities

## Perspectives from Rural Health Leaders

Rural health leaders and rural health researchers provide important perspectives for the ORH as it builds capacity and further refines its policies and programs. The ORH conducted structured interviews with rural health leaders and organizations during October and November 2007 (see Appendix B for list of interviews). While the following captures common cross-cutting themes among the majority of interviewees, most of the actual theme descriptions below reflect a compilation of individual comments or phrases from specific individuals. Additionally, some themes may have been voiced by only a handful of individuals but are included if determined by the authors to add an important or interesting perspective. As such, one should not conclude that these are consensus opinions among rural health leaders and researchers:

- **Significant variability across communities; no single model or definition of rural is sufficient:** Each rural community has a distinct social and community dynamic and significant variability that impacts access to health care, perceptions of quality, trust of government programs, or expectations of care. Although, as a generalization, one can say that rural communities have more limited incomes, poorer health literacy, poorer health outcomes, and more sporadic insurance coverage (except for veterans), one must be very careful about “lumping” measures and drawing conclusions from aggregate measures.
- **Urban models do not always work in rural communities:** “One size does not fit all” when working with the challenges of rural communities. A common mistake is to create national programs that, when applied at the local level, do not work very well. Collaboration and implementation at the local level remains critical to success and must be based on trusted relationships at the local level. Many rural health communities have negative attitudes about their local VA service offices; new models should rely on collaborative local relationships that include both VA and non-VA community assets.

<sup>48</sup> Heady HR. Oversight hearing to examine the VA efforts to provide high quality health care to veterans in rural communities. National Rural Health Association written testimony. Health Subcommittee, Committee on Veterans’ Affairs. June 27, 2006.

<sup>49</sup> Veterans Health Administration. VA research on access to care and rural health. Internal document, 2007.

- **There is limited availability of veteran-specific rural health research:** Despite great progress among rural health researchers over the past few decades, especially through support and funding from the Office of Rural Health Policy, Department of Health and Human Services (ORHP), the focus on veterans has been very limited within the rural health research community. The VHA, through its Office of Research & Development (ORD), has provided support for veterans-specific health services research, but its focus on the rural community appears to be a more recent shift, and not much has reached the literature. A strong and sustained veterans rural health research focus is required in the future, and it should also allow for a community-based participatory research approach, as local perceptions must be aligned, and it should be framed away from “stigmatized” diagnoses such as PTSD and TBI if possible. It is also important to recognize that much of the rural health research, despite the absence of a “veterans” label, remains relevant and applicable to the rural veteran population. Finally, one must recognize that it is difficult to get systematic results in drawing research conclusions about rural communities; “one must learn to rely on the information that one can get.”
  - **Collaborations with the rural health research community will be essential:** A common theme is that the VA’s rural health research agenda must involve rural health experts, and this requires close collaborations with existing rural health research centers and experts. A great deal of variability exists within the rural health research community in terms of both expertise and work style. Some of the ORHP-supported research centers are embedded in academic institutions, with a greater focus on peer-reviewed publications; others are focused on policy. Some of the research may be described as more “advocacy” related while others are more traditional health services research. Also, it is important to look beyond the ORHP-supported research centers because rural health research has a broader context and a broader base than those that are currently funded by ORHP. There is usefulness in all of these varied sources of “research.” Pitfalls to beware of include resistance to data-sharing and restrictions on publication of findings. It will be important to maintain independence and objectivity in all research activities while also being mindful of the political pressures inherent in such research. There needs to be a nexus of all relevant research communities established through meetings, funding, and joint research solicitations.
  - **Quality measurements are difficult in rural settings:** Quality of care is a central issue, but research on measuring quality in rural communities has largely been ignored (a notable exception is the work of Ira Moscovice). Quality and outcomes studies are very expensive to conduct in any setting and are even more expensive to conduct in a rural setting. Small sample sizes and greater variability among rural health settings (i.e. limiting the usefulness of aggregate measures) makes such research more difficult to conduct. Another challenge relates to strained resources; most rural health care providers have less time, fewer resources, and limited incentives to track sophisticated quality metrics. Although the nation seems to have embraced the quality movement, there are likely to be marginal benefits in rural settings unless quality measurements are made simpler and less resource-intensive to collect. One must adapt analytical strategies and quality metrics to the rural context (for example, most of the National Quality Forum or Centers for Medicare and Medicaid Services quality indicators are not the ‘heart-and-soul’ of the rural health agenda). It is also important to recognize that access issues tend to overwhelm all others, such that quality and access are often used interchangeably with one another in rural health discussions.
  - **Access issues are often more complex and multi-faceted in rural settings:** Access has many dimensions beyond distance to health care facilities. Veterans rural health problems extend to family and community members, and there is often limited access for the care or support of family members. Even when facilities are available, they may maintain strict business hours with limited access on weekends and evenings (when families tend to have the time to take loved ones to a facility). The eligibility processing may be too complicated. There may be communication barriers or
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regional/cultural barriers. There are stigmatized perceptions, especially related to mental health disorders, that are not considered socially acceptable in the communities where veterans live. Addressing the needs of veterans must extend beyond tracking eligibility, enrollment, and utilization, because there are many veterans with significant physical and mental health care needs that are bypassed altogether by the VA system. Moreover, traveling long distances to receive care attenuates the social supports that are critical to quality care.

- **Perceptions about fee-based care vary but are generally positive in local rural communities:** Rural health providers are very receptive at the local level – and there are very successful models and best practices in place – but, it must be more than just a reimbursement mechanism. “One needs to remember that the unitive identity of health care in rural communities is being a part of the community.” While some of the national level veteran service organizations (VSOs) may be opposed to the fee-basis program, most local veterans and local VSOs are very supportive; they just need to find ways to better “integrate it into the fabric of rural community life.” Transportation grants and mileage reimbursements have not been very effective in the past because they take veterans out of the community where they live, but the fee-basis program has potential. Concerns about continuity of care, appropriate payment mechanisms, and quality of services remain barriers to expansion; but they are not insurmountable. Also, access issues play out differently across regions, meaning that the standards for quality, electronic health records (EHRs), and clinical protocols required for effective public-public or public-private partnerships may be more easily supported by Federally Qualified Health Centers in the East Coast, while the Fee Program may be more appropriate for the network of Rural Health Clinics in the West where they may have less capability to maintain interoperable EHRs and follow VA quality protocols.
  - **Leveraging local infrastructure is an important strategy for reaching rural veterans:** The rural hospital and clinic network is already diffuse and well-established. “Rural health access is NOT a problem of infrastructure; it is a problem of different payer mixes and different populations eligible for different levels of coverage.” There is a broad mix of rural health infrastructure (e.g. Rural Health Clinics, Critical Access Hospitals, Federally Qualified Health Centers, and others) as well as a broad mix of payers (e.g. Medicare, Medicaid, Indian Health Service, Bureau of Primary Care, private plans, and others), and there are opportunities to optimize the payer mix and care delivery models at the local level. Despite concerns that have been expressed about differences in the quality of care provided or about the challenges of finding appropriate mechanisms for transfer of funds among payers, “build or buy” should not be the only options for the VA as there are local resources and assets that are often abundant, even in rural communities. “In rural areas, there is very little distinction between veterans programs, Medicare-eligible programs, Medicaid-eligible programs, and private payers; there are access problems, yes, but what is really required is a critical mass for network development of all the participants and payers to better coordinate the available care.” Further, despite the perceptions of sparse resources in rural areas, “one should not under-estimate local rural health capacity.”
  - **Public-private partnerships must overcome very practical challenges:** Creating appropriate platforms for collaboration will be important, but challenging. Using compatible or interoperable electronic medical records may require clinics to operate two distinct systems; providers will need appropriate training on veteran-specific issues; financial support will be necessary for equipment, training, and service provision; and one needs to understand the great variability of needs, workforce, facilities, and community dynamics across rural settings. Local network and community development is an essential first step.
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- **ORH must collaborate with the Federal Office of Rural Health Policy:** The Office of Rural Health (ORH) should work closely with the Office of Rural Health Policy (ORHP) and leverage both resources and the relationships already established within rural communities. ORH should meet regularly and work collaboratively with ORHP to develop the best solutions for rural veterans. The development of an active VA presence in rural health will also invigorate the ORHP in its own efforts to improve the health of all rural communities.
  - **ORH must collaborate with local and regional constituencies:** Local providers and local communities must be included for there to be real impacts on access and quality of care for veterans. Cooperation and communication with the Veterans Integrated Service Network (VISN) leadership must be coupled with collaboration with local rural communities and rural health care providers. The ORHP has been very effective with its outreach grants and network planning grants in building effective health care networks that tend to be very cooperative. Information, funding, and services are often distributed through multiple channels. Leveraging the existing infrastructure will be easier than trying to replicate or duplicate networks.
  - **ORH must institutionalize collaborations:** The ORH must explore avenues to institutionalize collaborative relationships. For example, if ORHP and ORH develop a joint research agenda, consider providing core funding to a small number of local collaborations between ORH initiatives and ORHP-funded research centers; support doctoral training to develop new researchers with growing expertise in veterans rural health; fund specific veteran-specific research projects across multiple research channels; provide an annual meeting for collaborators to meet and discuss progress; develop demonstration projects that place a high premium on VA and ORHP collaboration; and nurture formal and informal networks that are able to provide continuous feedback to the ORH and to identify emerging opportunities to collaborate and find the best solutions. Interagency agreements will be an important mechanism for the ORH.
  - **Progress requires long-term commitments to local communities:** Tackling rural health issues requires long-term commitment and immense resources directed at the local level; local health care providers and local community leaders are essential to improving access and quality of care, and veterans rural health initiatives must be focused on building long-term solutions in concert with local communities. “Community is a reality and not just rhetoric in rural health communities; it underpins everything we do.” It is important to understand that funding is important, but local leadership is even more critical. The VA needs to develop long-term relationships with local leaders on a state-by-state basis, but it must also understand that “community development is messy work” that requires time and patience.
  - **VA organizational culture may be a barrier:** There is a perception, whether valid or not, that the VA leadership and program offices tend to be insular and less willing to embrace collaborative approaches with the rural health community. Past experience suggests that the VA may not be willing to open up sufficiently, although there is optimism that the establishment of the ORH is a step in the right direction. “One needs to be introspective about VA organizational culture when assessing which strategies and initiatives are likely to be best for rural veterans and rural communities.” That being said, there are many examples of VISNs and VA Medical Centers (VAMCs) working closely with rural health communities and rural health researchers. The Rural Policy Research Institute (RUPRI) is working closely with VISN 23, Eastern Tennessee State University has a long-standing relationship with its VAMC, and there are many other examples of successful collaborations between the VA and local rural communities and rural health research activities.
  - **Private home based services require training and improved reimbursement mechanisms:** The VA is a leader in extending home-based services, and home and hospice care is seen as a critical
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strategy for addressing access and limited staff time. Collaborations by the private sector with the VA have been hampered by “negative impressions” of those caught “in the bureaucratic morass” when trying to get reimbursement from the VA and a perception that some of the organizational processes of the VA are “impenetrable.” Nonetheless, with Medicare lowering payments for home health and hospice services, home health providers may welcome collaborations with the VA. Associated use of telemedicine technologies is universally accepted at the conceptual level, but there is also less acceptance by home health providers themselves. Both patients and providers appear to like telemonitoring technologies, but it is also seen as cumbersome with little return on investment. Obstacles include cost, patient resistance (home services seen as “intrusive”), poor training of health care providers, and poor broadband capacities in many rural areas.

- **Health information technologies need to be simpler and more cost-effective:** “The VA is very good at using different kinds of technologies but does not do a great job of systematically testing whether the technologies work or are the best available strategies for their population.” For example, for many rural communities, tackling the core challenges does not require sophisticated health information technologies or telemedicine equipment (e.g. some rural areas do not have broad-band access). They require simpler, more basic solutions. Moreover, there is an economy of scale issue, as many local rural health assets do not have enough patients to make telemedicine or HIT economically viable, and most rural health clinics operate at capped cost basis levels (i.e., there is usually not enough cap space to invest in information technologies). To ensure wide diffusion of technologies, one must focus on improving the reimbursement mechanisms for both the equipment and the provision of IT-based services.
- **Telemedicine investments are not panaceas:** Telemedicine and telemental health are “not going to save rural America! We should try it, use it as a tool, but have realistic expectations.” One needs to acknowledge that there may be resistance to “sending telemedicine equipment and not actual doctors.” A lot of telemedicine investments have already been made and continues to be made, but there is a need for program development and process improvements to potentiate the use of existing hardware and make providers more comfortable with using these technologies. Also, it is important to understand that (1) there are many legacy systems in place to integrate data from, and (2) rolling-out information technologies often freezes innovation and functionality at that point in time.
- **Workforce recruitment and retention goals apply to a broad spectrum of health professionals:** Many of the access and quality issues that rural patients face start with the shortage of health care providers. Workforce strategies have to be multi-faceted. Rural communities rely on non-physician providers a great deal. Nurses are very good at maintaining long-term relationships with patients and in assuming the care coordination role, psychologists and counselors play important roles as mental health providers, and advanced practice nurses, physician assistants, and nurse practitioners are critical providers of primary care. One needs to recognize that rural communities lack workforce for ancillary services as well; this may be an opportunity to train veterans to fill these critical needs. Experiential training opportunities for young medical students will be important investments for creating a veteran friendly and rural health friendly physician workforce. Recruiting and training local people will likely be more successful, as will focusing on the recruitment of the whole family (i.e. welcoming and embedding the spouses and children into the community). Of course, reimbursement, loan repayment, and funding remain important, with opportunities to perhaps integrate the National Health Service Corps (NHSC) Commissioned Officer Student Training and Extern Program (COSTEP).
- **Continuity of care and care coordination are critical:** In order to build effective care management programs in mental health, long-term care, and primary care, one must consider the spectrum of care

together and provide funding and technical assistance to ensure appropriate capacity-building and program management. Planning grants and network building grants, with ample technical assistance, have been effective for ORHP strategies. Interdisciplinary teams are especially critical in rural settings.

- **Prevention services are often ignored:** There is currently not a great deal of emphasis on prevention in rural communities, although it represents an important area for improvement. It may play a greater role with the start of quality improvement mandates, but one must create an economic model for prevention. Given that public health and prevention services are not currently well integrated, one must expand the conversation and advocate for rural health clinical and community preventive services.
- **Effective strategies also integrate technical assistance and an information clearinghouse:** The health education strategies that are disseminated have to be more evidence-based, and there needs to be some sort of centralization of the kinds of health information that are being promoted. Department of Defense and VA websites are often not friendly enough to be accessible for rural veterans or rural health providers. There needs to be an information clearinghouse specific to rural veterans and it should work closely with the websites or information channels that are well-known already in rural communities (e.g. National Rural Health Association, Federal Office of Rural Health Policy, Rural Health Research Gateway). Toll-free hotlines need to be offered for those without computer access, and there needs to be ways for rural veterans to provide direct feedback. Also, all demonstration projects must have robust program support and ample technical assistance to be successful. Technical assistance needs to be in the field, as community-based programs require community-based expertise.

## Federally Supported Rural Health Research

A summary of the rural health research centers and individual health services research funded by the Office of Rural Health Policy and the Agency for Healthcare Research and Quality is provided in **Appendix C**. Ideas from a review of the Office of Rural Health Policy are integrated in the *Exploring Options* section of this report. A broader survey of federal agencies involved in rural health research, policy, and practice may be warranted in the future.

## VA Program Offices

A preliminary survey of VA Program Offices and VHA initiatives that have rural health implications is provided in **Appendix E**. The priority research areas, funded research, and proposals for additional rural health initiatives from the VHA Office of Research & Development (ORD) are provided in **Appendix D**. A broader survey and more formalized input from individual Program Offices and from ORD may be warranted in the future.

## Current Legislative Initiatives

A summary of bills introduced in the 110<sup>th</sup> Congress that pertain to veterans rural health issues and to the ORH is provided in **Appendix A**. The ORH continues to monitor legislative initiatives, but the selection of initial demonstration projects should be informed by legislative requirements that appear to mandate certain kinds of pilot programs or strategic approaches. Although the FY2008 appropriations bill has not been fully analyzed at the time of this report, the FY2008 Appropriations Conference Report (H.R. 3043) highlights a number of requirements for the Office of Rural Health:

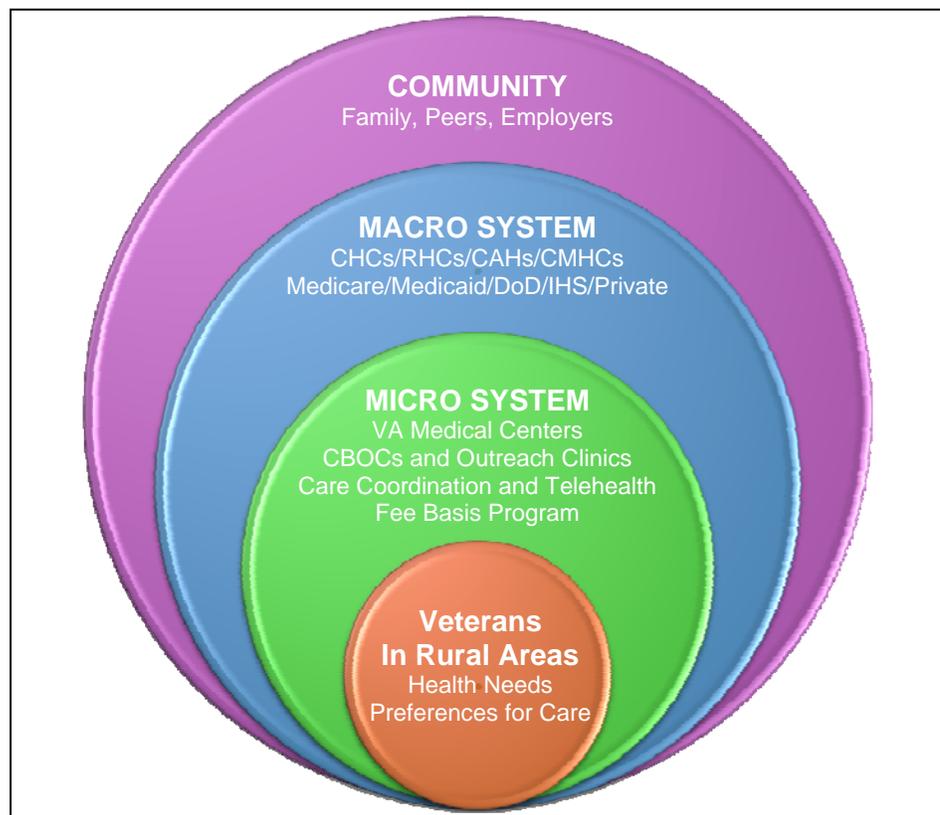
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- A report to the Committees on (1) the unique challenges and costs faced by remote rural veterans, (2) the need to improve access to locally administered care, (3) the need to fund alternative sources of medical services, and (4) an assessment of the potential for increasing local medical care access through partnerships.
  - A report to the Committees on the on-going actions to improve access to health in rural areas.
  - A report to the Committees on CBOC issues, to include (1) actual number of CBOCs opened in FY2007, (2) the number of planned CBOC activations in FY2008, and (3) the feasibility of and/or plans for clinics in locations specified in the conference report.
  - Authorization for Alaskan veterans to use medical facilities of IHS or tribal organizations at no additional cost to VA or IHS.
  - A Government Accountability Office study on standards being followed in rural VA hospitals, to include the consistency of VA standards being applied across urban and rural facilities.
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## Exploring Options: Ideas for Further Consideration

Conceptually, most of the following ideas represent variations on how best to connect rural veterans to the systems that provide quality health care services. Despite some published literature on the health care needs and care preferences of rural veterans, there is a great deal more that one needs to study and understand about rural veterans. The VA has a network of facilities and resources employing seemingly effective strategies for reaching rural veterans – VA Medical Centers, Community-Based Outpatient Clinics, Outreach Clinics, Care Coordination and Telehealth programs, the use of purchased or contracted care, etc. – yet, there are perceptions that are often echoed in the literature and among rural health experts that the VA may sometimes fall short of expectations in reaching all rural veterans and that the VA must more effectively collaborate with the existing rural health infrastructure, if possible.

This broader rural health care infrastructure includes a network of facilities, resources, agencies, and stakeholders with valuable experience in reaching rural residents, and many of the directions for research and exploration of new care delivery models aim to better understand the dynamics of how rural veterans seek and receive care and to better understand the effectiveness and impacts of various strategies that might be pursued by the VA or supported by the ORH. All of this is in the context of the rural communities where rural veterans live, as the VA's strategic directions cannot operate in isolation. The following ideas try to identify ways in which both to expand currently successful VA approaches and to explore new ideas where the ORH may promote better interconnections between the micro- and macro-systems that rural veterans interact with.



## Potential Directions for Studies and Assessments

The VHA's Office of Research and Development (ORD) has an ongoing evidence synthesis project on rural veterans access issues and has planned several additional initiatives of interest to the ORH. The following section provides some additional ideas that may be useful in discussions with ORD (or with other rural health researchers); moreover, they help frame the kinds of demonstration or pilot projects that the ORH may choose to pursue.

- **Rural Veterans Health Care Needs Assessment:** The ORH may consider supporting a normative assessment of the health care needs of rural veterans (as opposed to historical utilization trends). ORH might consider a large scale, multi-state survey of rural veterans or integration with other national survey efforts (e.g. the Walsh Center has several ongoing national surveys in rural communities that might be adapted to target rural veterans). One might also consider using a traditional time-and-task projection model based on disease prevalence and/or reference database comparables in order to determine if enrollment and/or utilization is lagging behind projected health care needs among rural veterans. For example, national disease prevalence rates may be derived from national datasets (e.g. National Health and Nutrition Examination Survey, National Health Information Survey, the National Institute of Mental Health, Centers for Disease Control and Prevention, etc.) or state-level datasets (e.g. Behavioral Risk Factor Surveillance System, Healthcare Cost and Utilization Project) and compared with current VA enrollment and utilization data to identify potential gaps and geographical variations. This should be coordinated with the VHA's Health Care Analysis and Information Group.
- **Disease Burdens and Associated Risk Maps:** There needs to be a more comprehensive quantification of the extent and scope of the burdens of chronic disease (e.g. heart disease/failure, hypertension, diabetes, chronic obstructive pulmonary disease, musculoskeletal injuries or disabilities) and mental health disorders among rural veterans. The ORH might consider supporting the development of subgroup population riskmaps or lifetime risk progression charts. Such efforts could be used to more effectively target interventions and resources, as well as to evaluate the impacts of various policies or interventions. An interesting approach used in the British National Health Service is the use of risk ladders that include factors such as comorbidities, housing status, and geographical location to create ordered tables that enable policy planners to segment the risk across the country.<sup>50</sup>
- **Veterans Quality of Life Measures:** William Weeks and Amy Wallace completed a study of veterans health-related quality of life (HRQOL) using 1999 data. It would be useful to provide updates using current data on physical and mental quality of life scores among urban and rural veterans. Moreover, it would be important to determine if HRQOL scores correlate with utilization rates and/or risk-adjusted mortality or outcomes data, if available. One should also consider studies on family/caregivers to assess how veterans' quality of life, utilization, or outcomes data correlate with the availability of caregiver supports and, conversely, how families and caregivers fare given veterans with physical or mental health disorders.
- **Rural Health Outcomes Research:** The ORH should support studies that have a specific emphasis on health outcomes and the practices that lead to good health outcomes. Given the great variability of resources in rural areas, the ORH should determine how practice variations correlate with different health outcomes. Further, one should explore how outcomes measures in upstream systems vary based on referral or transfer patterns from rural areas. Rural veterans have lower service utilization;

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<sup>50</sup> Mayhew L and Duncan I. Presentation at Society of Actuaries meeting. Washington, DC. October 15, 2007.

one should also explore to what extent lower utilization contributes to worse health status over time (i.e. consider the implications of John Wennberg's studies of geographical variation and the potentially harmful impacts of over-utilization).

- **Quality and Safety for Rural Veterans:** The ORH should support studies that assess differences in quality and safety measures that have the best relevance in rural contexts, to include comparisons within the VA and comparisons to Medicare, Medicaid, and private payers. It will be important to understand if quality and safety issues differ between the care provided to rural veterans and the care that urban veterans and non-veterans receive.
  - **Barriers to Access and Their Impacts:** Access is multi-faceted, and it may be useful to catalogue the barriers to access (beyond drive time) for veterans in different rural settings. It would also be useful to explore more comprehensively the impact of excessive distance to VA care on access for rural veterans. One could expand on the care preferences research to determine if rural veterans are choosing other rural health providers over the VA and to determine to what extent excessive distance contributes to these care preferences. One should also assess the effectiveness of distance technologies and the impacts on care preferences for rural veterans.
  - **Rural Veterans Access Points of Care:** A study on rural veterans access points would provide a useful tool for understanding potential collaboration opportunities. One could provide an overview of health care services available to veterans in rural areas (e.g. VA Medical Centers, Community Based Outpatient Clinics, Outreach Clinics, Vet Centers, etc.), to include the types of services at each geographical location (e.g. primary care, mental health, rehabilitation, specialty care, etc.) and veteran concentrations and summary eligibility for VA health care benefits within each geocode. This could be compared with a geographical overlay of potential alternatives within the rural health infrastructure (e.g. Community Health Centers, Rural Health Clinics, Critical Access Hospitals, Community Mental Health Centers, etc.), to include types of available services at each alternative facility, in order to identify gaps in services and to explore alternatives and/or potential payer-mix optimization models for rural veterans to access care.
  - **Health Care Utilization Studies:** The VA Enrollee Health Care Projection Model appears to provide a powerful tool to determine where care is delivered, where it is sought, and how many enrollees reside within the network of VA facilities. It would be equally interesting to determine what types of services are not being sought or delivered in rural settings and to determine differences between veterans and non-veteran comparable populations. Many patients often require access redundancies and cross-refer across health systems; it would be useful to explore cross-referral patterns and to explore how changes over time will impact upon the budgetary and policy decisions of the VA.
  - **Payer-Mix Optimization Study:** The discussions on public-public and public-private collaborations rely on the ability to efficiently and effectively transfer funds among payer systems. A supporting study might provide an assessment of the number and geographical locations of rural veterans who are eligible for health services from multiple federal programs (to include Medicare, Medicaid, Military Health System, Indian Health System, etc.); determine eligibility and utilization of employer-sponsored insurance, individual insurance, and other private plans among rural veterans; and assess the extent of redundancy and/or duplicative payer systems among rural veteran populations by identifying the different reimbursement mechanisms (payer mix) for different types of services. This would make for more informed policy decisions about strategies to build, buy, rely on telehealth, or leverage local payer-mix or rural health infrastructure collaborations. One could also assess the impacts of the payer mix on care coordination, out-of-pocket healthcare costs, the financial viability of private sector rural health care organizations, and the relevance of the VA healthcare system in rural settings. Datasets from the Centers for Medicare and Medicaid Services and other federal systems
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may already be accessible; explore potential data and tools within the Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project (HCUP), to determine if participating states provide sufficient inpatient and outpatient data to be useful as well.

- **Comparative Effectiveness Studies:** The VA utilizes a number of different strategies, led by a variety of different program offices, to improve access and quality for rural veterans. Comparisons of differences across times, geographical regions, patient satisfaction, access, utilization rates, economic costs, and outcomes among different strategies to improve access (e.g. fee-based care, transportation grants, outreach clinics, home-based services, telehealth initiatives) would be useful. Further, one could demonstrate the variability in strategies across different rural settings, as well as focus on comparative effectiveness between direct clinical interaction and telemedicine consultations across a broad range of critical services.
- **Long-Term Care and Mental Health Services Care Delivery Models:** A comparative study of care delivery models might be useful. One could provide an overview of long-term care (LTC) and mental health (MH) care delivery models within the VA system and compare them to care delivery models and best practices within non-VA rural settings. One may consider mapping the prevalence of different care delivery models based on the availability of LTC and MH services and explore differences across medically underserved areas (MUAs) and health professional shortage areas (HPSAs), as well as across different rural definitions used by federal agencies.
- **Care Continuum Models:** A framework for patient-centered care that identifies access at each point on the care continuum and the quality of available services at each access point would be useful. It could explore models for care integration of health care services, network development, prioritization of health care needs, and potential platforms for collaboration; it could identify best practices for integration of planning and accountability for costs, quality, and outcomes in managing health care delivery across the continuum of VA facilities, telehealth services, and purchased care.
- **Rural Public Health Surveillance:** While access remains the central issue for most rural communities, issues such as health behavior, environmental health, infectious disease surveillance, and other public health concerns remain critical. These areas remain largely unstudied with respect to their impacts on rural health status.<sup>51</sup> A focus on rural public health infrastructure, workforce competencies, health disparities, access to care, public health preparedness, and environmental health – to include the role of the VA as a member of rural communities – requires a broader public health research agenda. *Bridging the Health Divide: The Rural Public Health Research Agenda* provides a useful starting point for further exploring these issues.<sup>52</sup>
- **Prevention Services:** It is important to determine the extent to which wellness and prevention initiatives are being implemented for rural veterans (e.g. the Walsh Center is exploring the degree of compliance in rural settings with the recommendations of the U.S. Preventive Services Task Force). The ORH should work closely with the VA National Center for Health Promotion and Disease Prevention (Office of Patient Care Services) to continue to prioritize prevention programs in accordance with the National Commission on Prevention Priorities and to identify best practices for standardized case management and care coordination programs that include prevention services. The ORH should coordinate with the Department of Defense to promote an integrated health promotion and preventive services program that tracks and evaluates the long-term impacts of

<sup>51</sup> Meit M. Development of a rural public health research agenda. Public Health Report. Association of Schools of Public Health. September-October 2004;119:515-517.

<sup>52</sup> University of Pittsburgh Center for Rural Health Practice. *Bridging the Health Divide: The Rural Public Health Research Agenda*. April 2004.

prevention programs (consistent with the recommendations of the Task Force on the Future of the Military Health Care).<sup>53</sup>

- **Policy Analysis Capabilities:** Certain issues appear to receive a great deal of policy attention and targeted funding. It seems equally important to develop an ORH capability to assess all policy issues in terms of its impact on rural veterans, to have the ability to consult with a broad spectrum of rural health experts and policy leaders, and to develop concise and accurate policy issue briefs for consideration and/or dissemination. In concert with this, there may be a number of policy relevant research focus areas that require more long-term investments in time and resources and more traditional health services research to inform policy decision-making.

## Potential Demonstration or Pilot Projects

The rural health community has been experimenting with a number of different strategies and care delivery models to improve access and quality of care in rural settings, and the VA Program Offices have a number of initiatives targeted to rural veterans (see Appendix E). The following provides some preliminary ideas for consideration that may be appropriate for rural veterans. They are informed by the potential research directions outlined in the preceding section but are categorized under broad areas of focus specified by the ORH Director.

The categories are not mutually exclusive; in fact, all pilot programs are designed to improve access and quality of care or to improve the understanding about strategies to improve access and quality of care for rural veterans. Long-term care and mental health initiatives are separately highlighted, as these are emphasized in the Public Law requirements as important focus areas for the ORH. Technology and workforce initiatives are separately highlighted as these remain important strategies or means to accomplish the ORH's goals, and targeted populations are separately highlighted given the unique needs of OIF/OEF veterans, American Indian and Alaska Native veterans. These constructs may be modified as the ORH continues its strategic planning efforts.

### *Improving Access to Rural Health Services*

- **Fee Basis Program:** A concurrent evaluation of the Fee Basis Program, mandated by Public Law, is currently underway and should be used to direct further policy recommendations and research initiatives with respect to the Fee Basis Program. The VA generally authorizes fee-based care to veterans seeking health care to a VA health care facility when services are not available, cannot be economically provided to eligible veterans, or is not feasible due to geographic barriers. The analysis of the Fee Basis Program will assess the current utilization of the fee program in rural areas, considering modifications to the delivery of this type of care, researching and identifying mechanisms for expanding or modifying the current program, and performing cost analyses to help understand the universe of options available for providing care.
- **Community Based Outpatient Clinic (CBOC) Expansion:** CBOCs have been successful in improving geographic access for many veterans, and the VA operates over 700 CBOCs and contracts for care at 100 outpatient clinics located in areas considered rural or highly rural.<sup>54</sup> Expansion of services to include mental health as part of their core set of services has been important, but some contend that many rural and remote veterans continue to have access problems. Further evaluations of the effectiveness, impact on access, and cost implications of expanding the

<sup>53</sup> Task Force on the Future of Military Health Care, Defense Health Board. Final Report. December 2007.

<sup>54</sup> Perlin JB. Oversight hearing to examine the VA efforts to provide high quality health care to veterans in rural communities. Written testimony. Health Subcommittee, Committee on Veterans' Affairs. June 27, 2006.

CBOC network should include comparisons with use of existing rural health facilities and community networks.

- **Outreach Clinics or Health Centers:** Successful models of alternative delivery models have been demonstrated in several VISNs where travel distance, inclement weather, geographical restrictions, and other barriers limit access to health care. Partially or intermittently staffed Outreach Clinics or “Virtual” Clinics have been developed that provide basic primary care and mental health services for those amenable to an alternative to face-to-face visits. Services provided include interim evaluation, diagnosis, and treatment; management of previously diagnosed problems; and, where available, care coordination/home telehealth and telemedicine specialty services (e.g. teledermatology). Face-to-face clinical visits may be scheduled on an intermittent basis, and annual comprehensive physical examinations may be required with the veterans’ primary care provider. Further evaluations of the effectiveness, impact on access, and cost implications of expanding the Outreach Clinic network should also include comparisons with use of existing rural health facilities and community networks.
- **Mobile Vet Centers:** Some of the Vet Centers in rural areas provide information about service availability and provide readjustment counseling through rural area outstations. Vet Centers also coordinate with community providers, employment services, substance abuse programs, and other health care providers to better support referrals and case management, to include use of telehealth linkages and over 300 private contracts to provide readjustment counseling.<sup>55</sup> The Vet Center program plans to station 50 mobile vans at strategically located Vet Centers throughout the country for the purpose of extending outreach and readjustment counseling to rural veterans. Also, over the two year period of FY 2008 through FY 2009, VA will be establishing telehealth capacity at over 25 Vet Centers. Further evaluations should explore the effectiveness, impact on access, and cost implications for using Mobile Vet Centers.
- **Transportation Grants:** Transportation to VA facilities for appointments is a barrier to rural veterans in obtaining care. ORH will assess the feasibility of establishing a grant program for State Veteran Service Agencies and Veteran Service Organizations for the purpose of providing veterans living in remote rural areas with innovative means of travel to VA medical centers. Such grants will need to address eligibility issues, housing options for drivers/veterans, the impacts of seasonal variability, care coordination (to minimize the need for transportation), or the development of initial screening or triage within local communities before long-transport to VA facilities. Evaluations should explore the effectiveness, impact on access, and costs of expanding transportation grants.
- **Rural Community Partnerships:** Partnerships with existing rural health facilities, to include Federally Qualified Health Centers (FQHCs), Medicare-certified Rural Health Clinics (RHCs), rural hospitals including Critical Access Hospitals (CAHs), community mental health centers, home health agencies, skilled nursing facilities, community action agencies, private physician practices, free clinics, assisted living facilities, substance abuse treatment centers, rehabilitation hospitals, and outpatient clinics, have often been proposed. Examples of successful contracts with FQHCs exist in Wisconsin, Missouri, and Utah. In many rural and frontier communities, RHCs represent the only source of primary care available; Montana has 45 CACs and the highest percentage of veterans in the country. A network of linkages with CAHs, CHCs, and RHCs may greatly enhance services to

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<sup>55</sup> Perlin JB. Oversight hearing to examine the VA efforts to provide high quality health care to veterans in rural communities. Written testimony. Health Subcommittee, Committee on Veterans’ Affairs. June 27, 2006.

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rural veterans.<sup>56</sup> One pilot project might involve the development of an interagency agreement between the VA and the Department of Health and Human Services to contract for services within a network of existing federally-supported rural health facilities, ensuring that there is appropriate technical assistance, uniform standards of care, an interagency team to facilitate contracts, appropriate management of continuity of care, and adequate reimbursement to local providers rendering care to rural veterans. Such pilots should include a comprehensive evaluation plan to assess access improvements, veterans' care preferences, quality of care, and best practices for transfer of funds among payer systems. Also, ORH should expand participation in the National Rural Development Partnership, which brings together local, state, tribal, federal, and private sector partners for community and economic development in rural America.

- **Payer Mix Care Integration:** Develop a collaborative network with the Centers for Medicare and Medicaid Services (CMS), the Department of Health and Human Services (DHHS), the Department of Defense (DoD), the Indian Health Service (IHS), and private payers to develop multi-payer care delivery models. The goal would be to coordinate with different payers and utilize a network of existing rural health facilities (e.g. FQHCs, RHCs, CACs, IHS, DoD, VAMCs, CBOCs, private facilities) to maximize the efficiency of the payer mix. The project would focus on simplifying reimbursement mechanisms, testing different models of care delivery, and identifying the optimal mix of local assets, remote technologies, and access to more specialized facilities that are required for different health services and different populations. A focus on continuity of care and appropriate sharing of Protected Health Information will also need to be considered. The project should include concurrent studies and evaluations that monitor how these models evolve over time and across geography, as well as its impacts on veterans access, quality of care, costs, and care preferences.
- **Care Delivery Best Practices Network:** The ORH should develop a collaborative network with the State Offices of Rural Health at the state level, the Office of Rural Health Policy at the federal level, and VISN Rural Health Consultants to identify, analyze, and replicate best practices or “models that work” for care integration and innovative approaches to providing care for rural communities. This may be especially important for mental health and family support services for veterans in rural communities.<sup>57</sup> The network may utilize a number of outreach and dissemination strategies, and evaluations may focus on the cost and effectiveness of utilizing different dissemination channels.
- **On-Line Directory of Access Points:** The ORH should develop an on-line resource for rural veterans that identifies various health care access points with associated payers (linked, perhaps, to eligibility processing and contact information), to include both VA and non-VA resources. It could identify the 153 hospitals, 882 outpatient clinics, 207 Vet Centers, and 135 nursing homes in the VHA system of facilities<sup>58</sup> through closest zipcode or create simple geographical maps that allow veterans to visualize available access points, along with available services and contact information. This could be made available via the ORH website, placement within a variety of rural settings, and perhaps an annual printed version for distribution to rural veterans.
- **VA-Certified Fee Basis Clinic Model:** The ORH should consider supporting the development of a VA certification process that allows fee-basis clinics to meet several tiered certification levels, based

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<sup>56</sup> Heady HR. Oversight hearing to examine the VA efforts to provide high quality health care to veterans in rural communities. National Rural Health Association written testimony. Health Subcommittee, Committee on Veterans' Affairs. June 27, 2006.

<sup>57</sup> Adams GL. Oversight hearing to examine the VA efforts to provide high quality health care to veterans in rural communities. Written testimony. Health subcommittee, Committee on Veterans' Affairs. June 27, 2006.

<sup>58</sup> Hawthorne K. How VA provides care. HRSA/ORHP All Programs Meeting. August 2007.

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on Veterans Health Information Systems and Technology Architecture (VistA) interoperability, adherence to established clinical care protocols, availability of telemedicine resources to connect to VA Medical Center (VAMC) specialist services, quality measurements, etc. It should also develop a concurrent studies and analysis program to compare quality metrics across the various tiers of VA certification for fee-basis providers, CBOCs and Outreach Health Centers, VAMCs, and other providers. For certain Rural Health Clinics during the initial demonstration phase, one might consider using Medicare-certification as a proxy, given that RHCs already must meet formalized requirements. The purpose of the tiered certification reflects the reality that certain local RHCs do not yet have electronic medical records and that getting them up to uniform standards will require investments in training, technical assistance, and financial support. Providers should be taught VA protocols, as appropriate, and have a central VA as their “medical home” to coordinate care within VA-certified fee-basis providers. A collaboration with Project HERO (Healthcare Effectiveness through Resource Optimization) may be warranted. Project HERO focuses on the cost-effectiveness, quality, and timeliness of purchased care; and vendors will be pre-qualified (having passed qualification standards). Pilot Project HERO demonstrations in VISNs 8, 16, 20, and 23 may also provide important lessons learned.

### *Improve Quality of Care for Rural Veterans*

- **Veterans Rural Access Hospital Directive:** The VA recognizes that there are limitations in the range of services delivered at small VA facilities. In response, VHA has developed the Veterans Rural Access Hospital directive (VRAH) which helps to maintain quality at facilities in rural areas with limited community resources. The ORH should support studies that assess the impact of the VRAH on access and quality of care for rural veterans.
- **Medical Home Model:** The Centers for Medicare and Medicaid Services (CMS) has Medical Home demonstration projects of variable size practices, with many in rural areas, using a variety of process and outcomes measures. It is expected that by the end of 2009 there will be 500 medical homes, with 100 health information technology homes, that use Wagner’s Chronic Care Model and integrate self-management, community, point of service, delivery system design, and clinical information systems to improve quality of care. UnitedHealth Group is planning a multi-year pilot in several geographical regions. The ORH should explore how to collaborate with CMS and/or UnitedHealth Group to ensure that rural veterans are included in the medical home demonstration projects, to the extent possible, and to evaluate how the VA network of facilities can adopt lessons learned from the CMS demonstration projects. The National Committee for Quality Assurance (NCQA) recently released new standards for patient-centered medical homes, and these should be integrated where appropriate.
- **Rural Health Quality Measures Development:** The ORH should explore the currently available quality measures in use in the VA’s Office of Quality and Performance, the VA National Center for Patient Safety, and the Office of the Associate Deputy Under Secretary for Health for Quality and Safety and determine their relevance for rural veteran populations. The Office of the Assistant Deputy Under Secretary for Health for Policy and Planning also has identified a number of measures to assess urban and rural comparative performance, and these should be integrated. Improving the quality of care for veterans in rural areas requires consideration of both quality measurement and quality improvement. Quality measurement requires a focus on appropriate measures development and data collection processes to ensure that one can track progress and assess needs; quality improvement requires systems interventions to have a more direct impact. A pilot project might field a number of validated rural health quality measures and compare the impact of various quality improvement initiatives in rural and non-rural settings.

- **Quality Through Collaboration:** The Rural Policy Research Institute recommended the creation of a Rural Health Quality Advisory Commission to develop a coordinated national plan for rural health quality improvement and design demonstrations to test alternative models for quality improvement, as well as to monitor, report, and make recommendations to Congress.<sup>59</sup> Consider support for such an Advisory Commission and ensure veterans rural health issues are well represented. Also, the Institute of Medicine had recommended that the Centers for Medicare and Medicaid Services establish 5-year pay-for-performance (P4P) demonstrations in five rural communities and that the Agency for Healthcare Research and Quality assess the impact of changes in public and private health insurance programs and in insurance coverage on the financial stability of rural providers. Assess the extent to which these recommendations have been followed and evaluate the impact of P4P programs in rural settings.
- **Focus on Prevention Services:** “The single greatest opportunity to improve health and reduce premature deaths lies in personal behavior,”<sup>60</sup> and health promotion and disease prevention will become more central to the quality of care provided to all veterans. A study by the Walsh Center for Rural Health Analysis concluded that rural populations are less likely to receive clinical preventive health services recommended by the U.S. Preventive Services Task Force.<sup>61</sup> The VA National Center for Health Promotion and Disease Prevention is exploring the deployment of an on-line health risk appraisal tool, which may both provide important data and allow customization of health educational information. Another excellent candidate for a pilot project to test the effectiveness of behavioral modification strategies for clinical preventive services would be the Aspirin Utilization Project, sponsored by the American College of Preventive Medicine (ACPM), as prophylactic use of aspirin is an established and effective prevention intervention that has been shown to be grossly under-utilized. ACPM already has a multi-tiered strategy in development to address both consumer/patient- and physician-focused behavior modification to achieve initiation and maintenance of aspirin use as standard clinical preventive services, and they are seeking potential pilot program candidates at this time.<sup>62</sup> This is especially salient as VHA specific delivery of daily aspirin use is unknown (as only aspirin use in patients with ischemic heart disease is measured) while the VHA does very well in measuring and providing the other adult preventive services recommended by the Partnership for Prevention’s National Commission on Prevention Priorities.<sup>63</sup> A collaboration with ACPM could be used to assess the effectiveness of various behavior modification strategies (e.g. clinical reminders, standing orders, staff education campaigns, patient education campaigns, community outreach, etc.) among rural veterans and providers and the extent to which good prevention practices can be promoted in rural settings.

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<sup>59</sup> Mueller KJ, MacKinney AC, Slifkin RT, Coburn AF, McBride TD, Wakefield M. The Institute of Medicine Rural Health Report: Next Steps in Legislation and Programs. RUPRI Rural Health Panel. February 2006.

<sup>60</sup> Schroeder S. We can do better – improving the health of the American people. *New England Journal of Medicine*. 2007;357:1221-1228.

<sup>61</sup> Infante A, Meit M. Delivering the U.S. Preventive Services Task Force recommendations in a rural health plan. Walsh Center for Rural Health Analysis. February 2007;W(8):1-4.

<sup>62</sup> American College of Preventive Medicine. Aspiring utilization project. Presentation, October 27, 2007; and Strand Communications Strategies. Preventive health interventions: a qualitative review of relevant literature. October 19, 2007.

<sup>63</sup> Kahwati LC. High-value preventive services. *HealthPower Prevention News*. VA National Center for Health Promotion and Disease Prevention. Fall 2007.

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### *Long-Term Care (LTC) Services for Rural Veterans*

- **Expansion of Existing VA Programs:** The VA is committed to providing patient centered care in the least restrictive setting possible. The ORH should work closely with VA Program Offices to support Home and Community Based Care Programs, including Home Based Primary Care (HBPC), focusing on providing care in the patient's community; Medical Foster Home Programs, which work with caregivers in the community to provide 24-hour supervision as well as needed personal assistance and home visits from HBPC staff; referral to and purchase of community nursing home, home care, hospice, and adult day health care services; and support of State Veterans Homes/State Home Domiciliaries through per diem payments to the State to finance care for eligible veterans. HBPC also provides chronic disease care management (programs currently include diabetes, heart failure, chronic obstructive pulmonary disease, PTSD, and depression), often using home-based telemonitoring capabilities. Geriatric Programs provide oversight and management of VA's Geriatric Research, Education, and Clinical Centers (GRECCs), Alzheimer's/Dementia Care Programs, Geriatric Evaluations, and Geriatric Primary, Ambulatory, and Acute Care. A baseline assessment of the long-term care needs of rural veterans could be coupled with program development and expansion of existing programs to better address these established needs. The ORH has already made a commitment to assess the average daily census in non-institutionalized settings for veterans in rural areas for the Home-Based Primary Care, Care Coordination Home Telehealth, and Medical Foster Home Programs.
- **Caregiver Support of the Rural Veteran Elderly:** The National Family Caregiver Support Program (NFCSP) of the Older Americans Act Amendments of 2000 acknowledges that family caregivers are important to the long-term care system. The 2004 study, *State of the States in Family Caregiver Support: A 50-State Study*, identifies a number of unmet needs among caregivers. This includes the lack of resources to provide a range of services, limited respite care, lack of public awareness about caregiver issues, the shortage of providers, and limited access to services in rural areas.<sup>64</sup> The ORH should consider collaborations with the Health Services and Resources Administration, the Centers for Medicare and Medicaid Services, and the Administration on Aging to expand, incorporate best practices, and standardize the array of assistance made available to rural caregivers. Better information about rural veterans with long-term care needs and their families also needs to be collected through the National Aging Program Information System (NAPIS).
- **Public-Public Partnership with PACE:** The *Program for All-inclusive Care for the Elderly* (PACE) allows for Medicare beneficiaries with long-term care needs to be placed in comprehensive care programs that coordinate preventive, primary, acute, and long-term care services. The Rural PACE Grant Program, mandated by the Deficit Reduction Act of 2005, Section 5302(c)(7) and managed by the Centers for Medicare and Medicaid Services, allows for \$7.5 million in grants to be awarded so that organizations can start rural PACE sites in their community.<sup>65</sup> A public-public partnership with CMS might create rural PACE sites that include management of veteran populations as well. Program evaluations of the partnership might include assessments of the impacts on quality of life, care coordination, and costs for elderly veterans who participate.

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<sup>64</sup> National Advisory Committee on Rural Health and Human Services. 2006 Report. <http://ruralcommittee.hrsa.gov/NAC06AREport.htm>.

<sup>65</sup> Office of Rural Health Policy. 2006 Annual Report. Health Resources and Services Administration, U.S. Department of Health and Human Services, 16.

### *Mental Health (MH) Services for Rural Veterans*

- **Expansion of Existing VA Programs:** The Mental Health Intensive Case Management – Rural Access Network Growth Enhancement (MHICM-RANGE) program should be expanded to CBOCs that are not currently participating. Care Coordination Home Telehealth (CCHT) should also expand its telehealth and telepsychiatry initiatives, and each VA Medical Center or clinic should develop plans for the delivery of VA mental health services by using on-site provider, telemental health, referral to other facilities, or referral to community providers as appropriate. The VA Homeless Providers Grant and Per Diem (GPD) Program, which provides grants to community agencies providing services to homeless veterans (including those in rural areas), should be expanded. All service expansions should include a comprehensive evaluation plan to assess the impacts on access, quality, costs, and outcomes for rural veterans and to assess rates of mental health and/or substance abuse disorders.
- **Post Traumatic Stress Disorder and Family Care:** The ORH should consider developing a telemedicine-based cognitive processing therapy or prolonged exposure therapy module, with linkages to VA-based mental health services. Also, as symptoms of PTSD typically involve the entire family and may involve issues with domestic violence, child abuse, substance abuse, depression, and divorce, the program should include a team of family therapists and/or educational programs for family members. The ORH should monitor the effectiveness of these PTSD therapy modules and evaluate the impacts on access, quality, costs, and outcomes.
- **Veteran Specific Training for Emergency Medical Services:** First responders in rural areas are often the first health care contact for veterans. Federal and state funding has tried to address the need to strengthen and integrate emergency medical services with rural health care services and providers,<sup>66</sup> but rural health leaders have noted that many emergency medical technicians are not necessarily aware of either the resources available for veterans in the VA system or the medical or mental health conditions that veteran populations may be at risk of dealing with (e.g. PTSD, domestic violence, alcohol and substance abuse). One demonstration project might focus on training modules for EMS professionals in rural areas, to ensure appropriate awareness of veteran specific issues and resources, and evaluations to determine the effectiveness of various dissemination strategies.
- **Veterans with Traumatic Brain Injury:** The FY2008 Defense Authorization bill includes a requirement (Section 1705) for the VA, in collaboration with the Defense and Veterans Brain Injury Center, to carry out a five-year pilot program to assess the effectiveness of providing assisted living services to eligible veterans to enhance the rehabilitation, quality of life, and community integration of veterans. This includes special consideration for veterans in rural areas to participate in the pilot program.

### *Telemedicine and Technology*

- **Expansion of Existing VA Programs:** Telehealth involves the clinical use of information and telecommunications technologies to provide health care services in situations where patient and provider are in different locations. A particular focus of telehealth development in VHA is improving access to veteran patients in rural and remote locations. VHA has developed major national telehealth networks that provide care: into the home; between community-based outpatient clinics and hospitals; and between hospitals and other hospitals. Currently, depending on telehealth application, between 15% and 38% of VHA's telehealth-based services are provided to rural/remote locations. Initiatives aimed at further expanding the telehealth networks to deliver care to veteran patients in rural/remote locations include a clinical enterprise videoconferencing telecommunications network, expansion of the home telehealth infrastructure, and telehealth training centers. ORH

<sup>66</sup> National Rural Health Association. 2007 Legislative and Regulatory Agenda.

should work closely with Care Coordination and Home Telehealth and other program offices to expand existing VA programs, where appropriate, and continue to assess current strategies.

- **Critical Access Hospital Health Information Technology (HIT) Networks:** Many rural communities have existing telemedicine networks with long-established experience and success; other communities are supported by critical access hospital rural health information technology networks (e.g. ORHP funded 16 grants for \$1.25 million each to develop pilot rural HIT networks); the ORH should explore the potential for integration of services, sharing of support for telehealth equipment, and regional care coordinators to integrate care for veterans using these kinds of care delivery models, to include assessments of legal and department level barriers to such partnerships. Such sharing of telemedicine networks might require specific service lines or clinic days that are for veterans only and track and coordinate care through VistA compatible electronic health records. Pilot programs should be accompanied by comprehensive evaluation plans.
- **Public-Private Telemedicine Partnership:** The rural health community has many examples of successful telemedicine programs already in action. For example, the Eastern Montana Telemedicine Network in Billings, Montana, is a successful telemedicine/telepsychiatry program with over 200 physicians that feed a broad network of hospitals and long-term care facilities with remote networks; it began as a cooperative effort among health care providers using interactive video conferencing technology to provide medical and mental health services throughout the region.<sup>67</sup> Currently, it does not serve the veteran population. A model of public-private partnership might involve the addition of veteran specific capabilities at the Billings clinic, providing access to VA specialists and appropriate follow-up within the VA system built upon an experienced telemedicine/telepsychiatry access point that serves a broad population in Montana. As another example, Nebraska has created a private secure telehealth backbone that connects all 88 not-for-profit hospitals, 19 public health departments, and 6 Certified Rural Health Clinics; it received ORHP funding to develop a rural HIT network connecting a Critical Access Hospital with local providers; and it has a state-wide eHealth Council to coordinate HIT and telehealth initiatives. These represent opportunities for mutual benefit, close collaborations, and direct improvements in access for rural veterans; these programs should be accompanied by comprehensive evaluation plans.
- **Health Information Exchange:** Rural communities have limited capital for health information technology (HIT) investment, with the risk of rapid changes in technology and the absence of national technical standards posing further challenges. Health information exchanges (HIEs) or regional health information organizations (RHIOs) have been created in many localities to test the electronic exchange of Protected Health Information between health care facilities. The 2004 Institute of Medicine report, *Quality through Collaboration: The Future of Rural Health*, acknowledges the health information technology needs to be a pivotal quality health care strategy for future rural health improvement. Despite the challenges of interoperability, privacy and data security, the scarcity of skilled IT and health care providers in rural settings, and the costs of coordinating national and local activities, as noted by the National Rural Health Association,<sup>68</sup> the ORH may work with local partners to (1) establish data standards for rural information systems, (2) facilitate interoperability of disparate systems within rural facilities, (3) help establish regional networks, (4) establish the policy framework to support health information exchange, (5) create educational and funding resources to support HIT infrastructure in rural areas, and (6) support the training of a skilled technology workforce in rural

<sup>67</sup> Smith HA, Allison RA. Telemental health: delivering mental health care at a distance. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration and Health Resources and Services Administration. 1998.

<sup>68</sup> National Rural Health Association. Rural health information technology. Issue paper. February 2006.

areas. There may be successful examples: The CareSpark health information exchange (Care Data Exchange Project) in the central Appalachian region includes the Quillen VA Medical Center, and the Santa Barbara County Data Exchange (Clinical Data Sharing Project), led by Dr. David Brailer, listed the VHA as a participant. These and other projects should be further evaluated, to determine best practices for future policy and strategies for wider diffusion, as the successful deployment of HIE networks will be essential next steps for promoting broader strategic partnerships. Particular attention must be paid to privacy, data security, and regulatory requirements regarding the collection, maintenance, and release of VHA records (e.g. Privacy Act of 1974, Health Insurance Portability and Accountability, 38 United States Code (USC) 7332, 38 USC 5701, 38 USC 5705, etc.). Successful HIE projects may integrate telehealth group therapy modules, web-based home telemedicine capabilities, and veterans rural health social networking initiatives.

- **VistA-Office Electronic Health Record:** The National Advisory Committee on Rural Health and Human Services notes that public use of the VistA-Office Electronic Health Record (EHR) had shown promise as a potentially cost-saving program for private rural practices but that the delayed release of the product, the lack of technical support, and the high cost of licensing presented barriers to wider use.<sup>69</sup> The ORH should check on current status of the VistA-Office EHR and see if it can or should be more aggressively pushed out to rural committees. Despite the complexities of interoperability, data security, and privacy issues that surround EHRs, wider use may facilitate greater collaboration in rural settings. Evaluations of current patterns of use of VistA-Office EHR may be helpful.
- **Additional Telemedicine Models:** Beyond the expansion of existing VA programs or the replication of successful best practices from the broader rural health community, there may be opportunities to explore new and innovative uses for the telemedicine model. For example, the ORH might consider portable telehealth capabilities for PTSD or TBI (e.g. hand-held access to specialist care or a 24/7 video hotline for services), wide distribution using non-traditional retail networks (e.g. partnerships with Wal-Mart to provide on-line directory of access points, local libraries or community centers to provide health educational content, or ADT security services for emergency call services), health educational programs using streaming video (e.g. health promotion topics), video-based home-monitoring and consultation (e.g. tele-psychiatry, tele-dermatology, tele-orthopaedics, tele-retinal screening, etc.), or allow use of tele-health assets for recruiting (e.g. interviews to hire workforce or to provide medical training for local health providers to provide CME credits). The Federal Communication Commission's Pilot Program for Enhanced Access to Advanced Telecommunications and Information Services is currently trying to facilitate the creation of a nationwide broadband network dedicated to health care, connecting public and non-profit health care providers in rural and urban locations.<sup>70</sup> The ORH should stay actively engaged in opportunities that leverage telemedicine technologies to better reach rural veterans, ensuring that each initiative has a concurrent evaluation plan to ensure that measurable results are achieved.

### *Workforce Initiatives*

- **Veterans to Health Care Worker Programs:** An effective rural workforce strategy has been to recruit locally for a broad range of health-related professions and to train local people to fill critical workforce shortages, to include in nursing, ancillary support services, coding/billing, emergency medical technicians, physical therapists, pharmacy technicians, health outreach workers, etc. Analogous programs can be found in "farmers to pharmacists" or "veterans to teachers" programs.

<sup>69</sup> National Advisory Committee on Rural Health and Human Services. 2006 Report. <http://ruralcommittee.hrsa.gov/NAC06AReport.htm>.

<sup>70</sup> Federal Communication Commission. The Federal Communication Commission's Pilot Program for Enhanced Access to Advanced Telecommunications and Information Services. March 28, 2007.

Supporting veteran vocational or professional training in rural health related fields will encourage the growth of rural health care workers who both understand their local rural communities and understand the experience of veterans. For example, Minnesota's Ambulance Association has developed a model for Apprenticeships for EMTs and Paramedics for returning veterans and military non-veterans to receive their paramedic license; and the Montana Chapter of the National Association of Social Workers and the Montana National Guard are working to train therapists in recognizing and dealing with PTSD. The ORH might support the establishment of such programs and evaluate the overall impacts on health care workforce recruitment and retention in rural areas.

- **Health Information Technology Workforce Development:** Workforce shortages extend beyond clinical and ancillary support services. Health information technology professionals represent a growing need,<sup>71</sup> especially as rural healthcare facilities gear up to expand health information technologies. The National Center for Health Care Informatics (NCHCI) and the Rehabilitation Institute of Montana (RIM) have a joint proposal to integrate rehabilitation services with health IT training to support rehabilitation, education, and workforce re-entry. RIM's programs include the Bridges program, a post-acute transitional brain injury program; the WORCcenter, which provides vocational evaluation, job placement, and supported employment; and strong relationship with the Indian Health Service, providing training for individuals with brain injuries.<sup>72</sup> One idea would be to build on the NCHCI/RIM platform to provide veterans and returning soldiers an opportunity to receive training and education with an emphasis on health IT competencies. The workforce development program would be coupled with integrated rehabilitation services and create more collaboration opportunities with the Indian Health Service. The ORH should consider supporting such programs, ensuring that the evaluation plan includes assessments of the impacts on recruitment and retention of HIT professionals in rural settings and the benefits to participating rural veterans.
- **Sharing Rural Health Physician Workload:** Workload in many small rural health facilities is insufficient to recruit and retain physicians and non-physician health care providers. One suggestion would be to create economies of scale through shared work arrangements that allow rural health physicians to be recruited with clinical responsibilities both within VA facilities and out in local rural health clinics. This may be done through public-public or public-private partnerships among health systems or employers. The presence of the VA will likely add critical mass in rural communities and may spur further development; candidates for participation include remote Medicare-qualified Rural Health Clinics and partially staffed VA Outreach Clinics. Evaluations should assess impacts on shared workloads, improvements in patient utilization, quality measures, costs, and health providers.
- **Support Partnerships with 3RNet:** The *National Rural Recruitment and Retention Network* works to increase the number of providers practicing in rural America by working with 43 State-based, not-for-profit organizations to encourage and assist health professionals in locating their practices in underserved rural community. It includes a partnership with ORHP, the State Offices of Rural Health, Primary Care Offices, Primary Care Associations, Area Health Education Centers (AHECs), and other not-for-profit entities.<sup>73</sup> The ORH might consider adding information about opportunities at rural VA facilities and help to coordinate workshops, training, and presentations for those interested in recruiting and retaining health providers interested in serving rural veterans. It may include solicitation for VA clinical positions or training and/or certification in VA systems and processes that

<sup>71</sup> U.S. Bureau of Labor Statistics. Occupational Outlook Handbook 2006-2007.

<sup>72</sup> The National Center for Health Care Informatics. Integrating Health Information Technology Workforce Development With Rehabilitation Services to Serve Veterans in Rural Communities. November 2007.

<sup>73</sup> Office of Rural Health Policy. 2006 Annual Report. Health Resources and Services Administration, U.S. Department of Health and Human Services, 15.

may facilitate involvement in fee-basis or telemedicine programs for veterans in rural communities. ORH may also consider more direct partnerships with AHECs. The numbers of health providers recruited and retained should be monitored, as well as investments in the partnership.

- **Support Graduate Medical Education in Rural Settings:** Consider establishing a specific veterans rural health focused residency program (graduate medical education), in partnership with academic health centers in rural settings. Physicians who grow up in rural areas and receive training in rural practices are more likely to locate in rural communities,<sup>74</sup> Models like the West Virginia Rural Health Education Partnership (WVRHEP)/Area Health Education Center (AHEC) offer creative workforce solutions in the form of interdisciplinary training and clinical clerkships in rural underserved areas combined with financial incentives for community recruitment and retention. The WVRHEP/AHEC infrastructure supports 476 training sites in 55 counties (to include 45 CHCs, 47 FQHCs, 8 RHCs, 28 small rural hospitals, 25 dental offices, and 37 pharmacies), 682 clinical field faculty, 8 regional consortia with 4 AHEC Centers, and 17 Learning Resource Centers that support 100 student rotations per month.<sup>75</sup> The ORH might consider support for such programs, collaborations with undergraduate medical education programs (e.g. the American Medical Student Association), or the National Health Service Corps (NHSC) Commissioned Officer Student Training and Extern Program (COSTEP). Tuition assistance/foregiveness programs or the establishment of veterans rural health specific health professionals modeled after the NHSC have been proposed as well.

### *Targeted Populations*

- **Indian Health Service and Alaska Native Partnerships:** The Indian Health Service and VHA implemented a memorandum of understanding (MOU) to promote greater cooperation and sharing to enhance the health of American Indian and Alaska Native veterans. Some of the collaborative activities that have resulted from the MOU are described in Appendix E. The Omnibus Appropriations Bill (H.R. 2764) also requires that partnerships with public and local private health care providers designed to increase medical services for veterans in remote rural areas be explored, and Montana and/or Alaska appear to have compelling opportunities to address targeted rural veteran populations.
- **Expand Tribal Veteran Representative (TVR) Outreach Worker Program:** TVRs are appointed and supported by Tribal governments but formally trained by the VA; they function as liaisons between veterans, the VA, and other community organizations. Made up primarily of volunteers, TVRs work closely with all agencies in the community to help veterans obtain needed services to information and assistance completing paperwork for healthcare enrollment, claims benefits, education benefits, and home loan benefits. To date there are 125 TVRs representing 19 States. The ORH may consider expanding support for the TVR program after assessing the number of veterans served and the improvements in veteran satisfaction or services provided.
- **Participation in Frontier Extended Stay Clinic Program:** The Centers for Medicare and Medicaid Services (CMS) is conducting a demonstration program under the Medicare Prescription Drug Improvement and Modernization Act of 2003 in which Frontier Extended Stay Clinics (FESCs) are treated as Medicare providers for reimbursement purposes. FESCs provide observation services traditionally associated with acute care inpatient hospitals when patients with severe injury or illness has transport delayed due to weather or distance. The Alaska FESC Consortium has been working

<sup>74</sup> Rabinowitz HK, Diamond JJ, Markham FW, Paynter NP. Critical factors for designing programs to increase the supply and retention of rural primary care physicians. *Journal of the American Medical Association*. 2001;286(9):1041-48.

<sup>75</sup> Heady HR. The story of the West Virginia Health Education/AHEC partnership: a 15-year perspective. August 28, 2007.

with State and Federal partners, and ORHP has been supporting the program.<sup>76</sup> The ORH may consider a public-public partnership to include veteran participation in the FESC program, to include an evaluation of impacts on access for rural veterans.

- **Alaska Native Medical Center Telepharmacy Program:** The unique telepharmacy program allows the seven Community Health Centers in South-Central Alaska and the Aleutian Islands to have better access to pharmaceuticals with pharmacists in Anchorage authorizing dispensing via teleconference and counseling of patients by telephone or televideo.<sup>77</sup> The ORH may consider supporting a partnership to provide Alaska Native veterans an opportunity to participate in this or similar kinds of programs and should monitor the success and impact of these programs.
- **OIF/OEF Veterans:** ORH is working in collaboration with the Department of Health and Human Services to address the needs of returning veterans by enhancing the coordination of services. Initiatives include a training partnership between the Health Resources and Services Administration (HRSA) and the VHA to disseminate specialized training materials specific to the treatment of veterans returning from military deployment, technical assistance to HRSA Community Health Centers (CHCs) to facilitate CBOC requests for contract proposals, and a seamless referral process for veterans from CHCs to VA Medical Centers. The ORH should monitor the success and impact of these programs.

## Outreach, Education, and Training

- **Clearinghouse for Information:** The Rural Task Force of the U.S. Department of Health and Human Services identified the need for a single coordinated point of contact on rural issues for all HHS programs that affect rural communities.<sup>78</sup> As a result, the *Rural Assistance Center* (RAC) was established in December 2002, to serve as a “clearinghouse for collecting and disseminating information on rural health care issues.” The RAC’s website ([www.raconline.org](http://www.raconline.org)), electronic mailing lists, and customized assistance provide good best practices for the VA’s ORH to provide a single coordinated point of contact on veterans rural issues and a clearinghouse for veterans rural health information. The source for veterans rural health issues should follow the same principle in terms of providing a single coordinated point of contact and source for information. It should also understand that rural families and communities need information about a full range of services available for returning veterans, including information about services from the Veterans Administration and from other federal, state, and local organizations. An effort to integrate resources and information will increase the likelihood that an individual or community will access an appropriate resource in their area. In addition to web-based information sources, the clearinghouse function should also provide for dial-up connections and telephone hotlines (e.g. 1-800 numbers) and create the capacity for customized assistance.
- **Technical Assistance:** ORHP also supports provider-focused technical assistance (TA) and information sharing efforts that support a series of TA conference calls, educational conferences and seminars, patient assistance programs, and on-site technical assistance to assist with financial,

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<sup>76</sup> Office of Rural Health Policy. 2006 Annual Report. Health Resources and Services Administration, U.S. Department of Health and Human Services, 26-27.

<sup>77</sup> National Advisory Committee on Rural Health and Human Services. 2006 Report. <http://ruralcommittee.hrsa.gov/NAC06ARreport.htm>.

<sup>78</sup> Office of Rural Health Policy. 2006 Annual Report. Health Resources and Services Administration, U.S. Department of Health and Human Services, 11.

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operational, and clinical performance of its small rural hospitals.<sup>79</sup> TA is considered an important adjunct to any program or policy and should be integrated into all ORH programs or initiatives that require implementation in the field. The Georgia Health Policy Center provides technical assistance to 141 community network and outreach grantees in 49 states, and the Rural Health Resource Center provides technical assistance and services for the Medicare Rural Hospital Flexibility Grant Program. Both serve as successful best practices and focus on building leadership capacity, formalized training, peer-led learning systems, replication of best practices, and sharing information and resources. Additionally, there is recognition that there must be progression or maturity in terms of the strength of community networks, the degree of system integration, and depth of experience in network activities.<sup>80</sup> The ORH should integrate technical assistance into its supported programs and pilot projects and utilize best practices from existing TA resources within the rural health community.

- **Training and Education Resources:** Training programs and courses can be helpful in supporting rural providers address the unique challenges of rural veterans. Such courses may address a wide spectrum of themes including assuring cultural competency of all providers caring for veterans, the management of clinical conditions in resource limited environments, or the administrative processes associated with streamlining fee basis procedures between VA and non-VA providers. Other courses may touch on the appropriate use of telemedicine resources and guidance on how to optimize the use of remote consultation. Educational resources may extend to veterans, their families, interested citizens, VA physicians and staff, and others. The ORH has conducted an inventory of current VA training resources and is developing a rural health provider training module based on a high level gap analysis. Rural veteran training resources should be coordinated with Employee Education System (EES) and the VISN Rural Health Consultants to share resources and avoid duplication of efforts.
- **Outreach Initiatives:** The ORH should explore a variety of outreach channels to reach rural veterans. Outreach to employers, state agencies, CHCs, RHCs, CAHs, Reserve and National Guard units is mandated by Public Law 109-461, and it may be important to establish Rural Outreach Workers and Rural Case/Care Managers to help coordinate care across a spectrum of partnerships as they develop. The National Office of Outreach Programs and the Office for Seamless Transition Programs are important VA resources to collaborate with. There may be other outreach oriented organizations and initiatives that are especially relevant for rural veterans; for example, Interservice Family Assistance Committees (ISFACs) are voluntary cooperative partnerships organized to provide networking for training and assistance to ensure family readiness for all branches of military service; they often include a cross section of military/veterans organizations, public and private service agencies and community groups with the goal of coordinating family assistance services, improving communications among family support providers, and reducing duplication of efforts; ISFACs may serve as an additional dissemination channel for ORH outreach, education, and training resources.
- **ORH Website:** The veterans rural health website will be a single coordinated point of contact on rural health issues for veterans. It will allow internal and external stakeholders to provide feedback on rural health issues, as well as serve as a clearinghouse of information and resources for veterans in rural areas. It will serve both as an important resource for veterans and a central gateway or portal to educate all stakeholders on the work and progress of ORH initiatives. VHA websites must be behind the firewall, the VA must own the site, and it must be approved by the content manager. It will be important to establish continuous content maintenance capacities (although technical maintenance may be available on enterprise supported sites). It may provide links to rural health portals, and non-

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<sup>79</sup> Office of Rural Health Policy. . 2006 Annual Report. Health Resources and Services Administration, U.S. Department of Health and Human Services, 13-14.

<sup>80</sup> Minyard K. Briefing Book. Georgia Health Policy Center. December 2007.

VA sites such as RAOnline, ORHP, and NRHA should provide appropriate links to the VHA website for veterans. Ideas for social networking and clinical networking have also been suggested.

- **Direct Feedback From Rural Veterans:** The ORH should consider developing direct feedback channels that allow rural veterans to provide important feedback directly to the ORH staff. Public hearings, website links, toll-free hotlines, and other reporting processes – with appropriate capacity to respond to rural veterans – may be an important adjunct for reaching out to rural veteran communities. Educational awareness, the use of VISN Rural Health Consultants, and deployment of online surveys may be critical components to establishing trust and credibility for the national office.
  - **Research and Best Practices Network:** The ORH should consider formalizing a platform to share research findings among VA and non-VA rural health researchers, the development and sharing of best practices and program innovations, and the promotion of rapid and effective communications among stakeholders. The Agency for Healthcare Research and Quality (AHRQ) effectively utilizes User Meetings to share information among active users and organizations that might benefit from AHRQ resources; these settings provide an opportunity for open discussions among users, recommendations and feedback to AHRQ on future development efforts, and considerations of uses and interpretations of resources and research. The ORH should consider the use of User Meetings, electronic distribution lists, websites, regularly scheduled conference calls, open discussion groups, educational symposia, and other strategies to promote the sharing of resource tools, study findings, and best practices within the rural veteran and rural research communities.
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## The Road Ahead: Strategic Priorities

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Defining quality and ensuring access to quality care when needed are dominant issues for all health care systems and payers. In rural settings, the lack of economies of scale and scope make it more difficult to ensure access to quality care when the population is dispersed across broad geographical distances. Meeting the mental and physical health and supportive care needs of people in rural areas is among the most challenging aspects of care, and veterans rural health issues have added complexities associated with the unique health care needs of veterans and the political and community pressures inherent in veterans health care. Non-traditional approaches to health care delivery may be important adjuncts to the provision of quality rural health care. Proximity of facilities, transportation, and technology that can overcome the limitations of time and space remain important strategies that address important questions:

- Is there a facility to meet the patient's need within a reasonable distance?
- Can technology be used to reduce the number visits that either a health care professional needs to make to that person's home or the number of visits that person needs to make to a closest health care professional?
- Can persons with limited health skills be used to supplement or replace the care needed by more advanced trained health care professionals?
- How timely does the care need to be?

The VA has excellent capabilities to assess the scope of health and supportive care needs of veterans and has been testing deliberate means to meet unmet needs when conventional options are not available. It has a robust research capability through the Office of Research & Development (ORD) and strong program offices that are deploying innovative initiatives to reach rural veterans.

Conversely, the rural health infrastructure and non-VA rural health researchers are a tremendous resource. The Department of Health and Human Services supports a network of researchers and centers that contribute deeply to the understanding of the health care issues confronting individuals and communities in rural areas and has made great strides at improving access to care. It has been testing innovative strategies and establishing programs that build communities and serve rural residents. Tapping into this network and supplementing the work of this network to consider the issues unique to veterans must be part of the overall strategic plan for ORH.

A critical input into operational and strategic planning requires improved situational awareness about the current and anticipated needs of rural veterans. This will require using the information collected about population needs and the information collected about optimal delivery options in conjunction with current programs and facilities. This will need to be an ongoing effort as needs change and the understanding of medical care changes; options change as technology changes and as organizational options are

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evaluated; and the population changes due to migration, aging, and the degree to which American service men and women are engaged in hostile activities.

Rural areas necessitate adapting care delivery options. What might work in suburban or urban areas is not likely to work in a rural area and therefore there is a need for deliberate programmatic and technological changes to be tried, tested, and evaluated. Among the more difficult challenges will be meeting the needs of veterans with psychological, chronic, and supportive care needs living in rural areas. Meeting mental health and chronic care needs, especially for degenerative conditions, will require intermittent but ongoing care from skilled practitioners. Supportive care needs are likely to require less skilled assistance but more regular or continuous assistance. Finding ways to integrate technology and less skilled care for more skilled providers will likely to be a part of the way in which highly skilled but intermittent care can be provided. New forms of group care-giving in conjunction with technology might be necessary to make unskilled long-term care work in rural communities.

The Office of Rural Health (ORH) has a broad mandate to improve the quality and access to care for rural veterans. Responding to this mandate will require ongoing policy analysis and development; consolidation and support for research and evaluations; and promotion of best practices. As a new office, the ORH must be effective in internal marketing and outreach within the VA, to overcome institutional resistance and resolve jurisdictional issues with other program offices. To be effective, the ORH must build its own organizational capacity, rely on effective advisory bodies, establish robust information management and decision support systems, support and disseminate focused and relevant research and programmatic initiatives, and create effective platforms for collaboration, particularly with the existing rural health policy research community. The following section provides some insights about the road ahead for ORH. This section is drawn from the perspectives and opportunities identified in the published literature, from discussions with rural health experts, and a preliminary environmental scan of legislative requirements and existing VA programs. This is an initial evaluation and, therefore, the observations may not be sufficiently informed about the nuances and details of the activities, policies, and organizational culture of the VA.

## ORH Strategic Planning and Capacity Building

The role of the ORH is to provide policy, guidance, and oversight within VHA to improve access to quality health care for rural veterans, as well as to engage in research and promulgate best practices. At the heart of its approach are two key strategies: (1) create a robust data-driven decision-making process and (2) build the capacity for strong and effective collaborations across both VA and non-VA resources. VA's Program Offices have a history of developing and implementing innovative programs, many of which focus on the rural community. Conversely, rural communities have dramatic needs that rural health experts and researchers have been addressing for many decades. The key function of the ORH is to ensure that information is shared freely, policies and programs are coordinated efficiently, and creative ideas and approaches are considered thoroughly across the VA and within the non-VA rural community.

- **ORH Business Plan:** The ORH will need to develop a formal business plan with mission critical measures aligned around core corporate expectations, mandated requirements, and longer-term strategic goals. It will further outline the organizational structure, operating processes, and resource requirements for each ORH initiative. This plan will guide ORH activities, establish internal benchmarks of progress, and outline important implementation steps or action plans to support the overall mission of improving access and quality of care for rural veterans.
  - **ORH Staffing:** The ORH will rely on a combination of VA staff and contract support. Currently, the ORH is staffed by the Director, Office of Rural Health (GS 15) and a Health Systems Specialist (GS 14). It is directly supported by the Office of the Assistant Deputy Under Secretary (ADUSH) for Policy
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and Planning, which provides the staff resources of the Office of Strategic Planning and Analysis as well as the Office of Enrollment & Forecasting. The ORH also utilizes contracts to leverage rural health expertise with rural health leaders, academic institutions, and rural health organizations outside the VA to assist with strategic planning, coordination of research initiatives, and development of pilot programs. Further, the ORH will provide guidance and funding to field-based VA units to further develop and execute initiatives that will improve care provided to veterans residing in rural areas.

- **VA Program Offices:** The ORH must establish operating processes that allow close coordination and collaboration with all VA Program Offices, as most program offices have a substantial number of initiatives that impact on rural veterans. The ORH must become a resource for the program offices as well, advising on rural health issues, helping coordinate demonstration projects, linking the broader rural health community, and facilitating communications and interest in rural health issues. Internal review processes must seek to avoid duplication of services and to consider the impacts of new ORH initiatives on existing programs and data collection efforts throughout the VA.
- **Studies and Analysis Group:** The ORH plans to establish a Studies and Analysis Group, designed to provide independent and objective input and an efficient conduit to the broader rural health research community. It will leverage rural health expertise, relationships with rural health leaders and organizations, and academic community resources to assist with ORH strategic planning, coordination of research initiatives, development of pilot programs, and analysis of data needs and policy issues. The Studies and Analysis Group will provide rapid response and robust decision support capabilities and serve as both an advisory group and adjunct operations support for the ORH.

## Advisory Bodies

The ORH must establish processes that allow the input of a broad range of advisory bodies across a network of relationships, to help guide the strategic direction of the ORH and to better understand the impacts of ORH actions on rural veteran communities.

- **Rural Health National Advisory Committee (RHNAAC):** The mission of the RHNAAC will be to examine issues and strategies to improve and enhance VA services for enrolled veterans residing in rural areas through evaluations of current program investment, regulatory policy, and barriers to providing services as well as the development of strategies to improve services. The selection process should consider subject matter expertise, geographical diversity, and sector or stakeholder representation. The RHNAAC should include well-recognized members with credibility, who understand “hot button issues,” meeting bi-annually and reporting annually to the Under Secretary for Health, with sufficient resources to provide high-quality, well-researched, action-oriented reports that speak to specific legislative or regulatory policy issues. Reports should be disseminated broadly both within the VA and with external stakeholders. Many have recommended that the appointed chair have a sufficiently high public profile (e.g. former Governor or former Senator) to support broader report dissemination.
- **VHA Rural Health Working Group:** This working group has been established and continues to provide valuable input to the ORH. Its mission is to address rural health issues within the VA and to facilitate structured communications to identify strategies to expand current services or to assist in developing new initiatives to meet the needs of veterans residing in rural areas. There is representation from most of the Program Offices.
- **VISN Rural Health Consultants:** The Veterans Integrated Service Network (VISN) Rural Health Consultants Working Group provides important feedback from the field about best practices and

strategies being employed at the VISN level. Regularly scheduled calls and discussions of programs impacting on rural veterans have been valuable inputs into the ORH strategic planning process. The Independent Budget, authored by several veterans service organizations, further advocates for VISN Rural Health Consultants becoming full-time appointments; this idea should be explored.

- **Rural Veterans Forum:** The ORH may consider establishing a more formalized mechanism to receive direct feedback from rural veterans, either at the Veterans Integrated Service Network (VISN) level (possibly through the VISN Rural Consultant Group) or Veterans Affairs Central Office (VACO) level. Dedicated staff to consolidate, report, and respond to input from individual rural veterans may be both an important advisory input and an effective outreach strategy. Activities might include public hearings, site visits, meetings with rural and veteran organizations, websites, toll-free hotlines, and other “grass-roots” initiatives.

## Data Monitoring and Decision Analytic Capabilities

Central to the establishment of effective measures of access and quality for rural veterans and to the optimal management of resources by the Office of Rural Health will be the development of a robust decision support system. The goal is to leverage existing and new streams of data to raise situational awareness of aggregate trends, to develop prompt and accurate responses to both political leaders and policy planners, to generate flexible analytic strategies to meet challenging policy questions, and to provide effective evaluations and assessments of the impacts of policies, initiatives, and services promoted by the ORH. Conceptually, it should:

- Integrate data streams available both within the VA and outside the VA
- Include interactive graphical presentations, geocoded overlays, and analytic maps
- Provide aggregate measures (e.g. a dashboard on a variety of quality, access, cost measures)
- Track both clinical metrics and program management measures
- Perform rural health specific analyses (e.g. utilizing the VHA Enrollee Health Care Projection Model)
- Track local variability in needs, resources, utilization, etc. and provide local drill-down capability
- Establish a robust decision analytic platform to drive ORH's data-driven decision-making approach

Managers of the VA Enrollee Health Care Projection Model and the Planning Systems Support Group (PSSG) should be consulted to discuss opportunities to develop a relevant decision support tool within the current platform. There are other decision analytic tools currently in use in private industry that provide potential models for further development and assessments of relevance in VA settings. For example, the Human Capital Management Systems (HCMS) model is able to combine both traditional healthcare costs captured in administrative claims data and absence-related costs (and presenteeism/productivity costs, if available) to employers into an integrated health and human capital database; a broader understanding of the burdens of illness allows more sophisticated analyses of the impacts of health conditions and policy decisions, as well as builds a robust reference database of industry comparables. Thomson MedStat, the Integrated Benefits Institute, and many others have engaged in a number of innovative studies that can be used to inform how best to manage health and productivity or health as human capital. As data systems improve, it is likely that predictive modeling techniques will become even more effective at anticipating needs. Advances in informatics will enable better analyses of free-text data extractions, disability risk mapping, and improved interoperability in specific areas of health information exchange.

Commensurate with changes in technological capabilities must be the development of analytic strategies and appropriate metrics with a particular focus on quality, access, cost, and outcomes for rural settings and rural veterans. One can envision medical surveillance capabilities and utilization of non-traditional data sources to augment what one currently has available. These longitudinal data streams need to be augmented and informed by the latest findings from health services research (both the VA's HSR&D and other rural health researchers), as well as more local program evaluations and assessments. The work of the Consolidated Health Informatics Initiative (that included the VA, HHS, and DoD), as well as DoD's Clinical Data Repository and the VA's Health Data Repository, provide fertile grounds for further exploration. Mapping and validating reference terminologies, applying appropriate contextual access protocols, and tapping into other national databases can both help inform the policy process and the ORH research agenda. The VHA Data Consortium, whose mission is to improve information reliability, may provide an important collaboration opportunity to improve quality measurement, planning, policy analysis, and financial management.

## ORH Rural Health Research

Public Law 109-461, Section 212, mandates that the Director of the Office of Rural Health develop a plan to conduct, coordinate, promote, and disseminate research into issues affecting rural veterans, as well as to develop, refine, and promulgate policies, best practices, lessons learned, and innovative and successful programs to improve care and services for veterans who reside in geographically isolated areas. The ORH will support several research capabilities.

- **VHA Office of Research and Development:** The VHA's Office of Research and Development and the Health Services Research and Development service include access and rural health in its priority research areas. It has research solicitations for rural health currently in development and is engaged in an evidence synthesis effort on rural health access. It is looking to modify VA's annual surveys to include rural health issues. The Centers of Excellence (COEs) and other levels of research activities remain the key source of rural health research for the ORH.
  - **VA Enrollee Health Care Projections Model:** VHA utilizes enrollment, utilization, and unit costs – with adjustments for private sector demographic and historical VA benchmarks and for benefit design, morbidity, reliance on the VA, and level of health care management – and it remains a powerful tool to assess veterans rural health issues. The model does not currently include long-term care, readjustment counseling, non-veteran medical care, or infrastructure costs, but the ORH will continue to work closely to leverage this tool in serving the interests of rural veterans.
  - **Network of ORH Resource or Research Centers:** The ORH currently plans to establish several resource centers focused on veterans rural health issues. The focus of each center will be to provide educational and research resources for rural veterans, and it will also engage in program evaluations of demonstration projects and support additional studies and analyses as needed. Centers will be geographically dispersed and strive for strategic partnerships with both VA facilities and academic institutions to promote better communication and exchange of ideas.
  - **Studies and Analysis Group:** The primary focus of the Studies and Analysis Group is to provide policy-relevant studies, assessments, analyses, and health services research to support ORH policies and programs. The ORH is also focused on effective collaborations with the rural health research community; as such, one of the functions of the Studies and Analysis Group will be to establish a Best Practices Network, which will work closely with ORHP-funded rural health research centers and other grantees to jointly develop, evaluate, and disseminate research and best practices for rural health services. It will help coordinate research agenda setting meetings, users meetings, and help build a network of rural health researchers focused on rural health. It will also reach out to other
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potential collaboration partners interested in funding research on veterans rural health issues (e.g. W.K. Kellogg Foundation, Robert Wood Johnson Foundation, etc.).

- **Demonstrations and Pilot Programs:** The ORH will be developing and implementing a number of demonstration projects within the broad focus areas previously identified to support improved access and quality of care for rural veterans. Evaluations and assessments of new care delivery models, the impacts of policy initiatives, and the outcomes of innovative strategies will also be assessed. The network of resource or research centers and the Studies and Analysis Group will help manage data collection and analysis of pilot programs, coordinate collaborations with other researchers, and assist with dissemination of findings.

## Educational Programs and ORH Meetings

The ORH plans to implement a number of critical meetings and educational programs to promote a veterans research agenda, collect important advisory feedback, and to better disseminate findings throughout the VA and the rural health, academic, and policy communities. These meetings include:

- **Veterans Rural Health Summit:** This annual meeting would bring together researchers, policy leaders, and veterans groups to improve collaborations and share information.
- **Advisory Body Meetings:** These include meetings of the Rural Health National Advisory Committee, VISN Rural Health Consultants, and other advisory bodies.
- **Research Agenda Setting Conference:** Working closely with the Office of Research and Development, the ORH will help refine the veterans rural health research agenda.
- **Educational Symposia:** ORH will support educational symposia to raise awareness of veterans rural health issues among veterans, academia, health care providers, and policy-makers.
- **Veterans and Providers Program:** ORH will support a number of educational programs for rural veterans and health care providers; this may entail a number of local meetings in rural communities.

## Partnerships and Collaborations

The VA Program Offices represent the primary platforms for collaboration and expansion of existing product lines. However, it will be important to develop and expand upon relationships with other rural health organizations and external stakeholders as well. The ORH may serve as a natural nexus of VA and non-VA stakeholders interested in the welfare of rural veterans. Integral to this approach is the need to make strategic choices and to “institutionalize” to the extent possible the kinds of collaborative networks that the ORH establishes.

Critical external platforms for collaboration may include the National Organization of State Offices of Rural Health (NOSORH), the DHHS Office of Rural Health Policy (ORHP), and the National Rural Health Association (NRHA). While there is some variability in effectiveness and resources across states, the State Offices of Rural Health serve as clearinghouses of information and innovative approaches to the delivery of services; coordinate activities related to rural health; and identify Federal, State, and nongovernmental programs regarding rural health and provide technical assistance. The Office of Rural Health Policy represents an important national level partner to address rural health policy and program issues, and the National Rural Health Association is an important advocate for rural health issues and represents small rural hospitals throughout the country.

ORHP supports a number of Network Development Grants, which support rural providers who work together in formal networks, alliances, coalitions, and partnerships to integrate administrative, clinical, technological, and financial functions across their organizations; and Network Development Planning Grants, which support rural communities needing assistance in planning, organizing, and developing health care networks.<sup>81</sup> The following provides some key initial partnerships to explore, although the list is not comprehensive or inclusive:

- **Health Resources and Services Administration, Office of Rural Health Policy:** ORHP promotes better health care service in rural America; informs and advises the Department of Health and Human Services on matters affecting rural hospitals and health care, coordinates activities within the department that relate to rural health care, and maintain a national information clearinghouse.
- **National Institute of Mental Health, Office of Rural Mental Health:** Directs, plans, coordinates, and supports research activities and information dissemination on conditions unique to those living in rural areas, including research on the delivery of mental health services in such areas; and coordinates related research activities of public and private entities.
- **National Rural Health Association (NRHA):** NRHA has a broad range of rural health programs and initiatives, to include those that serve veterans. NRHA has an ongoing partnership with ORHP that supports an annual Rural Medical Educators Conference, a Rural Clinicians' Conference, and several policy forums throughout the year; a variety of activities under the State Rural Health Association Grants, and various technical assistance initiatives.<sup>82</sup>
- **National Organization of State Offices of Rural Health (NOSORH):** NOSORH is an influential voice for state rural health concerns. NOSORH strives to develop increased communications and involvement within the 50 State Offices of Rural Health, builds strong relationships with other health care groups, and finds sources of revenue to improve their effectiveness.<sup>83</sup>
- **National Association of Rural Health Clinics (NARHC):** NARHC is a national organization dedicated to improving the delivery of quality, cost-effective health care in rural underserved areas through the Rural Health Clinics (RHC) Program; NARHC works with Congress, federal agencies, and rural health allies to promote, expand, and protect the RHC Program.
- **National Association of Community Health Centers (NACHC):** NACHC is a non-profit organization whose mission is to enhance and expand access to quality, community-responsive health care for America's medically underserved and uninsured; NACHC represents the nation's network of over 1,000 Federally Qualified Health Centers (FQHCs) serving 16 million people through 5,000 sites located throughout the United States.
- **National Cooperative of Health Networks:** As a national association of health network executives and strategic health partners, their mission is to support and strengthen health alliances through collaborative efforts, networking, and educational opportunities.
- **Rural HIT Coalition:** The Rural HIT Coalition is a network of rural and health information technology leaders from regional, state, national and federal organizations, working together to advance the implementation of health information technologies (HIT) across rural America. Through forums,

<sup>81</sup> Office of Rural Health Policy. 2006 Annual Report. Health Resources and Services Administration, U.S. Department of Health and Human Services, 42-45.

<sup>82</sup> Office of Rural Health Policy. 2006 Annual Report. Health Resources and Services Administration, U.S. Department of Health and Human Services, 18-19.

<sup>83</sup> Hill T. Rural Health Resource Center. Summary of rural organizations. October 2007.

education, information sharing and a dedicated web portal, the Coalition enhances understanding of rural HIT issues, advocates for rurally-relevant HIT applications and solutions, and helps to drive knowledge and information about rural HIT throughout the country. Information that is shared includes available funding, best practices, case studies, rules and regulations, and major developments and trends in the field.

- **The Rural Assistance Center (RAC):** A national resource on rural health and human services information, the RAC provides information specialists to provide customized assistance, web and database searches on rural topics, and funding resources. All services are provided free of charge.
- **Rural Health Resource Center (RHRC):** RHRC serves as a knowledge center for the improvement of rural health care, providing technical assistance, information, tools and resources, and strives to build national, state, and local capacity. Focus areas include: Technical Assistance and Services Center for the Medicare Rural Hospital Flexibility Grant Program, Delta Rural Hospital Performance Improvement Project, the Rural Health Resource Directory, rural health network support, performance improvement, Balanced Scorecard, Health Information Technology, health care workforce analysis and consulting.
- **Georgia Health Policy Center:** The Georgia Health Policy Center provides evidence-based research, program development and policy guidance locally, statewide, and nationally to improve health status at the community level; the Center conducts, analyzes and disseminates qualitative and quantitative findings to connect decision makers with the objective research and guidance needed to make informed decisions about health policy and programs.
- **American Hospital Association (AHA):** AHA is the national organization that represents and serves all types of hospitals, health care networks and their patients and communities. Close to 5,000 hospitals, health care systems, networks, other providers of care and 37,000 individual members come together to form the AHA.
- **American Medical Association (AMA):** As the nation's largest physician's group, the AMA advocates on a variety of issues that are important to the nation's health.

Other organizations include the National Association of Counties (NACo), the National Conference of State Legislatures (NCSL), the National Association of City and County Health Officials (NACCHO), the State Offices of Primary Care, and many others. Additionally, veterans service organizations, academic affiliations, various private and public payers, and other external stakeholders need to be engaged in a systematic manner and communication channels left open.

## Additional Planning Considerations

The ORH has an expansive mission and many challenges. It must be responsive to Congressional expectations, manage relationships both within VA and external to VA, coordinate programs across a large number of separate communities and organizational "silos," and report to many broad constituencies.

- **Engage in Internal VA Marketing and Outreach:** Organizational buy-in and support from the VHA Program Offices will be critical to any future success. ORH will need to establish effective communication and coordination channels that allow for effective cooperation.
- **Promote Collaborations Outside the VA:** Specific collaboration strategies need to be implemented that target a number of important constituencies – rural veterans/military groups, rural health policy and research networks, broader health service researchers, potential federal and private partners,

rural health organizations, etc. Formal, institutional, structured networking will need to be balanced with informal network development as well: Presence at regional/annual meetings, publishing or providing links in rural health publications and websites, regularly scheduled communications, participation in planning meetings or calls, etc. The ORH should consider establishing an interagency council on rural health, to connect with federal partners and to meet quarterly with key leaders from agencies with rural health missions (and continue to expand the constituencies interested in veterans rural health issues).

- **Strengthen Internal Competencies to Pursue Core Missions:** Relationships and collaborative networks tend to progress in stages, and the ORH is still seen as being early in its growth process. The ORH needs to establish its own capabilities first – with a clear vision, intent, and leadership; sufficient infrastructure and operating processes to support its missions; and the ability to communicate effectively and efficiently with potential partners – and it must build sustainability through demonstrated value and commitment over time. ORH must develop the capacity to develop and analyze policies, coordinate research and evaluations, manage and leverage data, and effectively communicate and transfer knowledge to partners and stakeholders. Strengthening the “business operations” of the ORH and refining the “process” side of how the ORH operates will allow it to better pursue the programmatic goals that produce the outputs/outcomes and impacts that one needs to build credibility among potential partners and collaborators.
- **Utilize Effective Dissemination Strategies:** There are a number of key strategies for making health services research more accessible and useful to policy makers and other key stakeholders. The Rural Policy Research Institute (RUPRI) Rural Health Panel makes the following recommendations based on preferences by key target users of research:<sup>84</sup>
  - **Engage end users when framing research:** Consider establishing a “research to policy network” comprised of researchers and users, and develop “synthesis” products that summarize findings into accessible, readable formats. The ORH may consider establishing an internal staffing function or employ an independent Studies and Analysis Group to facilitate this process.
  - **Tailor the design of products to meet the diverse needs of end users:** Studies and assessments supported by the ORH should allow for publication in peer-reviewed journals (to reinforce credibility), provide detailed information on local areas when possible (as “all politics is local”), and be structured to meet the needs of policymakers (usually brief and to-the-point).
  - **Make research products more easily accessible to end users:** Multiple communication channels are required and should include email announcements and well-designed websites (an electronic portal) as well as more traditional communication vehicles like conference presentations and peer-reviewed publications.
  - **Expand contact and working relationships with end users:** Direct, interpersonal contact remains the most effective means of disseminating research. A trusted intermediary between ORH leaders and the broader rural health research community may be effective for providing timely, objective, and independent analysis.
  - **Invest in developing greater capacity for effective dissemination:** Dedicate resources and staff time to dissemination and include specific information dissemination requirements as part of funding mechanisms or cooperative agreement processes; also, consider all available resources

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<sup>84</sup> Mueller KJ, McBride TD, Coburn AF, Slifkin RT, Wakefield MK, MacKinney AC. Bridging Rural Health Research and Policy: Dissemination Strategies. August 2007.

for dissemination and leverage existing assets within universities, associations, funding agencies, etc.

- **Be Aware of Varying Definitions of Rural:** There are multiple definitions of rural that are used for federal policy purposes, often using units of geography (e.g. counties, ZIP code areas, census tracts); the implication for rural health research and policy is that differing definitions of “rural” will affect study findings, program eligibility issues, aggregation of measures, and comparisons across communities.
  - The VA definitions of *urban*, *rural*, and *highly rural* are based on census blocks, groups, and tracts.<sup>85</sup> The advantage is that census geography is the smallest and most precise geographic unit, but the disadvantage is that census geography is not commonly used by other programs and payers.<sup>86</sup>
  - The Office of Rural Health Policy, U.S. Department of Health and Human Services, uses Rural-Urban Commuting Areas (RUCAs) with adjustment to Office of Management and Budget Metropolitan and Nonmetropolitan county definitions, using census tract units within geographic counties.<sup>87</sup> Policy or program eligibility is often combined with key demographic, economic, or provider characteristics (e.g. distance to nearest provider or facility), and rural designations may change with shifts in population or commuting patterns.
- **Set Realistic Goals and Build Deliberately:** The Office of Rural Health will be held accountable to a variety of different stakeholders – political leaders, VA leaders, veteran service organizations, rural communities, health care organizations, veterans and their families, etc. – and it will be important to be deliberate in its development, create small successes, and build broad constituencies both inside and outside the VA system. Rural health is a challenging problem that requires nuanced leadership, and ORH must focus on setting realistic goals and building a sustainable infrastructure to address veteran health care needs for years to come.

## Conclusion

The Office of Rural Health will continue to expand its capacity to better serve veterans who reside in rural areas by promoting research and policies that improve the safety, effectiveness, efficiency, and compassion of the health care available to its constituents. The ORH has taken a deliberate approach to building a solid operational foundation, with sufficient organizational capacity and data-driven decision making, to collaborate and communicate effectively with VHA Program Offices, field units, the VA research community, and the broader rural health community. Through this initial environmental scan, the ORH has reached out to rural health leaders and organizations and has taken an inventory of published literature, VHA program offices and legislative requirements. It will need to continue to build its internal capacities while expanding its programs and policies to better serve rural veterans. Building effective advisory bodies, establishing efficient operational processes, developing robust decision analytic systems, and building sustainable supporting structures will lead to more effective policy-making and

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<sup>85</sup> Urban is defined as an area designated in the U.S. Census as an urbanized area (excluding urban clusters); rural includes all other areas excluded in the U.S. Census defined urbanized areas; and highly rural includes any rural area within a county with less than 7.0 civilians per square mile.

<sup>86</sup> Coburn AF, MacKinney AC, McBride TD, Mueller KJ, Slifkin RT, Wakefield MK. Choosing Rural Definitions: Implications for Health Policy. Rural Policy Research Institute Health Panel. March 2007.

<sup>87</sup> ORHP utilizes RUCAs 4-10 to identify small towns and rural areas within large metropolitan counties. Census tracts with RUCA codes 2 and 3 that are larger than 400 square miles and have population density of less than 30 people per square mile are also considered rural. See Coburn et al, March 2007.

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more focused research activities. Most observers of the ORH are likely to reserve judgment on the ORH's effectiveness until it has proven itself, and it cannot do so in a haphazard manner.

This focus on ORH capacity building, however, must be effectively balanced with the imperative and pressure to produce measurable results expeditiously. The ORH is already aggressively engaged and plans to test out innovative ideas through targeted demonstration projects, continue to expand outreach and network development activities, formalize partnerships that are most promising, and build a strong analysis and research capability. The ORH will support expansion of successful best practice models, promote effective policies that improve access and quality of care for rural veterans, and establish broad-based outreach, education, and training programs to provide better information and technical assistance and to build stronger partnerships with rural veterans and rural health care providers. ORH will help improve coordination of a range of VHA services to ensure that the needs of rural veterans are being considered as program development and implementation takes place. The ORH will also help build the partnerships that will allow other federal and non-federal rural health leaders and organizations to contribute ideas and resources in helping the VA fulfill its commitments to rural veterans.

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## Appendix A: Legislative Initiatives

Bills	Requirements
<p><b>S. 2433</b> – Rural Veterans Care Act of 2006 (Salazar, D-CO), March 15, 2006, 109<sup>th</sup> Congress</p>	<ul style="list-style-type: none"> <li>• Establish a new Assistant Secretary for Rural Veterans               <ul style="list-style-type: none"> <li>○ Cooperation with VHA</li> <li>○ Identify a rural veterans coordinator in each VISN</li> </ul> </li> <li>• Demonstration projects for alternatives for expanding care in rural areas               <ul style="list-style-type: none"> <li>○ Pilot program – conduct it for 3 years in 3 VISNs to evaluate and improve access to care in highly rural areas                   <ul style="list-style-type: none"> <li>▪ Allocate 0.9% of the appropriated medical care funds</li> </ul> </li> </ul> </li> <li>• Provide beneficiary travel benefits</li> <li>• Establish up to 5 centers of excellence for rural health research, education, and clinical activities</li> </ul>
<p><b>HR 5524</b> – Rural Veterans Health Care Act of 2006 (Michaud, D-ME), June 6, 2006</p>	<ul style="list-style-type: none"> <li>• Extensive outreach program to OEF/OIF</li> <li>• Expand access to Vet Centers in rural areas               <ul style="list-style-type: none"> <li>○ Establish a pilot program – 2 mobile Vet Centers in rural areas for a period of 5 years</li> </ul> </li> <li>• Review progress in implementation of the proposed 156 community-based outpatient clinics</li> <li>• Measures for LTC through nursing homes</li> <li>• Healthcare Information Technology – run a pilot program for 4 years</li> <li>• Enhance rural education and training for health professionals</li> </ul>
<p><b>HR 315</b> – Help Establish Access to Local Timely Healthcare for Your Vets Act of 2007 (Pearce, R-NM), January 5, 2007</p>	<ul style="list-style-type: none"> <li>• Fee basis authority for veterans in rural areas</li> <li>• Enhanced contract care authority for veterans in rural areas               <ul style="list-style-type: none"> <li>○ Effective date – at the end of the 120-day period of the enactment of this Act</li> </ul> </li> </ul>
<p><b>HR 538</b> – South Texas Veterans Access to Care Act of 2007 (Ortiz, D-TX), January 17, 2007</p>	<ul style="list-style-type: none"> <li>• Public-private venture to provide care to veterans in far South Texas</li> <li>• New VA medical center in far South Texas – 50-bed hospital with a 125-bed nursing home</li> <li>• Shared facility with DOD in far South Texas</li> <li>• Effective date – no later than 180 days after enactment of this Act</li> </ul>
<p><b>HR 1527</b> – Rural Veterans Access to Care Act (Moran, R-KS), March 14, 2007</p>	<ul style="list-style-type: none"> <li>• Enhanced contract care authority for health care needs of veterans in highly rural areas               <ul style="list-style-type: none"> <li>○ Highly rural – &gt;60 miles driving distance nearest health care facility</li> <li>○ Consult with the Secretary of Health and Human Services to establish a partnership</li> <li>○ Expand fee-basis care</li> <li>○ Effective date – no later than October 1, 2008</li> </ul> </li> <li>• VA pharmacies to dispense medication to highly rural veterans on prescriptions written by non-department practitioners</li> </ul>

<p><b>S. 1146</b> – Rural Veterans Health Care Improvement Act of 2007 (Salazar, D-CO), April 18, 2007</p>	<ul style="list-style-type: none"> <li>• Establish and operate up to 5 centers of excellence for rural health research, education, and clinical activities <ul style="list-style-type: none"> <li>○ Should be located at geographically dispersed health care facilities</li> <li>○ Establish peer review panel to evaluate proposals</li> </ul> </li> <li>• Fund transportation grants – grants awarded may be used by state veterans' service agencies and VSOs <ul style="list-style-type: none"> <li>○ Grant may not exceed \$50,000</li> <li>○ Authorized to be appropriated \$3 million for each of FY2008-2012</li> <li>○ Report – no later than 2 years after the date of enactment of this Act</li> <li>○ Annual report to Congress</li> </ul> </li> <li>• VA's beneficiary travel program</li> <li>• Demonstration projects on alternatives for expanding care to veterans <ul style="list-style-type: none"> <li>○ Required partnership with HHS</li> </ul> </li> <li>• Extensive outreach program to OEF/OIF</li> </ul>
<p><b>HR 2005</b> – Rural Veterans Health Care Improvement Act of 2007 (Salazar, D-CO), April 23, 2007</p>	<ul style="list-style-type: none"> <li>• Travel reimbursement for veterans</li> <li>• Centers for rural health – research, education and clinical activities <ul style="list-style-type: none"> <li>○ <b>ORH to establish and operate these centers</b></li> <li>○ Should be located at geographically dispersed health care facilities</li> <li>○ Establish peer review panel to evaluate proposals</li> </ul> </li> <li>• Transportation grants for rural VSOs <ul style="list-style-type: none"> <li>○ Maximum amount of a grant - \$50,000</li> <li>○ No matching requirement</li> <li>○ Authorization - \$3 million for each of FYs 2008 through 2012</li> </ul> </li> <li>• Demonstration projects on alternatives for expanding care to veterans <ul style="list-style-type: none"> <li>○ <b>ORH to carry out demonstration projects</b></li> <li>○ Establish a partnership with CMS</li> <li>○ Establish a partnership with HHS</li> <li>○ Expand coordination with IHS</li> <li>○ Report – No later than 2 years after the enactment of this Act</li> </ul> </li> <li>• Report to Congress – Annual report <ul style="list-style-type: none"> <li>○ The implementation of the provisions of this Act</li> <li>○ The establishment and function of the ORH</li> <li>○ An assessment of the fee-basis health care program</li> <li>○ An assessment of the outreach program</li> </ul> </li> </ul>
<p><b>S. 1233</b> – Veterans Traumatic Brain Injury Rehabilitation Act of 2007 (Akaka, D-Hawaii), April 26, 2007</p>	<ul style="list-style-type: none"> <li>• Research, education, and clinical care program on severe TBI</li> <li>• Transportation grants for rural VSOs <ul style="list-style-type: none"> <li>○ Maximum amount of a grant - \$50,000</li> <li>○ No matching requirement</li> <li>○ Authorization of appropriation - \$6 million for each of the FYs 2008 through 2012</li> </ul> </li> <li>• Demonstration projects on alternatives for expanding care for veterans in rural areas <ul style="list-style-type: none"> <li>○ <b>ORH to carry out demonstration projects</b></li> <li>○ Establish a partnership with HHS</li> <li>○ Establish a partnership with IHS</li> <li>○ Located at not less than 3 geographically dispersed facilities</li> <li>○ Report – no later than 2 years after the date of the enactment of this Act on the results of the demonstration projects</li> </ul> </li> <li>• Report to Congress Annually on matters related to rural health care</li> <li>• Veterans beneficiary travel program <ul style="list-style-type: none"> <li>○ Report – no later than 14 months after the date of the enactment of this Act containing an estimate of the additional costs incurred</li> <li>○ Effective date – at the end of the 90-day period of enactment Act</li> </ul> </li> </ul>

<p><b>HR 2874</b> – Veterans’ Health Care Improvement Act of 2007 (Michaud, D-ME), June 27, 2007</p>	<ul style="list-style-type: none"> <li>• Transportation grants for rural VSOs <ul style="list-style-type: none"> <li>○ Maximum amount of a grant - \$50,000</li> <li>○ No matching requirement</li> <li>○ Authorization of appropriation - \$3 million for each of FYs 2008 through 2012</li> </ul> </li> <li>• Contracts with Community Mental Health Centers to provide mental health services</li> </ul>
<p><b>HR 2623</b> – A bill to amend title 38, United States Code, to enhance readjustment counseling and mental health services for veterans (Miller, R-FL), June 7, 2007</p>	<ul style="list-style-type: none"> <li>• Readjustment and mental health services for OEF/OIF veterans in rural areas <ul style="list-style-type: none"> <li>○ Contract with the community health centers that meet qualifications</li> <li>○ Support and assistance to immediate family members by providing educational materials, individual counseling, mental health services</li> <li>○ Pilot program for immediate access to this services for returning veterans – provide a voucher, coupon, or card that may be used for five visits <ul style="list-style-type: none"> <li>▪ Should be conducted in at least 4 VISNs, and then may expand</li> <li>▪ Terminate on the date that is 5 years after the date of enactment of this section</li> <li>▪ Report – no later than 90 days after the end of that FY</li> </ul> </li> </ul> </li> </ul>
<p><b>HR 2190</b> – The Advisory Committee on Rural Veterans Act (Donnelly, D-IN), May 7, 2007</p>	<ul style="list-style-type: none"> <li>• Establish an Advisory Committee on rural veterans <ul style="list-style-type: none"> <li>○ Assist the Secretary of Veterans Affairs</li> <li>○ Comprised of government officials and members of the general public who are representatives of rural veterans and also individuals who are experts in the needs of rural veterans</li> <li>○ Regularly report to the Secretary of Veterans Affairs on both the needs of rural veterans and also provide an assessment</li> </ul> </li> </ul>
<p><b>S. 38</b> – Veterans’ Mental Health Outreach and Access Act of 2007 (Domenici, R-NM), May 23, 2007</p>	<ul style="list-style-type: none"> <li>• Readjustment and mental health care services to OEF/OIF <ul style="list-style-type: none"> <li>○ Peer outreach services</li> <li>○ Peer support services</li> <li>○ Readjustment counseling and services</li> <li>○ Mental health services</li> <li>○ Services to members of the immediate family</li> <li>○ Effective date – no later than 180 days after the date of the enactment of this Act</li> </ul> </li> <li>• Contracts with Community Mental Health Centers and Qualified Entities</li> <li>• Training of veterans for peer outreach and peer support services</li> <li>• Training of clinicians for provision of services</li> <li>• Report <ul style="list-style-type: none"> <li>○ Initial report – no later than 45 days after the date of the enactment of this Act on plan for implementation</li> <li>○ Status report – no later than 1 year after the date of the enactment of this Act including information on the number of veterans receiving these services and the type of services received and an evaluation of the provision of services</li> </ul> </li> </ul>
<p><b>S. 2142</b> – Vets Emergency Care Fairness Act</p>	<ul style="list-style-type: none"> <li>• Expend payments past “point of stabilization”</li> </ul>

<p><b>S. 2383</b> – Mobile Support for Rural Veterans Program (Klobuchar, D-MN), November 16, 2007</p>	<ul style="list-style-type: none"> <li>• <b>ORH is responsible for carrying out a pilot program</b></li> <li>• Carry out a pilot program to assess the feasibility and advisability of providing care and services to rural veterans through mobile system <ul style="list-style-type: none"> <li>○ Consult with the regional Director of VISN 23, ORHP Director, and other rural health agencies</li> <li>○ Carry out it at least 3 VISNs</li> <li>○ Specific care and services listed in the bill should be provided</li> <li>○ Should be staffed with VA personnel – health care providers, casework officers, and benefit counselors</li> <li>○ A mobile clinic should visit at least once each 45 days, for a period of not less than 48 hours for each visit</li> <li>○ Utilize CBOCs and coordinate with VSOs</li> <li>○ Report – no later than 16 months after the enactment, and every 180 days thereafter</li> <li>○ Appropriation - \$10 million each for FY 2008-2010</li> </ul> </li> </ul>
<p><b>H.R. 1328</b> – Indian Health Care Improvement Act Amendments of 2007 (Pallone, D-NJ), March 6, 2007</p>	<ul style="list-style-type: none"> <li>• Expand coverage for qualified Indians in a various health care programs</li> <li>• Consolidate certain existing programs into a new program of comprehensive behavioral health, prevention, treatment, and aftercare for Indian tribes</li> <li>• Establish the National Bipartisan Indian Health Care Commission</li> <li>• Directs the Secretary to establish the Native American Health and Wellness Foundation</li> <li>• Reauthorize the Indian Health Care Improvement Act through FY 2017</li> <li>• Community Health Aid Program in <b>rural</b> Alaska</li> </ul>
<p><b>H.R. 3043</b> - Military and VA Appropriation of 2008 Conference Report</p>	<ul style="list-style-type: none"> <li>• A report to the Committee on its plan to better utilize all opportunities to improve access to mental health services for all veterans by February 1, 2008 <ul style="list-style-type: none"> <li>○ Utilize CMHCs</li> <li>○ Implementation of peer training programs</li> <li>○ Additional fee-basis access to local providers</li> <li>○ Mobile Vet Centers</li> <li>○ Internet based services</li> </ul> </li> <li>• A report to Congress in 6 months after the enactment on rural veterans' access issue</li> <li>• Conferees agree the ORH is vital to ensuring equal access to health care to all veterans <ul style="list-style-type: none"> <li>○ Committee is providing sufficient funding within Medical Administration to ensure a robust ORH</li> <li>○ A report on the actions that have been taken to improve access to health in rural areas by February 1, 2008</li> </ul> </li> <li>• Allows Alaskan veterans to use medical facilities of the Indian Health Services or tribal organizations at no additional cost</li> </ul>
<p><b>H.R. 3008</b> – Rural Veterans Services Outreach and Training Act (Wu, D-OR), July 11, 2007</p>	<ul style="list-style-type: none"> <li>• Provide financial assistance to state departments of veterans affairs for the training of Veteran Service Officers (VSO) from rural counties through competitive grants <ul style="list-style-type: none"> <li>○ Grants may not exceed \$1 Million</li> <li>○ Grants are made on an annual basis</li> </ul> </li> </ul>
<p><b>H.R. 3458</b> – TBI Care in Rural Area (Capito, R-WV), August 4, 2007</p>	<ul style="list-style-type: none"> <li>• A pilot program in 5 rural states, to be selected by the Secretary, for the purpose of providing case management services to enrolled veterans with TBI <ul style="list-style-type: none"> <li>○ Managed by ORH</li> <li>○ Consultation with PCS</li> </ul> </li> </ul>

## Appendix B: Structured Interviews

Name	Organization	Date/Time	Contact Info
Jim Ahrens	Montana Hospital Association (former)	November 19, 3 pm	(406) 449-4713 <a href="mailto:ahrens@3riversdbs.net">ahrens@3riversdbs.net</a>
Eric Baumgartner	Louisiana Public Health Institute	November 20, 2 pm	(504) 813-3688 <a href="mailto:etbaumgartner@lphi.org">etbaumgartner@lphi.org</a>
Bruce Behringer	East Tennessee State University	November 19, 1 pm	(423) 439-7809 <a href="mailto:behringe@mail.etsu.edu">behringe@mail.etsu.edu</a>
Jerry Coopey	Office of Rural Health Policy	October 19, 5:30 pm	(301) 443-0835 <a href="mailto:jcoopey@hrsa.gov">jcoopey@hrsa.gov</a>
Bill Finerfrock	National Assn of Rural Health Clinics	November 27, 10 am	(202) 544-1880 <a href="mailto:bf@capitolassociates.com">bf@capitolassociates.com</a>
Gary Hart	University of Arizona	November 30, 2:30 pm	(520) 626-6258 <a href="mailto:garyhart@email.arizona.edu">garyhart@email.arizona.edu</a>
David Hartley	University of Southern Maine	November 13, 2 pm	(207) 780-4513 <a href="mailto:davidh@usm.maine.edu">davidh@usm.maine.edu</a>
Terry Hill	Rural Health Resource Center	October 30, 2:30 pm	(218) 727-9390 <a href="mailto:thill@ruralcenter.org">thill@ruralcenter.org</a>
Jeffrey Human	Nakamoto Group (formerly ORHP)	October 22, 12 pm	(301) 938-7413 <a href="mailto:jeffreymhuman@aol.com">jeffreymhuman@aol.com</a>
Alana Knudson	University of North Dakota	November 21, 5 pm	(701) 777-3848 <a href="mailto:aknudson@medicine.nodak.edu">aknudson@medicine.nodak.edu</a>
Clint MacKinney	Rural ER physician and consultant	November 19, 11 am	(320) 363-8150 <a href="mailto:clintmack@cloudnet.com">clintmack@cloudnet.com</a>
Michael Meit	National Opinion Research Center	November 27, 2:30 pm	(301) 951-5076 <a href="mailto:Meit-Michael@norc.org">Meit-Michael@norc.org</a>
Karen Minyard	Georgia State Health Policy Center	November 14, 8 am	(404) 413-0301 <a href="mailto:KMinyard@GSU.edu">KMinyard@GSU.edu</a>
Tom Morris	Office of Rural Health Policy	October 30, 2:30 pm	(301) 443-0835 <a href="mailto:TMorris@hrsa.gov">TMorris@hrsa.gov</a>
Ira Moscovice	University of Minnesota	November 28, 10 am	(612) 624-8618 <a href="mailto:mosco001@maroon.tc.umn.edu">mosco001@maroon.tc.umn.edu</a>
Keith Mueller	University of Nebraska (RUPRI)	November 28, 4 pm	(402) 559-4318 <a href="mailto:kmueller@unmc.edu">kmuellet@unmc.edu</a>
Seung Ki Mun	ISIS Center	November 14, 4:30 pm	(202) 687-7955 <a href="mailto:mun@isis.georgetown.edu">mun@isis.georgetown.edu</a>
Wayne Myers	National Rural Health Association	November 20, 11:30 am	(207) 832-5789 <a href="mailto:wmm@midcoast.com">wmm@midcoast.com</a>

Tom Nesbitt	UC Davis Health System	November 26, 5 pm	(916) 734-2184 <a href="mailto:thomas.nesbitt@ucdmc.ucdavis.edu">thomas.nesbitt@ucdmc.ucdavis.edu</a>
Neal Neuberger	Health Tech Strategies	November 27, 12 pm	(703) 790-4933 <a href="mailto:nealn@hlthtech.com">nealn@hlthtech.com</a>
Mike O' Grady	National Opinion Research Center	November 27, 2:30 pm	(202) 223-7933 <a href="mailto:Ogrady-Michael@norc.org">Ogrady-Michael@norc.org</a>
Larry Otis	Rural Community Development	November 29, 3:30 pm	(662) 610-3909 <a href="mailto:larryotis@bellsouth.net">larryotis@bellsouth.net</a>
Mike Parkinson	Amer. College of Preventive Medicine	November 14, 11:30 am	(703) 236-6478 <a href="mailto:mdparkinson@yahoo.com">mdparkinson@yahoo.com</a>
Tom Ricketts	North Carolina RHR and PAC	November 19, 9:30 am	(919) 966-7120 <a href="mailto:ricketts@mail.schsr.unc.edu">ricketts@mail.schsr.unc.edu</a>
Tim Size	Rural Wisconsin Health Cooperative	November 20, 1 pm	(608) 643-2343 <a href="mailto:timsiz@rwhc.com">timsiz@rwhc.com</a>
Becky Slifkin	North Carolina RHR and PAC	November 28, 12 pm	(919) 966-4640 <a href="mailto:becky_slifkin@unc.edu">becky_slifkin@unc.edu</a>
Bill Triplett	Delta Regional Authority	November 15, 4 pm	(662) 624-8600 x23 <a href="mailto:btriplett@dra.gov">btriplett@dra.gov</a>
Mary Wakefield	University of North Dakota	November 21, 5 pm	(701) 777-3848 <a href="mailto:mwake@medicine.nodak.edu">mwake@medicine.nodak.edu</a>
Amy Wallace	VHA, White River Junction, Vermont	November 30, 1 pm	<a href="mailto:amy.wallace@va.gov">amy.wallace@va.gov</a>
Bob Wardwell	Visiting Nurses Association	November 29, 2 pm	(202) 737-3707 x115 <a href="mailto:bwardwell@vnaa.org">bwardwell@vnaa.org</a>
Bill Weeks	VHA, White River Junction, Vermont	November 30, 1 pm	<a href="mailto:william.weeks@va.gov">william.weeks@va.gov</a>

## Appendix C: Selected Federally Supported Research

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### Office of Rural Health Policy (ORHP)

The Office of Rural Health Policy, Health Resources and Services Administration, Department of Health and Human Services, currently funds eight rural health research centers (summarized below):<sup>88</sup> More detailed information about all current projects is available in *Rural Health Research in Progress*, which is produced annually by the Maine Rural Health Research Center, and a searchable database of rural health services research and policy analysis may be found at <http://www.rural-health.org/database.htm>, which includes all ORHP-funded studies, as well as research funded by other federal agencies, major private foundations, and other sources.<sup>89</sup>

#### *Maine Rural Health Research Center*

The Center's portfolio of rural health services research addresses critical, policy relevant issues in health care access and financing, rural hospitals, primary care and behavioral health. The Center's core funding from the federal Office of Rural Health Policy is targeted to behavioral health.

#### *North Carolina Rural Health Research and Policy Analysis Center*

North Carolina Rural Health Research and Policy Analysis Center works to identify rural health problems through policy-relevant analyses, geographic and graphical presentation of data, and information dissemination. The Center's work primarily focuses on Federal insurance programs (Medicare and Medicaid) and their effect on rural populations and providers.

#### *Rural Policy Research Institute (RUPRI) Center for Rural Health Policy Analysis*

The RUPRI Center for Rural Health Policy Analysis focuses on rural health care financing/system reform, rural systems building, and meeting the health care needs of special rural populations.

#### *South Carolina Rural Health Research Center*

The South Carolina Rural Health Research Center works to shed light on the persistent inequities in health status within the population of the rural U.S., with an emphasis on inequities stemming from socioeconomic status, race and ethnicity, and access to healthcare services.

#### *Upper Midwest Rural Health Research Center*

The Center is a partnership of the University of Minnesota Rural Health Research Center and the

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<sup>88</sup> Rural Health Research Gateway. <http://www.ruralhealthresearch.org/centers.php>

<sup>89</sup> Person KB, ed. *Rural Health Research in Progress in the Rural Health Research Centers Program*. Tenth edition. February 2006.

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University of North Dakota Center for Rural Health. The centers combine expertise to undertake national projects focusing on quality of rural health care and other rural health issues.

#### *Walsh Center for Rural Health Analysis*

The Walsh Center for Rural Health Analysis focuses on implications of Medicare payment policies, access to care, home health care, public health infrastructure, emergency preparedness, workforce issues, and health information technology.

#### *WICHE Center for Rural Mental Health Research*

The objective of the WICHE Center for Rural Mental Health Research is to develop and disseminate scientific knowledge that can be readily applied to improve the use, quality and outcomes of mental health care provided to rural populations.

#### *WWAMI Rural Health Research Center*

The Washington, Wyoming, Alaska, Montana, Idaho (WWAMI) Rural Health Research Center (RHRC) focuses on training and supply of rural health care providers, availability and quality of care for rural women and children, and access to high-quality care for vulnerable and minority rural populations. Based in the Department of Family Medicine at the University of Washington School of Medicine.

ORHP also funds rural health research conducted by individual researchers through the **One-Year Rural Health Research Grant Program**:<sup>90</sup>

- Descriptive Analysis of the Health Status of a National Asbestos-Related Cohort
- Diabetes and Obesity: Is there a Rural-Urban Difference in the Burden?
- Diabetes Burden and the Lack of Preventive Care in the Rural United States
- Evaluation of an Outpatient Modified Paper Prescription Form
- National Study of Rural Medicaid Disease Management
- Preventive Care: Supports and Barriers to Best Practices for a National Sample of Rural Medicare Beneficiaries
- Rural-Urban Differences in Nursing Home Admissions, Service Usage and Discharge
- Targeted Rural Health Primary Care Research in HIT Adoption and Scope of Use
- Tribal Long-Term Care: Barriers to Best Practices in Policy and Programming for a National Sample of Rural Tribes
- Turnover Costs in Rural Emergency Medical Services
- U.S. Hospitalizations for Ambulatory Care Sensitive Conditions: A Rural/Urban Comparison
- Impact of Bioterrorism on Rural Mental Health Needs
- National Study of Home Health Access in Rural America
- Native Elder Care Needs Assessment: Development of a Long Term Care Planning Tool Kit

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<sup>90</sup> Rural Health Research Gateway. <http://www.ruralhealthresearch.org/individual/>

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- Patient Bypass Behavior and Critical Access Hospitals: Implications for Patient Retention
- Pharmaceutical Data Validity in Estimating Rural Population Health
- Prevalence of Chronic Disease and the Degree of Rurality of American Indian Elders in a Nationally Representative Sample of 100 Tribes
- Quality of Women's Care in Rural Health Clinics: A National Analysis
- Rural Access and State Loan Repayment for Dentists
- Rural and Urban Differences in Utilization of Formal Home Care
- Rural Public Health Department Structure and Infrastructure
- Rural Safety Net Provision and Hospital Care in 11 States
- Urban and Rural Differences in Access to Care and Treatment for Medicare Beneficiaries with Cancer

### Agency for Healthcare Research and Quality (AHRQ)

AHRQ is the lead Federal agency charged with improving the quality, safety, efficiency, and effectiveness of health care for all Americans. As one of 12 agencies within the Department of Health and Human Services, AHRQ supports health services research that will improve the quality of health care and promote evidence-based decisionmaking. However, there exists a perception, voiced by several rural health experts, that AHRQ has not funded a great many projects focused sufficiently on clinical outcomes in rural communities; many have suggested that the VA, ORHP, and AHRQ need to explore a collaborative approach to setting a veterans rural health research agenda. The AHRQ Grants On-Line Database lists the following studies under the search term "rural health."

- A Multi-Method Study of Health Services and Older Adults
  - A Rural HIT Cooperative to Promote Clinical Improvement
  - A Web-Based Conference on Evidence Based Practice for Rural Hospitals
  - Arizona Rural Managed Care Center
  - Bay Area Community Informatics Project
  - Connecting Healthcare in Central Appalachia
  - Creating Online NICU Networks to Educate, Consult, & Team
  - Decreasing AIDS in Montana Frontier CAHS Through HIT
  - EHR Implementation for Continuum Care in Rural Iowa
  - EMR Planning to Improve North Iowa Health Care
  - Efficacy of DVD Technology in COPD Self-Management Education of Rural Patients
  - El Dorado County Safety Net Technology Project / Access
  - Enhancing Quality in Patient Care (EQUIP) Project
  - Expansion of Rural Health Care Research Infrastructure
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- Factors Shaping Rural Hospital Managed Care Strategies
- Great Plains Institute for Rural Health Services Research
- HIT Planning for a Critical Access Hospital Partnership
- HIT for Medication Safety in Critical Access Hospitals
- Health Information Exchange: A Frontier Model
- Improving Care in a Rural Region with Consolidated Imaging
- Improving HIT Implementation in a Rural Health System
- Improving Healthcare Responses to Bioterrorist Events
- Improving Quality through Decision Support for Evidence-Based Pharmacotherapy
- Improving Rural Healthcare with Technology
- Improving Rural Healthcare: Implementing Innovations
- Linking Health Services Research with Health Policy
- Louisiana Rural Health Information Technology Partnership
- Measuring Quality of Care and Patient Safety: Problems in Use and Interpretation
- Oregon Rural Practice-Based Research Network
- Program of Rural Health Demonstration Activities
- Quality Care and Error Reduction in Rural Hospitals
- Regional Approach for THQIT in Rural Settings – Implementation
- Rural Hospital Collaborative for Excellence Using IT
- Sharing Patient Record Access in Rural Health Settings
- Standardization and Automatic Extraction of Quality Measures in an Ambulatory EMR
- The Maine AHCPH Rural Center
- Tulare District Hospital Rural Health EMR Consortium
- Using Military & Aviation Simulation Experience
- West Virginia Rural Managed Care Demonstration Center

The AHRQ Grants On-Line Database lists the following studies under the search term “veteran” or “veterans.”

- Arizona Center for Education and Research on Therapeutics
  - Center for Patient Safety at the End of Life
  - DCERPS on Systems Engineering – WISC. Patient Safety
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- Developing Best Practices for Patient Safety
  - Diabetes and the Arts & Humanities: Planning Conference
  - Evaluation of a Guideline-Based Decision Support System
  - Hospital Strategies to Improve Outcome Performance
  - Implementing Research Findings for Practice Improvement
  - Internet Disclosure Treatment for Multisymptom Illness
  - Organizational Predictors of Colon Cancer Screening
  - Organizations, Work Environment, and Quality of Care
  - Patterns of Care and Outcomes for Colon Cancer
  - Processes Predictive of CABG Complications
  - Reporting System to Improve Patient Safety in Surgery
  - Spinal Cord Dysfunction Research and Education Knowledge Translation Conference
  - Suncoast Development Center for Patient Safety Evaluation and Research
  - Telepsychiatry Service Delivery to Trauma Victims
  - The Eighteenth Annual Health Economics Conference
  - VA Integrated Medication Manager
  - Vanderbilt Center for Education/Research on Therapeutics
  - Workarounds: Developing Definitions, Measurement Strategies, and Links to Medication
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## Appendix D: HSR&D

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### Health Services Research and Development Service (HSR&D)

VA research supports and guides system improvements to ensure equitable access to quality care for all veterans through a diverse range of studies that analyze factors and interventions impacting access to the VA health care system. VA research identifies system-wide gaps in care to veterans; assesses specific access issues and barriers to care for special populations; assesses the impact of new programs, VHA practice structures and organizations of care on access and quality of care; and develops and evaluates the impact of quality improvement efforts, organizational and management interventions, implementation initiatives, and new technologies on improved access and health care to veterans.

#### *Current HSR&D Priorities*

- **Access/Rural Health:** To inform development of and assess interventions designed to enhance access to VA health care, access to specific health care services in the VA system, and equal access to health care treatments and procedures throughout VA, particularly for those in rural areas or vulnerable populations.
  - Complex, Chronic Condition Care
  - Equity
  - Health Services Genomics
  - Healthcare Informatics
  - Implementation and Management Research
  - Long Term Home Care and Caregiving
  - Mental Health
  - Post-Deployment Health
  - Quality Measurement
  - Research Methodology
  - Women's Health
-

*Notable Current Research Potentially Impacting Health Care to Rural Veterans*<sup>91</sup>

- Diabetes Telemedicine Consultation: A System Improvement Intervention
- Implementing Telemedicine-Based Collaborative Care for Major Depressive Disorder in Contract CBOCs.
- VA and Indian Health Service: Access for American Indian Veterans
- Evaluating HIV/AIDS Care Access and Quality in the VA
- Women Veterans' Health Care: Closing the Gap
- Evaluation of Military Sexual Trauma Screening and Treatment
- Physical and Sexual Assault in Deployed Women: Risks, Outcomes, and Services
- Barriers & Facilitators to PTSD Treatment Seeking
- Online Family Education to Promote Treatment Compliance in Schizophrenia
- Telephone Case Monitoring for Veterans with PTSD
- Clinical and Cost-Effectiveness of Screening for Diabetic Retinopathy using Tele-ophthalmology
- Telepsychiatry Service Delivery for Depressed Elderly Veterans
- Telephone Care as a Substitute for Routine Psychiatric Medication Management
- Telemedicine and Anger Management Groups with PTSD Veterans in the Hawaiian Islands
- Telemedicine Treatment to Reduce Medical Utilization for Veterans with Gulf War Illness
- Internet-Based Diabetes Education and Case Management
- Use of Telehealth In-Home Messaging to Improve GI Endoscopy Completion Rates
- Improving Service Delivery Through Access Points
- Implementing Effective, Collaborative Care for Schizophrenia
- Evaluating Non-Mandatory Workload and Optimizing Staffing
- Implementing an HIV Rapid Testing Pilot Project Among Homeless
- Access Criteria and Cost of Mental Health Intensive Case Management
- Geographic Access to VHA Rehabilitation Services for OIF/OEF Veterans
- Colorectal Cancer Care – A Quality Measurement Partnership

*Current Ideas and Proposals*

A conference call on October 25, 2007, among VA researchers produced the following proposed actions to support veteran rural health care research and implementation.

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<sup>91</sup> Veterans Administration. VA research on access to care and rural health. Internal document, 2007.

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- Rural health consensus development conference with VA researchers, clinicians and managers and non-VA experts to establish an agenda for future research as well as the development and implementation of clinical practice and network models for rural healthcare delivery in VA.
  - VA evidence synthesis on rural health and access (currently being planned) that would analyze VA research on rural healthcare and examine non-VA rural healthcare delivery models with application to VA to inform the future research agenda as well as implementation and management initiatives.
  - Secondary analysis of recently collected data from the VA clinical practice organizational survey to highlight rural facilities and identify organizational differences between rural and urban facilities (e.g., staffing, service availability, practice arrangements).
  - Tailor and adapt the content of the VA clinical practice organizational survey to target rural CBOCs (including contract CBOCs) (through the addition of key questions and refinement of the survey) and administer the survey and analyze data.
  - Identify VA administrative and clinical databases with information on the health of rural veterans and VA rural healthcare and conduct preliminary analyses of data (e.g., on cost, quality, satisfaction, from OQP, SHEP, EPRP, QUERI centers, etc.).
  - VA sponsorship of a special issue of a healthcare journal devoted to issues related to the care of rural veterans.
  - Priority research solicitation in HSR&D focused on rural health and access to encourage future research in FY 2008 and beyond.
  - VA National Center for Rural Health.
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## Appendix E: Related VA Product Lines and Offices

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A preliminary review of the Veterans Health Administration (VHA) highlights a number of existing programs and initiatives with direct relevance to the Office of Rural Health (ORH). VHA program offices should be consulted to ensure that new ORH activities are not duplicative of existing efforts and to identify improved collaboration strategies.

### Office of Care Coordination (OCC), Office of Patient Care Services (PCS)

Care coordination includes the use of health informatics, disease management and telehealth technologies to enhance and extend care and case management to facilitate access to care and improve health of designated individuals and populations with the specific intent of providing the right care in the right place at the right time.

#### *Major Programs:*

- **Care Coordination Home Telehealth (CCHT):** Targets patients with chronic diseases such as diabetes, heart failure and chronic pulmonary disease. Veterans are monitored at home, which is the preferred place of care for most veterans, using telehealth equipment in order to decrease hospitalizations, emergency room visits and unscheduled clinic visits. The number of veterans monitored using CCHT has increased from 2,000 veterans in FY2003 to over 25,000 veterans in FY2007. CCHT is often linked with the Home-Based Primary Care (HBPC) program to provide care.
- **Care Coordination Store and Forward Telehealth (CCSF):** Provides wound care, checks for diabetic eye disease, and delivers dermatology care using digital imaging, especially in rural areas.
- **Care Coordination General Telehealth (CCGT):** CCGT involves three major areas – Telemental Health, Telerehabilitation, and Telehealth in other clinical areas. It enables veterans to have real time visits via a Video Tele-Conferencing System (VTC) connecting different medical facilities. Approximately 9,000 veterans used CCGT in FY2003, and the number increased to approximately 20,000 in FY2007. Telemental health is a major way that VA will expand access to Mental Services.

Increasingly, rural VA Medical Centers rely on telehealth to provide services. CCGT has helped in maintaining services that would otherwise have been difficult to sustain. CCGT care involves more than 32 specialties such as mental health, pathology and radiology. Telemental health currently takes place in over 300 facilities, of which 164 are Community Based Outpatient Clinics (CBOCs). Specialists include Post-Traumatic Stress Disorder (PTSD) and substance abuse providers. The **VHA Telemental Health Field Work Group** was established in 2002, composed of representatives from each VISN.

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## Mental Health Services (and Special Needs), Office of Patient Care Services (PCS)

VHA is especially committed to expand access to mental health services through telemental health programs in rural areas. VHA offers telemental health at 311 sites including: 164 CBOCs, 89 medical centers, 21 Vet Centers, and 23 sites that support home telehealth. There are OEF/OIF Mental Health Teams and PTSD specialist capabilities in rural settings.

### *Special Programs/Initiatives*

- **Mental Health Intensive Case Management – Rural Access Network for Growth Enhancement (MHICM-RANGE):** VHA funded 20 programs at \$4.2 Million in FY2007.
- **Other Initiatives:** There are other special programs that integrate specialty mental health care into primary care and other medical settings; continue to expand access to specialty mental health services at all CBOCs by direct staffing, local contracts, or telehealth; pilot models in rural areas for implementation of Mental Health Intensive Case Management (MHICM) program concepts; and provide timely access for homeless veterans to mental health/substance abuse assessments.

### *Pilot Programs*

- **Collaboration with the Indian Health Service (IHS):** VISN 19 runs an outreach program to inform returning service members of the potential for VA medical or other benefits if needed; VISN 18 uses telemental health programs at CBOCs that serve several tribes; the Compensated Work Treatment Programs operate at 3 reservations in rural areas.

### *Special Needs: Rural Homelessness*

- **Grant and Per Diem (GPD):** Provides grants to community agencies providing services to homeless veterans. Since GPD's inception, the program has funded more than 75 projects that are in rural locations. It is expected that these grants will support or create over 1,200 transitional housing beds for homeless veterans.
- **Health Care for Homeless Veterans (HCHV):** Provides outreach and clinical assessment to homeless veterans who have serious psychiatric and substance abuse problems and connect them with needed mental health, medical, and rehabilitative services. In FY2006, 346 program clinicians were dedicated to the HCHV outreach effort. These clinicians contacted 39,000 homeless veterans (112 veterans per clinician).

## Long Term Care (LTC): Geriatrics and Extended Care, Office of Patient Care Services (PCS)

The VA's philosophy is to offer patient centered care in the least restrictive setting possible, and whenever possible in home and community-based rather than institutional settings.

### *Current Programs:*

- **Home and Community Based Care Programs (H&CBC):** Focuses on providing care in the patient's community and within the least restrictive environment that meets the patient's needs. There are currently 27 **Home Based Primary Care (HBPC)** sites in rural and highly rural areas. HBPC is partnering with the Office of Mental Health Services to add a mental health provider to each HBPC caregiver team. There is also collaboration with Office of Care Coordination (OCC) and Home Telehealth (CCHT) to integrate with HBPC to expand coverage into rural areas
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- **Medical Foster Home Program (MFH):** Offers a safe, favorable, and less costly alternative to nursing home care. MFH finds a caregiver in the community who is willing to take a veteran into their home and provide 24-hour supervision as well as needed personal assistance. It includes home visits from HBPC staffs.
- **Hospital-at-Home (H@H):** Presents a patient-centered interdisciplinary program providing hospital-equivalent care in the home setting. The program includes daily visits by and 24/7 availability of physicians, multiple daily visits by nurses, tests provided by professionals at home, and patient “discharge” back into the care of his or her primary care doctor.
- **State Home Construction Program:** Five grants awarded for construction in rural counties in FY2006 (\$47 Million).
- **State Veterans Homes/State Home Domiciliaries:** Owned and operated by individual states; VA pays a per diem rate to recognized homes to assist the state in financing care for eligible veterans.
- **Geriatric Research, Education and Clinical Centers (GRECCs):**
- **Other Initiatives:** LTC has a number of other current programs, to include programs to refer and purchase community nursing home, home care, hospice and adult day health care services; collaborations with the Administration on Aging and the Indian Health Service to provide HBPC outreach and caregiver support; and a pilot program on improvement of Caregiver Assistant Services.

## VHA Workforce Development

The goal of VHA’s workforce succession programs is to recruit, develop, and retain a competent, committed, and diverse workforce that provides safe, effective, efficient and compassionate care to veterans and supportive services to their families. Veterans living in rural areas that are treated in community-based outpatient clinics (CBOCs) must have access to quality primary and specialty care. But recruiting clinical and administrative staff to work in remote or rural locations may be difficult, particularly those with highly specialized skills. VHA will need to be creative in addressing the provision of health/mental health care in rural areas, utilizing such options as telehealth and care coordination. VHA will need to have both the IT infrastructure required for use of telehealth and care coordination, and staff with the skills needed to use these modalities. For example, specialists at the parent VHA facility can provide consultation to CBOC staff via telehealth, interviewing and examining patients virtually, but staff at the CBOC and the parent facility need training on using telehealth equipment and preparing patients for examination by clinicians who are geographically distant from their location. Many VHA facilities will choose to contract with staff to provide services in rural areas. Those contract employees must meet the same qualification standards as VHA staff and must demonstrate the needed skills and competencies. In addition, VHA will have to address the issue of funding to allow supervisors to travel more frequently for purposes of providing orientation, training, supervision and oversight of staff in rural settings like CBOCs. Education in supervising virtual employees must be provided to equip supervisors with the necessary skills to address the challenges of long-distance supervision.

### *Current Initiatives:*

- **Recruitment & Retention Programs:** Include recruitment marketing studies examining new electronic media, strategies to redesign hiring processes, development of a VHA Healthcare Recruiters Toolkit, and validating the value of Open House Recruiting; recruitment brand development; recruitment collateral development; scholarship services and education debt reduction programs; student employment; recruitment Training; and a pharmacy recruitment marketing study.
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- **Worgroups:** Workforce Succession Planning Workgroup and Productivity Improvement – Physician Productivity Workgroup have been established.

## Fee Program

The Fee Program provides for contracted health care services with non-VA providers. 259,162 patients contracted for services in VHA rural area during FY2006, and approximately \$760 million in payments were made in FY2006.

### *National Fee Support Office, VA Health Administration Center*

When appropriate VA officials determine that certain VA services are unavailable, or cannot be economically provided due to geographic inaccessibility, a veteran with special eligibility may be authorized fee-based care. Fee authorizations are not considered to be a permanent status for any veteran. In instances where a veteran's condition or situation changes, or, if a VA facility's capability is extended, constraints of law require that the authorization for fee-care be canceled and that the veteran be requested to return to the VA facility for needed medical services. VISNs and VAMCs manage the Fee program differently at almost every location. In some facilities, all Fee activities come under one office; in others, it is decentralized. Some VISNs have central claims processing centers; others do not.

### *Project HERO*

Project HERO (Healthcare Effectiveness through Resource Optimization) was developed to optimize the care provided directly to enrolled veterans and better manage fee care. While Project HERO is not specifically intended to address rural health care needs of enrolled veterans, the increased focus on maximizing available resources and better managing contracted care may result in improvements to the overall quality and consistency of care for veterans residing in rural areas. In addition, the quality of care provided through the Fee Program to veterans living in rural areas may improve since all Project HERO vendors will be pre-qualified. Additional benefits may include improved care coordination and improved cost effectiveness. Demonstration sites include VISN 8, 16, 20, and 23.

### *Public Law 109-461 Requirements*

PL 109-461 requires assessment of the Fee-Basis Health Care Program: The Director of the Office of Rural Health shall conduct an assessment of the effects of the implementation of the fee-basis health-care program of the Veterans Health Administration on the delivery of health-care services to veterans who reside in rural areas of the United States. The assessment shall be conducted in consultation with the individuals designated under subsection (c)(3) of section 7308 of title 38, United States Code, as added by subsection (a). In conducting the assessment, the Director shall (1) identify various mechanisms for expanding the program in order to enhance and improve health-care services for such veterans and determine the feasibility and advisability of implementing such mechanisms; and (2) for each mechanism determined under paragraph (1) to be feasible and advisable to implement, make recommendations to the Under Secretary for Health on the implementation of such mechanism.

## Office of Quality and Performance (OQP)

OQP supports VHA's commitment to systemize quality using an evidence-based approach to performance measurement and management.

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### *FY 08 OQP Quality Measurement*

- Mission critical performance measures (Executive Career Field, ECF)
- Health system indicator (ECF – Part E)
- Supporting indicators (No benchmarks)
- Special studies in rural health, stroke, lung cancer, gender/racial disparities, and colorectal cancer
- Transformational measures (new category, many are self-report)
- Financial and administrative indicators

### *Patient Satisfaction in 2006*

The Survey of Healthcare Experiences of Patients (SHEP) in 2006 showed that satisfaction among rural veterans was higher than that of urban veterans.

### *Collaboration*

The VA and the Department of Defense (DoD) are collaborating in the development of VA/DoD Clinical Practice Guidelines.

## **Outreach**

Outreach is not limited to veterans and dependants but also includes educating VA staff and other agencies and/or organizations involved in helping veterans and dependants such as community service providers, school officials, lenders, service organizations, and other federal and local agencies who work with veterans and their families.

### *Office of National Outreach Programs*

This office is charged with working with VA's administrators and staff offices to coordinate and monitor major Departmental outreach efforts to ensure veterans and their families have timely access to information regarding VA benefits and services.

### *Office of Seamless Transition Program (OST)*

This program is a VA/DoD joint effort to focus on coordination and collaboration across administrations and agencies to ensure that the transition process is approached in a comprehensive manner. OST focuses on combat injured veterans and OEF/OIF National Guard and Reserve members returning from deployment and their families.

### *Current Outreach Activities*

- Partnerships: VSO meetings, Post Deployment Health Reassessment Program, DoD programs, etc.
  - Publications: VHA newsletters, posters, direct mail correspondence, brochures, etc.
  - Websites: Primary VHA Internet-based Web site ([www.va.gov/health](http://www.va.gov/health)), VA/IHS combined Web site ([www.vha.ihs.gov](http://www.vha.ihs.gov)), etc.
  - Clinical Education Programs
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- Social workers at 9 medical treatment facilities nationwide to educate and assist injured and ill service members transitioning from military health care to VA health care
- National and local news releases generated by VHA inform veterans about veteran events and changes in policies
- Toll-free call centers
- Vet Centers – more information provided in Vet Center section
- Community Based Outpatient Clinics (CBOCs) and Outreach Clinics
- Virtual Clinics Initiative (Telehealth Outreach Clinics)
- Using telehealth technologies, “virtual” outreach clinics have been established; an example is an outreach clinic in Elko, Nevada

## Vet Centers

The Department of Veterans Affairs Vet Center program operates a system of 207 community based counseling centers. The Vet Centers are staffed by small multi-disciplinary teams of dedicated providers, many of whom are combat veterans themselves. The goal of the Vet Center program is to provide a broad range of counseling, outreach, and referral services to eligible veterans in order to help them make a satisfying post-war readjustment to civilian life.

### *Vet Center Services*

Vet Centers provide readjustment counseling and outreach services to all veterans who served in any combat zone. Services are also available for their family members for military related issues.

- **Community Outreach:** Vet Centers provided information about and access to available VA and community support services. Vet Center staff members encounter and educate veterans about VA services and benefits at numerous outreach-related events such as meetings, forums, fairs, and post deployment health reassessment programs. The eligibility for Vet Center services was extended to OEF, OIF and subsequent operations within GWOT veterans in 2003. Vet Centers have initiated outreach efforts at area military installations and closely coordinated their efforts with military family support services at various military bases.
- **Counseling:** Vet Centers provide trauma counseling, family counseling, employment services, and a range of social services to assist veterans in readjusting from war-time military service to civilian life. Bereavement Counseling is assistance and support to people with emotional and psychological stress after the death of a loved one. It includes a broad range of transition services, including outreach and referral services for family members.

### *Current Initiatives*

- **Peer Outreach:** In 2003, the Under Secretary for Health authorized the Vet Center program to hire 100 OEF/OIF veterans to conduct outreach to their fellow Global War on Terrorism (GWOT) veterans. All 100 were hired and located in all 50 states, the District of Columbia, and Puerto Rico. They provide information about VA and Vet Center services at military demobilization and National Guard and Reserve component sites, as well as at local community events.
  - **Mobile Vans:** Mobile vans extend the reach of Vet Center services.
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## Community Based Outpatient Clinics (CBOCs)

VHA currently operates CBOCs in rural areas and continues to plan and implement additional in rural areas. VHA studies on geographic access indicate that over 80% of rural enrollees are within a 60 minute driving time of a VA primary care clinic. VHA's policy on the planning and activation of CBOCs will continue to address rural access. Types of CBOCs include rural CBOCs and contract CBOCs.

*Statistics from Veterans Administration Site Tracking (VAST) data (as of end of year 2007)*

CBOCs	Highly Rural	Rural	Urban	Total
	39	293	400	731
VA Hospitals	Highly Rural	Rural	Urban	Total
	2	23	123	153

## Training – EES (Employee Education System)

### *Cooperative Health Education Program (CHEP)*

The primary mission of the CHEP is to provide continuing education to VA and non-VA health care providers. Educational partnerships are one major way to help the VA “build healthy communities” for veterans and their families. CHEPs were targeted for rural regions and have been very successful in creating educational cooperative environments through VA leadership. There are currently 3 CHEP programs in operation. These are located in Fort Meade, South Dakota; Prescott, Arizona; and Tuskegee, Alabama.

### *Resources Available*

- **Remote Training Services:** Available through satellite and video
- **Training Partnership:** VHA and Health Resources and Services Administration
- **Welcome Home (OEF/OIF Veterans Tribal Outreach Program):** Collaboration with HIS; targets facility directors, physicians, health care professionals, and social workers.

## Traumatic Brain Injury (TBI) and Rehabilitation Services

One of the greatest recent challenges for VHA has been meeting the complex needs of severely injured service members. VA developed the Polytrauma System of Care (PSC) to improve access to specialized rehabilitation services for polytrauma/TBI, to facilitate delivery of care closer to home, and to provide life long case management services for OEF/OIF veterans and active duty service members.

### *Polytrauma System of Care (PSC)*

PSC is an integrated nationwide network of 100 rehabilitation programs that proactively assess and manage injuries of returning OEF/OIF veterans.

- **Polytrauma Rehabilitation Centers (PRCs):** There are 4 PRCs. PRCs serve as hubs for acute medical and rehabilitation care, research, and education related to polytrauma and TBI. PRCs also serve as resources for other facilities in the PSC and are active in the development of educational programs and of best practice models of care.
- **Polytrauma Network Sites (PNSs):** PNSs are located in each of VHA's 21 VISNs. PNSs are responsible for coordinating access to VA and non VA services across the VISN to meet the needs of patients and families with polytrauma.
- **Polytrauma Support Clinic Teams (PSCTs):** Due to their wider geographical distribution, PSCTs play an important role in improving access to local rehabilitation services for veterans and active duty service members closer to their home communities.
- **Polytrauma Telehealth Network (PTN):** Facilities in PSC are linked through a Telehealth Network that provides state-of-the-art multipoint videoconferencing capabilities. PTN ensures that polytrauma and TBI expertise are available throughout the system of care and that care is provided at a location and time that is most accessible to the patient.

### *Current Services*

- **Institutional Care:** Includes Nursing Home Care (NHC) and Community Nursing Home Care (CNH). 21 CNHs under VA contract have specialized units caring for younger people with TBI.
- **Non-institutional Care:** Includes Home-Based Primary Care (HBPC), Adult Day Health Care, Purchase Skilled Home Health Care, Care Coordination Home Telehealth (CCHT), and Community Residential Care

## VA National Center for Health Promotion & Disease Prevention (NCP) Office of Patient Care Services (PCS)

### *Current Programs/Initiatives:*

- **HealthierUS Veterans:** HealthierUS Veterans is a joint project between VA and HHS. The focus of this initiative is to encourage and educate veterans and their families about the health risk of obesity and diabetes, as well as encourage veterans to eat healthy, be active and get fit for life.
- **Move!:** Move! is a national weight management program designed to help veterans lose weight, keep it off, and improve their health.

## Information Technology (IT)

My HealthVet is a comprehensive Personal Health Record; it is a tool that will enable veterans to be knowledgeable about their health and better prepare them to make informed health care choices, stay healthy, and seek services when needed.

### *My HealthVet Services*

The most requested functionality is the ability to request prescription refills. It can also record and track personal and family health histories, vital signs and graphical monitoring, medication information, military health history, activity/food journals, and personal information; provide access to Trusted Health

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Information and VA News and Feature stories; and provide access to Healthy Living and Condition Centers.

### *Current Efforts*

The Veterans Informatics Resource Office is working with OIT to deliver additional features; additional self-entered information, e-learning, HealthWise content, blended medication views, account activity logging, Your Life, Your Choices, end-of-life decision making guidance, Calendar Updates, and authentication.

### *Collaborations*

- **Joint Incentive Fund:** Coordination is underway with the Department of Defense on areas where one can leverage work underway in the development and maturity of both the TriCare Online and My Health\_eVet portals.
- **Interoperability:** Collaboration with DoD for electronic health record sharing.

## Collaborations

Key collaborations include the Seamless Transition program for OIF/OEF veterans and the VA/DoD Health Information Technology Sharing Program. Collaborations with the Indian Health Service have also progressed:

### *Indian Health Service*

The Department of Health and Human Services (HHS) and the Department of Veterans Affairs (VA) signed a Memorandum of Understanding (MOU) in February 2003 to encourage cooperation and resource sharing between the Indian Health Service (IHS) and the Veterans Health Administration (VHA) to deliver quality health care services and enhance the health status of American Indian and Alaska Native (AI/AN) veterans.

- **Outreach:** Most networks are engaged in a variety of outreach activities, including meetings and conferences with IHS program and tribal representatives, VA membership in the Native American Healthcare Network, VA participation in traditional Native American ceremonies, transportation support to AI/AN, etc.
  - **Education:** VHA Employee Education Service (EES) provides training programs to IHS staff and the tribal community. In 2006, VHA delivered 145 training programs, of which 90 were made available using satellite technology and 55 using web based technology. These educational programs will be continued in 2007, and VHA will also provide selected IHS staff an opportunity to attend regional EES workshops.
  - **Behavioral Health:** The Behavioral Health workgroup developed a framework for AI/AN communities to assist returning Operations Iraqi Freedom and Enduring Freedom (OIF/OEF) AI/AN service members and veterans reintegrate with their families and communities and readjust to civilian life. The objective is to promote a community health model with tools provided to Tribal communities.
  - **Expanded Health Care Services:** At the local level, ten VHA networks are engaged in targeted initiatives aimed at providing a full continuum of healthcare services, such as; health fairs, VA/IHS Advisories, Use of Health Buddy, and education and/or shared services in substance abuse, domestic violence programs, cardiac rehabilitation, dietetics, behavioral medicine, etc.
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- **Care Coordination:** The VHA-IHS Shared Health Care Workgroup has drafted an Inter-Departmental Coordinated Care Policy, the goal of which is to optimize the quality, appropriateness and efficacy of the health care services provided to eligible AI/AN veterans receiving care from both VHA and IHS or Tribes; and to improve the patient's satisfaction with the coordination of care between the two Departments.
- **Telemedicine:** Telemedicine has proven to be an extremely effective in the treatment of PTSD in Alaskan Native villages. VA and IHS are working to spread the use of telemedicine services by AI/AN veterans, which will allow VA to bring physical and mental health care to the tribes, especially those in remote areas of the country.
- **Traditional Healing:** Some VHA facilities and Vet Centers have incorporated Traditional Healing Ceremonies along with modern methods of treatment and counseling. As a national initiative, VA has sent over 500 letters to tribal leaders to ask them to provide information on appropriate providers of Traditional Practices so that they may be called upon for religious/spiritual care of AI/AN veterans.

## OEF/OIF Veterans

### *Seamless Transition*

Web site for returning Active Duty, National Guard and Reserve service members of Operations Enduring Freedom and Iraqi Freedom (OEF/OIF), at <http://www.seamlesstransition.va.gov/>.

- **Suicide Prevention Lifeline:** 1-800-273-TALK (8255)
- **Transition Assistance:** VA has maintained an active Transition Assistance Program and Disabled Transition Assistance Program (TAP/DTAP) throughout the United States and around the world. VA has provided benefit information to separating service members and their families. Programs have included Transition Assistance Advisors (National Guard) and the State Coalition Model (a model that ties together federal/local community resources to ensure benefits and services to Guard member and their families); <http://www.dodtransportal.dod.mil/dav/lsnmedia/LSN/dodtransportal/>.
- **Benefits for Dependents of OEF/OIF Veterans:** A wide range of benefits and services are available for the dependents of living and deceased veterans (Ex: CHAMPVA).

### *Outreach*

- **Partnership with National Guard Bureau:** Memorandum of Agreement (MOA) between the National Guard Bureau and VA has been established to define the mutually agreed upon requirements, expectations, and obligations regarding the assistance for services and benefits to National Guard personnel.
  - **Vet Centers:** Vet Centers have taken a lead role in providing outreach services to returning war veterans. Since 2003 through the first quarter of fiscal year 2007, the Vet Centers have provided services to 165,153 Operation Iraqi Freedom and Operation Enduring Freedom (OIF/OEF) veterans. Following initial contact with Vet Center outreach workers at demobilization sites, many of these veterans disperse home to rural areas of the country. Without the initial Vet Center outreach contact, subsequent access to VA services would be far more of a challenge for many rural veterans.
  - **Collaboration with IHS:** OEF/OIF Veterans Tribal Outreach Program; in collaboration with IHS, this training program targets facility directors, physicians, health care professionals, and social workers.
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## Appendix F: Acronyms Guide

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3RNET	National Rural Recruitment and Retention Network
ACPM	American College of Preventive Medicine
ADUSH	Assistant Deputy Under Secretary for Health
AHA	American Hospital Association
AHEC	Area Health Education Center
AHRQ	Agency for Healthcare Research and Quality
AI/AN	American Indian/Alaska Native
AMA	American Medical Association
BPHC	Bureau of Primary Health Care
CAH	Critical Access Hospital
CBOC	Community Based Outpatient Clinic
CCGT	Care Coordination General Telehealth
CCHT	Care Coordination Home Telehealth
CCSF	Care Coordination Store and Forward Telehealth
CHAMPVA	Civilian Health and Medical Program of the Department of Veterans Affairs
CHC	Community Health Center
CHEP	Cooperative Health Education Program
CME	Continuing Medical Education
CMS	Centers for Medical and Medicaid Services
CNH	Community Nursing Home Care
COE	Center of Excellence
COSTEP	Commissioned Officer Student Training and Extern Program
CPOS	Clinical Practice Organizational Survey
DHHS/HHS	Department of Health and Human Services
DoD	Department of Defense
DVA	Department of Veterans Affairs
ECF	Executive Career Field
EES	Employee Education System
EMR/EHR	Electronic Medical Record/Electronic Health Record

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EMT	Emergency Medical Technician
EPRP	External Peer Review Program
FESC	Frontier Extended Stay Clinics
FQHC	Federally Qualified Health Center
GPD	Grant and Per Diem
GRECC	Geriatric Research, Education, and Clinical Center
GWOT	Global War on Terror
H&CBC	Home and Community Based Care Programs
H@H	Hospital-at-Home
HBPC	Home Based Primary Care
HBPC	Home Based Primary Care
HCHV	Health Care for Homeless Veterans
HCMS	Human Capital Management System
HCUP	Healthcare Cost and Utilization Project
HERO	Healthcare Effectiveness through Resource Optimization
HIE	Health Information Exchange
HIT	Health Information Technology
HPSA	Health Professional Shortage Area
HRQOL	Health-Related Quality of Life
HRSA	Health Resources and Services Administration
HSR&D	Health Services Research and Development Service, Veterans Administration
ICD-9	International Classification of Diseases, 9 <sup>th</sup> Edition
IHS	Indian Health Service
IOM	Institute of Medicine
ISFAC	Interservice Family Assistance Committee
LTC	Long-Term Care
MFH	Medical Foster Home Program
MH	Mental Health
MHICM-RANGE	Mental Health Intensive Case Management – Rural Access Network Growth Enhancement
MOU	Memorandum of Understanding
MUA	Medically Underserved Area
NACCHO	National Association of City and County Health Officials
NACHC	National Association of Community Health Centers
NACO	National Association of Counties
NARHC	National Association of Rural Health Clinics
NAPIS	National Aging Program Information System
NCHCI	National Center for Health Care Informatics

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NCP	National Center for Health Promotion & Disease Prevention
NCQA	National Committee for Quality Assurance
NCSL	National Conference of State Legislatures
NFCSP	National Family Caregiver Support Program
NHC	Nursing Home Care
NHSC	National Health Service Corps
NIMH/ORMH	National Institute of Mental Health/Office of Rural Mental Health
NOSORH	National Organization of State Offices of Rural Health
NRHA	National Rural Health Association
OCC	Office of Care Coordination
OEF/OIF	Operation Enduring Freedom/Operation Iraqi Freedom
OQP	Office of Quality and Performance
ORD	Office of Research and Development, Veterans Administration
ORH	Office of Rural Health, Veterans Health Administration
ORHP	Office of Rural Health Policy, Health Resources and Services Administration
OST	Office of Seamless Transition Program
P4P	Pay-for-Performance
PACE	Program of All Inclusive Care for the Elderly
PCS	Patient Care Services
PDHA	Post Deployment Health Assessment
PDHRA	Post Deployment Health Reassessment
PHI	Protected Health Information
PL	Public Law
PNS	Polytrauma Network Site
PRC	Polytrauma Rehabilitation Center
PSC	Polytrauma System of Care
PSCT	Polytrauma Support Clinic Team
PTN	Polytrauma Telehealth Network
PTSD	Post Traumatic Stress Disorder
QUERI	Quality Enhancement Research Initiative
RAC	Rural Assistance Center
RHC	Rural Health Clinic
RHIO	Regional Health Information Organization
RHNAC	Rural Health National Advisory Committee
RHRC	Rural Health Resource Center
RIM	Rehabilitation Institute of Montana
RUCA	Rural-Urban Commuting Area Code

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RUPRI	Rural Policy Research Institute
SHEP	Survey of Healthcare Experiences of Patients
TA	Technical Assistance
TAP/DTAP	Transition Assistance Program and Disabled Transition Assistance Program
TBI	Traumatic Brain Injury
TVR	Tribal Veteran Representative
USC	United States Code
VA	Veterans Administration
VACO	Veterans Affairs Central Office
VAMC	Veterans Administration Medical Center
VAST	Veterans Administration Site Tracking
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network
VISTA	Veterans Health Information Systems and Technology Architecture
VRAH	Veterans Rural Access Hospital
VSO	Veteran Service Organization
WVRHEP	West Virginia Rural Health Education Partnership
WWAMI	Washington, Wyoming, Alaska, Montana, Idaho

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