



Department of Veterans Affairs Office of Inspector General

Healthcare Inspection

Access to VA Mental Health Care for Montana Veterans

To Report Suspected Wrongdoing in VA Programs and Operations

**Telephone: 1-800-488-8244 between 8:30AM and 4PM Eastern Time,
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Executive Summary

Introduction

In January 2008, U.S. Senator Jon Tester and U.S. Senator Max Baucus requested the VA Office of Inspector General (OIG) review the quality and availability of mental health services at Veterans Health Administration (VHA) facilities in Montana. It was decided that OIG would analyze: the access to VA provided and VA purchased mental health care in Montana by Montana veterans and the impact of peer-to-peer counseling programs. The availability of mental health providers, a geographically large area, and population dispersion are factors that pose challenges for Montana's veterans in need of mental health services.

The VA Montana Healthcare System (VAMHS) includes a 50-bed acute care, medical-surgical facility at the main campus at Fort Harrison (Helena) and 12 community based outpatient clinics (CBOCs). Veterans Readjustment Counseling Centers (Vet Centers) are located in Billings and Missoula, and a 30-bed Community Living Center (nursing home) provides general and ventilator dependent care is located in Miles City. Acute inpatient psychiatric care and residential mental health treatment is provided at VA facilities in Sheridan, Wyoming, or Salt Lake City, Utah, or at a local community hospital. Outpatient VA mental health providers are available onsite at Fort Harrison and at 5 of the 12 CBOCs. VA telemental health is available at Fort Harrison and most VA CBOCs. Starting in 2001, VAMHS has contracted for mental health services with Montana's regional community mental health centers; veterans are seen by mental health providers at 45 sites. In addition, VAMHS utilizes the services of 27 non-VA private mental health therapists on fee basis. Some veterans living close to the border of neighboring states receive VA mental health care at sites outside Montana.

We used all Montana veterans in the LC database¹ for this review, with data updated through the end of fiscal year (FY) 2008. This review analyzed access in terms of travel time. We utilized geo-coding, that is the geographic coordinates of latitude and longitude. We geo-coded all VHA mental health care service providers and providers under VHA paid service; these were further categorized by whether they provided medications only, therapy only, or both medications and therapy. In addition, we identified all Montana veterans in the LC database for geo-coding, whether or not they are enrolled with VHA. We constructed travel time bands for each service provider's physical service location. We determined veteran travel times from their home address to providers' locations and considering the types of mental health services needed.

¹ *Quantitative Assessment of Care Transition: The Population-Based LC Database*, VAOIG report number 07-00380-202, issued 9/13/2007, <http://www.va.gov/oig/54/reports/VAOIG-07-00380-202.pdf>

Results

Over 82 percent of this veteran population had access to VHA providers and providers under VHA paid service offering at least medication management or therapy within 15 minutes of travel. Access to a provider with half an hour of travel increased this to 95 percent of the population. Almost all have access to a provider within an hour of travel.

Over 70 percent of the population had access within 15 minutes of travel to a provider with both medications and therapy services, and over 88 percent had access within one hour. The marked exception was non-Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF) reserve component veterans; 12 percent of them had to travel over an hour and 4 percent had to travel over 2 hours.

The data set used permits analysis by demographic factors, medical treatment with Department of Defense and VA, VBA benefit status, and OIF/OEF participation. Our data show that in both the Montana and non-Montana LC population, alcohol and drug use were common mental health diagnoses, in addition to PTSD and related mental health disorders. At present, access to specialty substance use therapy is limited.

We reviewed the Vet to Vet program in Montana. There was not sufficient data to analyze utilization or impact of such groups. However, it is reasonable for VAMHS to encourage further efforts at forming affiliated OIF/OEF-specific Vet to Vet groups as part of their ongoing, comprehensive outreach effort, including Vet Center outreach and VHA partnerships with community mental health organizations, non-VA providers, veterans groups, and the Montana National Guard.

Recommendations

Recommendation 1: We recommended that the VISN 19 Director ensure that the VAMHS Director takes steps to increase the availability of evidence-based treatment for PTSD for Montana veterans.

Recommendation 2: We recommended that the VISN 19 Director ensure that the VAMHS Director takes steps to increase the availability of specialty substance use treatment for Montana veterans.

Comments

The Under Secretary for Health and VISN 19 Director concurred with our findings, and the VISN submitted appropriate implementation plans. (See Appendixes E and F, pages 61–65 for the full text of their comments.)

The VISN reports that an Evidence-Based Practice Coordinator has been hired to facilitate the implementation and expansion of evidence-based treatment (EBT) at VA

Montana Healthcare System. In addition, the VAMHS has sponsored EBT for contract and fee basis providers who serve Montana veterans. Also the newly proposed contract requires training in EBT. With regard to increasing the availability of specialty substance use treatment, the VA Montana Healthcare System has received additional VA positions for employees in an intensive outpatient program (IOP) of substance abuse services. They also report developing a contract agreement to provide IOP services and residential support. We will follow up on all planned actions until they are completed.

(original signed by:)

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Healthcare Inspections

Part I. Introduction

Purpose

On January 17, 2008, U.S. Senator Jon Tester and U.S. Senator Max Baucus requested the VA Office of Inspector General (OIG) review the quality and availability of mental health services at Veterans Health Administration (VHA) facilities in Montana. After further discussion in April 2008, it was decided that OIG Office of Healthcare Inspections would analyze: the impact of distance from mental health services on enrollment in VA mental health programs in Montana; the degree to which contracted mental health services for post-traumatic stress disorder (PTSD), depression, and substance use could be expanded to improve veteran access to mental health services; and the degree to which peer-to-peer counseling programs, such as the Vet to Vet program, help the VA reach out to veterans who are not enrolled in the VA but are in need of mental health services.

Background

The VA Montana Healthcare System (VAMHS) includes a 50-bed acute care, medical-surgical facility at the main campus at Fort Harrison (Helena) and Community Based Outpatient Clinics (CBOCs) located in Anaconda, Billings, Bozeman, Cut Bank, Glasgow, Glendive, Great Falls, Havre, Kalispell, Lewistown, Missoula, and Miles City. Veterans Readjustment Counseling Centers (Vet Centers) are located in Billings and Missoula. A 30-bed Community Living Center (nursing home) that provides general and ventilator dependent care is located in Miles City. The system is part of Veterans Integrated Service Network (VISN) 19. Primary care is provided at the main campus in Fort Harrison and at the affiliated CBOCs.

A May 2003 report from the VHA Office of the Medical Inspector (OMI) found that VAMHS had a plan for contracting mental health services with community practitioners around the state with the aim of providing better access to mental health services. The OMI report noted that specific programming for PTSD appeared “almost non-existent” and that discontinuation of an inpatient VA substance abuse program was not accompanied by a parallel increase in investment in an outpatient substance abuse program.

A 2007 investigative report by a media outlet alleged that VAMHS lags behind the nation in the quality and availability of mental health services and specialized PTSD treatment programs for recent veterans. VAMHS asserted that health care needs in Montana are met not only by providers at VA clinics as described in the media report but also by contract and fee-basis providers throughout the state.

A. Access to Mental Health Care in Rural Areas

Mental Health and Rural America: 1994–2005, a 2007 report by the Health Resources and Services Administration, Office of Rural Health Policy, notes “there is not one rural America. The rural United States is a place of great diversity, which is perhaps a surprise to many in the majority metropolitan population. Rural is many small places scattered across the vast landscape of America.” Rural can be a New England village, a Midwestern county, or the Western frontier. Rural areas share common characteristics of relatively few people living in the area, limited access to large cities, and considerable travel distances to market areas for work or every-day living activities.² No consistent definition is used across agencies or programs.³ The most commonly used definitions are based on the Office of Management and Budget characterization of counties or the Census Bureau categorization of census blocks.⁴ According to the OMB definition, rural America comprises 17 percent (49 million) of the population, compared to 21 percent (59 million) by the Census definition.⁵

Over 85 percent of the 1,669 federally designated mental health professional shortage areas (MHPSAs) are rural. According to the Epidemiological Catchment Area (ECA) Study, which compared rural and urban prevalence rates for a large variety of psychiatric disorders, lifetime prevalence rate of the combined disorders was 32 percent in rural areas, and only slightly higher at 34 percent in urban areas. The rate of adults with severe mental illnesses is not significantly different in rural and urban areas. The overall prevalence of substance abuse among adults has also been shown to be comparable between rural and urban areas.⁶

B. Montana Demographics

According to the 2000 U.S. Census, Montana has a population of 902,195 and a land area of 145,552 square miles, with a 6.6 density-persons per square miles—the third-lowest in

² Ciarlo, James A. PhD, Wackwitz, John H., PhD, Wagenfeld, Morton O., PhD, Mohatt, Dennis F., MA, *Focusing on “Frontier”: Isolated Rural America, Letter to the Field No.2*, Western Interstate Commission for Higher Education, Frontier Mental Health Services Resource Network, pp.1–14.

³ Mohatt, Dennis F., Bradley, Mimi M., Adams, Scott J., and Morris, Chad D., *Mental Health and Rural America: 1994–2005*, U.S. Department of Health and Human Services, Health Resources and Services Administration, Office of Rural Health Policy, p.1.

⁴ Coburn, Andrew F., MacKinney, A. Clinton, McBride, Timothy D., Mueller, Keith J., Slifkin, Rebecca T., and Wakefield, Mary K., *Choosing Rural Definitions: Implications for Health Policy*, Issue Brief #2, Rural Policy Research Institute Health Panel, March 2007.

⁵ Mohatt, Dennis F., Bradley, Mimi M., Adams, Scott J., and Morris, Chad D., *Mental Health and Rural America: 1994–2005*, U.S. Department of Health and Human Services, Health Resources and Services Administration, Office of Rural Health Policy, p.2–3.

⁶ Mohatt, Dennis F., Bradley, Mimi M., Adams, Scott J., and Morris, Chad D., *Mental Health and Rural America: 1994–2005*, U.S. Department of Health and Human Services, Health Resources and Services Administration, Office of Rural Health Policy, p. 9.

the U.S. Fifty-four percent of the population resides in urban areas and 46 percent in rural areas, the seventh-highest in the U.S.⁷

The U.S. Department of Health and Human Services, Bureau of Health Professions, designates Health Professional Shortage areas for primary medical care, dentists, and mental health professionals. Within Montana's 56 counties, part or all of 54 counties are designated mental health care shortage areas.⁸

Montana has the second-highest veteran per capita population.⁹ According to the end of year 2006 enrollment file, Montana had a veteran population of 100,223 with 42,131 veterans enrolled in VHA and 29,023 unique patients receiving care within the system. The availability of mental health providers, a geographically large area, and population dispersion are factors that pose challenges for Montana's veterans in need of mental health services.

C. VA Provided Care

1. VAMHS Mental Health Care

The VA facility at Fort Harrison does not have an inpatient acute psychiatric unit or a residential mental health treatment program. However, it does have an outpatient mental health clinic offering general mental health services including medication management and therapy for PTSD, depression, and other non-substance use conditions. Patients in need of inpatient psychiatric care are transferred to the VA Medical Center (VAMC) in Sheridan, Wyoming or Salt Lake City, Utah or a local community hospital. Patients in need of residential mental health care are admitted to programs at VAMCs in Sheridan, Salt Lake City, or Boise, Idaho. If a bed is not available in a VA facility or the community, patients are admitted temporarily to a medical floor at the Fort Harrison VAMC with consultation to a psychiatrist.

Outpatient VA mental health providers are available onsite at Fort Harrison and the CBOCs in Anaconda, Billings, Great Falls, Kalispell, and Missoula. Mental health services are not available at the CBOCs in Cut Bank, Glasgow, Glendive, or Havre.

2. VAMHS Telemental Health

Telemental health networks have potential to provide a wide range of mental health services, enhance continuity of care for rural patients, and to facilitate family involvement and discharge planning for psychiatric inpatients. In addition, telemental health has been used to extend the service range of nurse practitioners, physician

⁷ mt.govTM Montana's Official State Website, Montana Quickfacts.

⁸ Rural Policy Research Institute, State Economic and Demographic Profile Series, Montana.

⁹ Testimony of Joe Foster, Administrator, [State of] Montana Veterans Affairs Division before the U.S. Senate Veterans' Affairs Committee Field Hearing, Great Falls, Montana, July 21, 2007.

assistants, and psychiatric clinical nurse specialists who serve rural areas and who practice in consultation with off-site psychiatrists who provide medication review. However, telemental health services may not be appropriate for every patient. An example would be a patient with serious mental illness who has delusions focused on being electronically monitored by others.¹⁰

Telemental health care is provided at the Fort Harrison VAMC and the CBOCs in Anaconda, Billings, Great Falls, Kalispell, Missoula, Bozeman, Lewistown, and Miles City utilizing video-conferencing systems in which patient and provider see and communicate with each other in real time. Equipment is reportedly in place in Cut Bank, Glendive, and Havre, with plans for utilization within the next few months.

D. VA Paid Care

1. Contract Mental Health Care

For non-VA community mental health services, Montana is divided into four regions: the Eastern Montana Community Mental Health Centers (EMCMHC), the South Central Regional Mental Health Centers (SCRMHC), the Centers for Mental Health (CMH), and the Western Montana Mental Health Centers (WMMHC). Each region consists of a regional mental health center and several satellite offices.

VAMHS contracted with the SCRMHS in 2001 to provide mental health care to veterans at their various satellites/clinics. In 2003, VAMHS contracted with WMMHC and CMH for mental health services, and the EMCMHC clinical sites were sub-contracted under the SCRMHC contract. In FY 2003, approximately 870 veterans were treated at these contract facilities. In FY 2007, the number of veterans treated under contract increased to approximately 2,081 for 22,420 visits.

Under these contracts, veterans are seen by mental health providers at 45 sites including 11 EMCMHS sites, 12 CMH sites, 8 SCRMH sites, and 14 WMMHC sites. (See Appendix A.1.)

Patients access contract care through the Ft. Harrison VAMC Access to Care Unit. If the patient has not been seen within 24 months by a VA mental health professional a phone assessment will be done within 24 hours. An assigned provider completes the phone assessment and a written note is sent to Access to Care Unit clinicians who then set up a referral to an appropriate contract provider nearest to the patient. The choice of contract provider depends on the type of clinical services required.

¹⁰ Smith Henry A., LCSW, and Ronald A. Allison MA, *Telemental Health: Delivering Mental Health Care at a Distance*; A Summary Report, U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration Center for Mental Health Services, Health Resources and Services Administration, 1998.

A contract provider may be utilized for one service while a VA provider may be utilized for a different mental health service. For example, a patient may be seen for therapy by a contract psychologist at a contract community mental health center site and for medication management by a VA psychiatrist in Fort Harrison.

When a contract provider sees a VA patient, progress notes are mailed to Access to Care Unit clinicians at Fort Harrison, who scan the notes into the VHA computerized patient record system (CPRS). On a monthly basis, Access to Care Unit staff review a 5 percent sample of progress notes and treatment plans.

The contracts specify provision of initial visits, psychiatric care, case management, interactive group psychotherapy, and other outpatient visits for evaluation and management. According to VAMHS leadership, the contracts are in the process of re-negotiation. In 2008, the VAMHS conducted a survey of services provided at each contracted community mental health center. Community mental health centers were interested in adding additional services to the contracts.

VHA has a performance mandate that Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF) veterans be scheduled for an initial intake with a mental health provider within 2 weeks of contact/referral to the system. Although not specified in the present contracts, the VAMHS reported that mental health centers have previously pledged to see these veterans on a priority basis and contract providers have been compliant with the VA mandate.

2. Fee-Basis Mental Health Care

In addition to the community mental health center contracts, but to a lesser extent, the VAMHS utilizes the services of 27 non-VA private mental health therapists on fee-basis. These fee-basis arrangements are set up on an individual basis. VAMHS leadership reports that in FY 2007, there were 257 VAMHS patients seen for 3,213 visits under fee basis. (See Appendix A.2.)

E. Mental Health Care Available to Montana Veterans at VA Facilities in Neighboring States

Some Montana veterans live in areas close to the border of neighboring states. Veterans may access mental health care at VHA sites located in a neighboring state, especially if the neighboring site is more proximate to the patient's home. For example, a patient living near the North Dakota border may seek care at the CBOC in Dickinson, North Dakota, as an alternative to care at the Miles City, Montana site. At the time of our inspection, mental health care was available via telemental health or on-site care at the CBOCs in Dickinson and Williston, North Dakota; the satellite clinic in Salmon, Idaho; the CBOC in Powell, Wyoming, and the Sheridan VAMC; the Spokane VAMC in

Washington; and at the VA Black Hills Health Care System–Fort Meade Campus in South Dakota.

F. VA Mental Health Care to American Indian Reservations in Montana

The 2004 U.S. Census Bureau American Community Survey indicated that American Indian and Alaska Native-alone and American Indian and Alaska Native-alone-or-in combination populations represented approximately 6.5 or 7.8 percent of Montana’s state population.¹¹ (See Appendix A.3 for a map showing seven different American Indian reservations.)

Mental health services to veterans residing on American Indian reservations in Montana (see Appendix) are provided via telemental health videoconferencing. The program is administratively based at the VA Salt Lake City Healthcare System and affiliated with the VHA Office of Rural Health. A psychiatrist and nurse practitioner at the VA Eastern Colorado Health Care System in Denver provide clinical care by telemental health. The program also serves veterans residing on American Indian reservations in Wyoming and South Dakota. Mental health clinicians work with Tribal telemental health outreach workers who serve as community liaisons, help arrange installation, and provide logistical support for use of the equipment. Funding for telemental health outreach workers is funded through VAMHS fee-basis. Tribal telemental health outreach workers partner with Tribal veteran representatives to liaison with veterans, their families, Tribal Councils, and the Indian Health Service, to facilitate access to care within a culturally sensitive framework.

Provision of care requires having a facility where patients can use the telemental health equipment; having the equipment and associated technological infrastructure in place and operable; having an effective outreach worker who is knowledgeable and respectful of tribal customs and Tribal Council procedures; and having mental health clinicians in place at the other side of the transmission. Equipment may be located inside Vet Centers, IHS facilities, or other available and appropriate locations.

In Montana, telemental health has been available at the Lame Deer and Crow sites. Telemental health began at the Fort Belknap site in November 2008. Telemental health recently became operable at the Rocky Boys site and is under development at the other sites. The Montana veteran population analyzed in the findings section of this report included American Indian veterans. However, because telemental health services at reservation sites are solely intended for use by those veterans residing on American Indian Reservations, we captured the data for these veterans but did not include these telemental health locations in the quantitative analysis of geographic access presented in the findings section.

¹¹ U.S. Census Bureau, *The American Community—American Indians and Alaska Natives: 2004*, May 2007, p.6.

Scope and Methodology

A. Interviews and Document Review

We initially interviewed the VISN 19 Director, VAMHS leadership, the Director of Behavioral Health services for the VAMHS, VAMHS staff responsible for contract mental health care and fee-basis mental health care, and the VAMHS liaison to the Vet to Vet program¹² by phone in February 2008.

We obtained information regarding the address, number of providers, provider types, and services provided at VAMHS facilities and VAMHS mental health contract and fee-basis sites. We obtained data on when telehealth services began at CBOCs and whether contract and fee-basis sites provided service before and/or after March 2008.

We visited multiple VAMHS sites during the week of August 25–29, 2008. At the Fort Harrison facility, we interviewed the facility director, and re-interviewed the Director of Behavioral Health services, staff responsible for contract mental health care, and the liaison to the Vet to Vet program. We interviewed mental health clinicians and the grant-per-diem program manager at the Fort Harrison VAMC. We interviewed the program manager responsible for coordinating VISN 19 telemental health services to Indian Reservations.

Inspectors visited and interviewed clinical and administrative staff at the CBOC and a contract mental health clinic site in Billings; the CBOC and a contract mental health site in Bozeman; and the CBOC, a Grant-Per-Diem residence, and a community shelter for the homeless in Missoula. We also visited the Missoula campus of the WMMHC. During the week of our visit we ultimately drove over 660 miles from Missoula to Dickinson, North Dakota, which provided an enhanced understanding of geography in relation to access issues.

Additionally, we met with a group of Montana veterans who facilitate and participate in Vet to Vet groups. These veterans shared with us observations and experiences with the Vet to Vet program. In addition, we were provided with and reviewed the Fort Harrison Vet to Vet Missions Statement/Program Guide. We reviewed the June 2005 *Vet to Vet Peer Support Manual* authored by Moe and Naomi Armstrong. In addition, we ascertained the location of other Vet to Vet sites in Montana and schedules or flyers indicating days and times of meetings.

We reviewed the October 2007 OIG report, *Combined Assessment Program Review of the VA Montana Health Care System, Fort Harrison, Montana*. We reviewed the May 2003 OMI report, *VA Montana Healthcare System, Ft. Harrison, MT, Review of Quality*

¹² Vet to Vet is a non-VA program which offers peer-to-peer support to veterans of all eras; it is a self-help program of veterans helping veterans overcome both mental illness and substance abuse.

of Care. In addition, we reviewed VHA Handbook 1160.01, *Uniform Mental Health Services in VA Medical Centers and Clinics*, and a State of Montana Veterans Affairs Division, Division of Military Affairs, *PDHRA Task Force Report*. Further, we performed a literature search and reviewed selected research, public health, and public policy literature relevant to access to mental health care in rural areas.

This inspection was performed in accordance with *Quality Standards for Inspections* published by the President's Council on Integrity and Efficiency.

B. Analytic Methodology

1. Study Population

We used the Montana veterans in the LC database for this review. The population-based LC database identifies all veterans who were discharged alive from active military duty during July 1, 2005 – September 30, 2006, whether or not they enrolled in VA healthcare or applied for VA benefits after discharge (VA users or non-VA users). The LC database was created and currently is maintained by the OIG. Derived from more than 30 files acquired from VA and Department of Defense (DoD), the LC database integrates details from both VA and DoD data on these nearly a half million discharged service members. The LC database is the first and, to date, the only available population-based, comprehensive analytic database that integrates both VA and DoD data on these recently discharged veterans. This population-based approach eliminates potential selection bias in the selection of veterans. For example, veterans who are VA users may differ from non-VA users in fundamental ways that impact policy, planning, and resource decisions. In addition, VA outreach efforts could be better targeted if more information were available about non-VA users.

The OIG's descriptive report on the LC database, *Quantitative Assessment of Care Transition: The Population-Based LC Database*,¹³ was published in September 2007. The report describes the LC database in detail, including an overview of its structure, the methodology used to create it, data confidentiality issues, and the opportunity it provides for VA to make decisions using an evidence-based approach. Since publication of the report, we have updated the LC database with DoD and VA medical treatment files and vital status files and incorporated additional information. These updates are summarized below.

2. Percentage Service-Connected Disability Ratings

Disability compensation is part of the Veterans Benefits Administration (VBA) Compensation and Pension (C&P) program. It provides a tax-free monetary benefit paid to veterans who are disabled by injury or disease that was incurred or worsened during

¹³ VAOIG report number 07-00380-202, issued 9/13/2007, <http://www.va.gov/oig/54/reports/VAOIG-07-00380-202.pdf>

their military service. This benefit compensates veterans for the average loss in earnings capacity in civilian occupations commensurate with the severity of the service-connected conditions. Generally, service-disabled veterans who were discharged from military service under other than dishonorable conditions are entitled to compensation benefits, regardless of their income or employment status.

After a veteran submits a benefits claim to the VA Regional Office (VARO) of jurisdiction, a VARO veteran service representative (VSR) develops claim evidence by obtaining the veteran's military service medical records and other relevant medical information. The veteran undergoes a medical examination (known as a C&P exam) by a VA or contract clinician. A VARO rating specialist evaluates the evidence to (1) determine if the claimed impairments are service-connected; (2) if service connected, apply the medical criteria of VA's rating schedule to assign a degree of disability for each impairment; and (3) if there is more than one impairment, determine the veteran's overall degree of service-connected disability.

The VBA rating schedule classifies diagnostic codes (1) by body systems, such as musculoskeletal, mental, and cardiovascular; (2) by specific conditions, such as impairment of the knee, PTSD, and hypertensive disease; and (3) by the severity of the conditions. The degree of disability for both individual conditions and the overall disability is rated as a percentage in 10 percent increments from 0 percent (for conditions that are disabling but not to a compensable degree) to 100 percent (for conditions that are totally disabling).

After the determination of service-connection and disability rating has been completed, the VSR processing the claim enters the pertinent claim and rating information into VA's automated payment system to begin the veteran's monthly compensation payments. These payments are usually retroactive to the date the VARO received the claim. If a service-connected condition worsens, a veteran can file a claim for an increase in disability rating and thus higher compensation payments. If VA denies a disability claim or assigns a rating lower than what the veteran feels is appropriate, the veteran may appeal the decision.

The amount of monthly monetary compensation depends on the veteran's degree of service-connected disability and the number of dependents (spouse, children, and parents). As of December 1, 2008, the basic monthly compensation payments ranged from \$123 for a 10 percent-disabled veteran to \$2,673 for a 100 percent-disabled veteran. For disability ratings of 30 percent or higher, VA pays additional benefits for veterans' dependents. For example, if a 60 percent-disabled veteran has a spouse and one child, the monthly payment increases by \$155, from \$974 to \$1,129. For very serious disabilities, such as the loss of limb(s), VA pays additional Special Monthly Compensation (SMC). VA also pays additional benefits if the veteran requires the regular aid and attendance of another person.

Compensation payment rates are not (linearly) proportional to the corresponding degrees of disability, with the higher disability ratings having disproportionately larger monetary benefits than the lower ratings. For example, the basic monthly 100 percent compensation payment rate of \$2,673 is 21.7 times more than the 10 percent payment rate of \$123. In contrast, the 100 percent payment rate is 3.5 times more than the 50 percent payment rate of \$770.

Because of the compensation payment variation for a given disability rating, we chose to work with disability ratings directly. We added to the LC database up to 9 impairment-specific disability ratings and the combined overall disability rating as of the end of FY 2008. Note that the combined disability rating is not a simple sum of each specific disability rating. For example, multiple zero ratings of specific disability could result in a 10 percent combined disability rating. These disability ratings were taken from both the extract of the Benefits Delivery Network (BDN) database (referred to as the C&P file) and from the extract of Corporate Data Warehouse's VetsNet database (referred to as the Corporate file), as VBA is in transition from the BDN database to the Corporate one.

3. Geo-Processing Montana Mental Health Providers and Veterans

The geo-coding process translates addresses into geographic coordinates, that is, latitude and longitude. We identified all VHA mental health care service providers and providers under VHA paid service in Montana as of March 8, 2008. Through the remainder of this report, we use the term "VA providers" to indicate "VHA providers and providers under paid service." VHA providers located near Montana state borders were included if they were within 2 hours of travel time of Montana veterans. VHA acquired paid service through both contractual arrangement and fee basis. We do not distinguish paid service by these two mechanisms in the quantitative analysis. Based on treatment service(s) offered, each of the care providers were classified into one of the three types of service: medications only, therapy only, and combination of medications and therapy.

All Montana veterans in the LC database were identified for geo-coding, irrespective of their use of VHA services or VA benefits, in order to derive their travel time to VA mental healthcare providers. The Planning Systems Support Group (PSSG) of the VHA Policy Analysis and Forecasting (PA&F) Division in the Office of the Assistant Deputy Under Secretary for Health (ADUSH) for Policy and Planning (10A5) is charged with geo-coding all VHA providers and enrolled veterans (VHA users). Thus, for veterans who were VHA users and for VHA mental health providers, we captured their geo-data directly.

For non-VA mental health providers under VA auspices (paid service) and non-VHA users, we first assembled their addresses. The listing and addresses for non-VA mental health providers were acquired from the VAMC at Fort Harrison, Montana. For Montana non-VHA users in the LC database, their addresses were determined from the BDN file, Veterans Assistance Discharge System (VADS) file, and finally the VA/DoD Identity

Repository (VADIR) file, if missing from a previous file in this hierarchical order. The BDN address information was gathered from the mini SAS C&P dataset created on February 26, 2008. The mini file is created bi-monthly on the VA mainframe. VADS addresses were pulled from the most current information on the mainframe's quarterly VADS file that was gathered on April 24, 2008. The VADIR addresses were obtained from the VADIR file that was extracted on January 25, 2008.

We sent the addresses file of these non-VHA users and non-VHA mental health providers under VA auspices to PA&F in the Office of the ADUSH for Policy and Planning for geo-coding. These addresses were first checked against the National Change of Address (NCOA) data from the US Postal Service to insure best match in geo-processing. The positional accuracy of the geo-coded addresses was summarized into 5 categories that include: (1) street match, which is the most accurate geo-coding level; (2) ZIP+4 (or ZIP9) match, which is the next most accurate geo-coding level, indicating that every part of an address (street, city, State and ZIP) was matched except for the house number which is typically on the wrong side or between two known house numbers of a street; (3) ZIP+2 (ZIP7) match, which denotes a sector or neighborhood match within a ZIP code; (4) ZIP (or ZIP5) match, in which the location of an address is as certain only as the center (centroid) of mass delivery or the location of the post office of a ZIP code, which can encompass several neighborhoods or sectors; and (5) non-geo-coded, which indicates insufficient or invalid address information and thus cannot be geo-processed.

After geo-coding, PA&F constructed travel time bands around each of these VA health care providers. The 5 travel time bands are: (1) 15-minutes – travel time is within 15 minutes (inclusive), (2) 30-minutes – travel time is over 15 minutes but within 30 minutes, (3) 1 hour – travel time is over 30 minutes but within 1 hour, (4) 90-minutes – travel time is over one hour but within 90 minutes, and (5) 2 hours – travel time is over 90 minutes but within 2 hours.

The road network used in deriving travel time included freeways, primary, secondary and access roads, except for those roads in residential neighborhoods. Where available, ferry routes were also used.¹⁴ To account for the travel conditions on these different types of roads, the *2001 Urban Mobility Report of the Texas Transportation Institute* (Texas A&M University System) was used to derive average speeds for each type of road in different types of urban areas. In addition, the 2000 Census population density of the Census tracts was used to adjust the travel time on the each type of road. For more details, see *National Travel Time Analysis Methodology* of the Planning Systems Support Group, VHA Office of ADUSH for Policy and Planning.¹⁵

¹⁴ *FY 2006 Geographic Access to Veterans Health Administration*, Healthcare Analysis & Information Group, Office of the ADUSH for Policy and Planning, U.S. Department of Veterans Affairs; April 2008.

¹⁵ http://vaww.pssg.med.va.gov/PSSG/PSSG_TravelTime.pdf.

Travel times between veterans and health care providers were corroborated based on the geo-coordinates of the veterans and the travel bands around the providers. We derived travel times to nearest providers by service type (medication management, therapy, or both) and by VHA providers and providers under paid services. In the report, the travel times from veterans to nearest providers are presented in the upper limits of 15 minutes, 30 minutes, 1 hour, 90 minutes, 2 hours, and over 2 hours.

4. VA and DoD Treatment Information and Vital Status

Veterans' vital status information was updated through October 2008. All medical treatment information was updated to the end of FY 2008 (September 30, 2008). In addition, we added DoD treatment information from FY2002 and FY2003, so that the current LC database covers DoD treatment information from FY2002 through FY2008. VA treatment information covers the period from the beginning of FY2004 through the end of FY2008.

In addition to updating the original 11 diagnostic-specific indicators in the LC database, we added new diagnostic-specific indicators. These indicators were created based on patients' specific diagnostic codes of the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM), using the same business rules detailed in the 2007 OIG report.¹⁶ ICD-9-CM groups these disease diagnostic codes into 17 broad categories. We created an indicator for each of the 16 broad ICD-9-CM categories, except for Neoplasms (140-239) that used 2 indicators, one for Malignant Neoplasms (140-208) and another for Benign Neoplasms (210-239).

Mental Disorders were defined as any ICD-9-CM diagnosis from 290.0 to 319.0, which corresponds to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Revised* (DSM-IV-R). Indicators were also created for each individual category of mental disorders, based on the first 3 digits of the ICD-9-CM codes.

The category "Psychosocial or Behavioral Problems" were defined based on selected ICD-9-CM V-codes, a supplementary classification used to describe problems that are a focus for mental health treatment but are not considered mental health diagnoses.¹⁷ ¹⁸ ¹⁹ The specific V-codes included for defining this category are: V15.40 – V15.49; V60.0 – V60.2; V60.4; V61.0 – V61.22; V61.80 – V61.83; V61.90; V62.0; V62.2; V62.5; V62.80 – V62.89; V63.0; V63.9; V65.2; V65.5; V69.2 – V69.8; V70.1 – V70.2; V71.0 – V71.01;

¹⁶ *Quantitative Assessment of Care Transition: The Population-Based LC Database*, <http://www.va.gov/oig/54/reports/VAOIG-07-00380-202.pdf>.

¹⁷ Prophet S., *V codes: supplementary classification of factors influencing health status and contact with health services*, Journal of AHIMA (American Health Information Management Association), 1996; 67:16-25.

¹⁸ Hoge CW, Lesikar SE, Guevara R, et al., *Mental disorders among U.S. military personnel in the 1990s: association with high levels of health care utilization and early military attrition*, American Journal of Psychiatry, 2002; 159:1576-1583.

¹⁹ Karen.

V71.5; V71.81; and V79.0 – V79.1. Descriptions of these V-codes are shown in Appendix C of this report.

5. Statistical Analyses

Analyses included service members in the LC database who were discharged alive from active military duty during July 1, 2005 – September 30, 2006. Veterans whose age at separation was under 17 or over 65 were excluded. Age at separation was calculated based on date at separation and date of birth.

A veteran was considered to be a Montana veteran if residing in the State of Montana. All veterans other than Montana veterans were termed non-Montana veterans, including those with unknown states of residency.

A service member was considered as having served in a Reserve/National Guard unit if Reserve/National Guard status was indicated in any of the Reserve Affairs roster, OEF/OIF, or VADIR Reserve files before their separation date.

The “Other” category of service combined all branches other than Army, Navy, Air Force, and Marine Corps, including missing branch information.

Pay Grade was grouped into 5 categories: E1–E4, E5–E9, O1–O3, O5–O10, and “Other.” The “Other” group included W1–W5, codes other than specified above, and missing Pay Grade information.

Service Character was re-categorized as follows:

- **Honorable/General** incorporates “Honorable” and “General, Under Honorable Conditions.” This category also includes those judged “Honorable for VA Purposes” by VBA.
- **Other than Honorable.**
- **Bad Conduct/Dishonorable** includes “Bad Conduct” and “Dishonorable” discharges. It also includes those judged “Dishonorable for VA Purposes” by VBA.
- **Uncharacterized** consists of those without character of service listed.

Both DoD and VA treatment comprised only clinical encounters (that is, with at least one ICD-9 diagnosis code), excluding “occasions of services” (no ICD-9 codes).

The Indicator of Mental Health Diagnosis combined the Mental Disorder (ICD-9-CM) and Psychosocial or Behavioral Problems (ICD-9-CM V-codes).

Because of the large size of the population of interest, nearly all comparisons between subgroups were likely to be statistically significant, even though differences between

subgroups were very small and thus likely not of practical importance. For this reason, we did not report statistical significance.

All data analyses were performed using SAS statistical software (SAS Institute, Inc., Cary, North Carolina), version 9.2 (TS1M0). Maps were produced using ArcGIS software (Environmental Systems Research Institute (ESRI), Redlands, CA), version 9.2.²⁰

Part II. Results and Conclusions

Issue 1: Montana Veteran Characteristics and Geographic Access to Mental Health Care

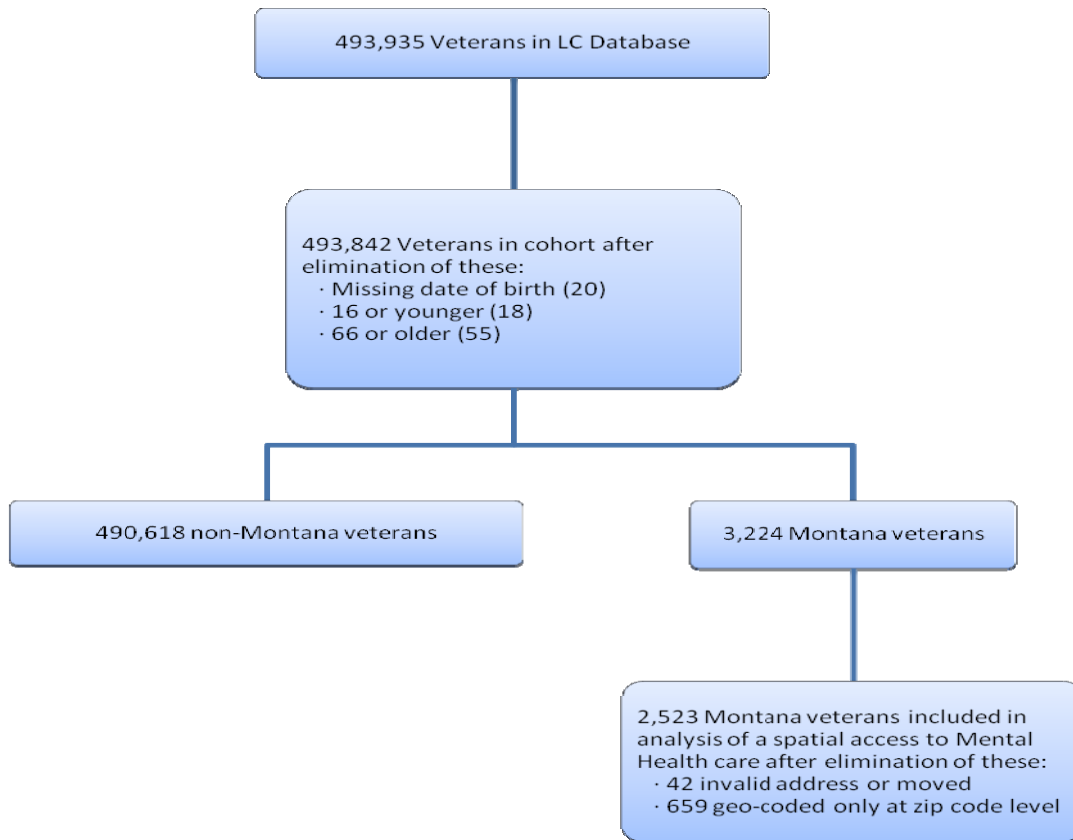
The LC database currently incorporates details about all 493,935 service members discharged or released alive from active military duty during the period July 1, 2005–September 30, 2006. Because of delays in reporting deaths, the total number discharged alive (493,935) in the current database differs from that (494,147) in the 2007 report *Quantitative Assessment of Care Transition: The Population-Based LC Database*.²¹

Of the 493,935 veterans in the LC database (**Figure 1**), we excluded from our analyses (1) 20 whose date of birth were unknown and (2) 16 veterans coded as under age 17 and 55 over age 65 at their time of separation from active military duty. A total of 93 veterans were excluded, which was less than 0.02 percent (93/493,935) of the entire population. Thus, our analyses included 493,842 service members whose ages at separation were between 17 and 65, inclusive. Among these, 3,224 (0.65 percent) were Montana veterans.

²⁰ GIS stands for geographic information systems.

²¹ <http://www.va.gov/oig/54/reports/VAOIG-07-00380-202.pdf>.

Figure 1: Pathway from LC database to study populations: service members discharged from active military service during 7/1/2005 - 9/30/06.



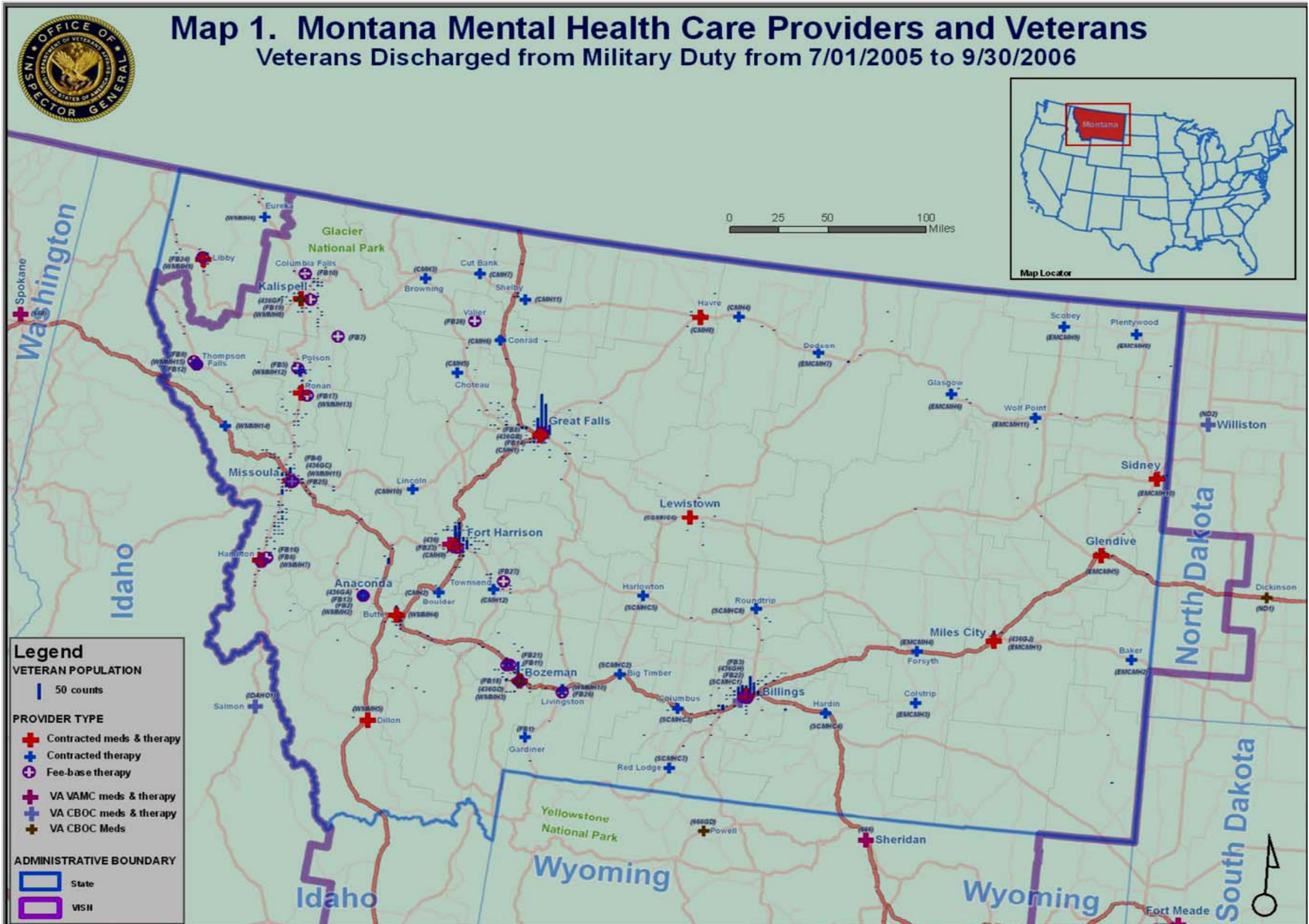
Of the 3,224 Montana veterans, 42 (1.3 percent) of them had moved out of the state or had invalid addresses. Among the 3,183 geo-coded addresses, 659 (21 percent) were coded at the accuracy of ZIP level. We excluded them from geo-analyses because of considerable uncertainty in their travel times to care providers since Montana is such a geographically vast state with low population density. Therefore, the number of Montana veterans included in the analysis of access to mental health care was 2,523, which represented 78 percent (2,523/3,224) of the Montana veterans.

There were 86 mental health provider sites, 79 of them within Montana. The other 7 VHA provider sites were located within a 2-hour travel zone of geo-coded Montana veterans. At 6 sites medication management only was available; at 55 sites therapy only was available; and at 25 sites both medication management and therapy were available. VHA does not provide therapy only service, and paid service does not provide medication only service. (See **Table 1**)

Table 1. Distribution of mental health providers as of March 2008, by mental health service type and provider type.

	# of Sites	# of Sites With Only Medication Management	# of Sites With Only Therapy	# of Sites With Both Meds & Therapy
Mental health providers in the state of Montana				
VHA Provider				
VAMC	1	0	0	1
CBOC/Satellite	7	4	0	3
Paid Service Provider				
Fee-Basis	26	0	26	0
Contract	45	0	29	16
<i>Total</i>	<i>79</i>	<i>4</i>	<i>55</i>	<i>20</i>
Mental health providers in bordering states				
VHA Provider				
VAMC	3	0	0	3
CBOC/Satellite	4	2	0	2
<i>Total</i>	<i>7</i>	<i>2</i>	<i>0</i>	<i>5</i>

Map 1 on the next page depicts the geographic distribution of (geo-coded) veterans and mental health care providers in Montana included in our analyses of access to care.



1. Characteristics of the Montana Veteran Population

Figure 2 shows that at the time of their separation, 55 percent (1,758/3,224) of Montana service members were serving in the active component compared to 71 percent (349,421/490,618) of non-Montana veterans. By the time of separation, more than twice the service members in the reserve component had served in OIF/OEF than those in the active component: 78 percent (1,142/1,466) vs. 34 percent (593/1,758) for Montana, and 81 percent (114,525/141,197) vs. 37 percent (130,862/349,421) for non-Montana.

Figure 2: Montana and non-Montana (all U.S., excluding Montana) veterans discharged from active military service during 7/1/2005 - 9/30/06 (17-65 years old at discharge), by military component and OIF/OEF status.

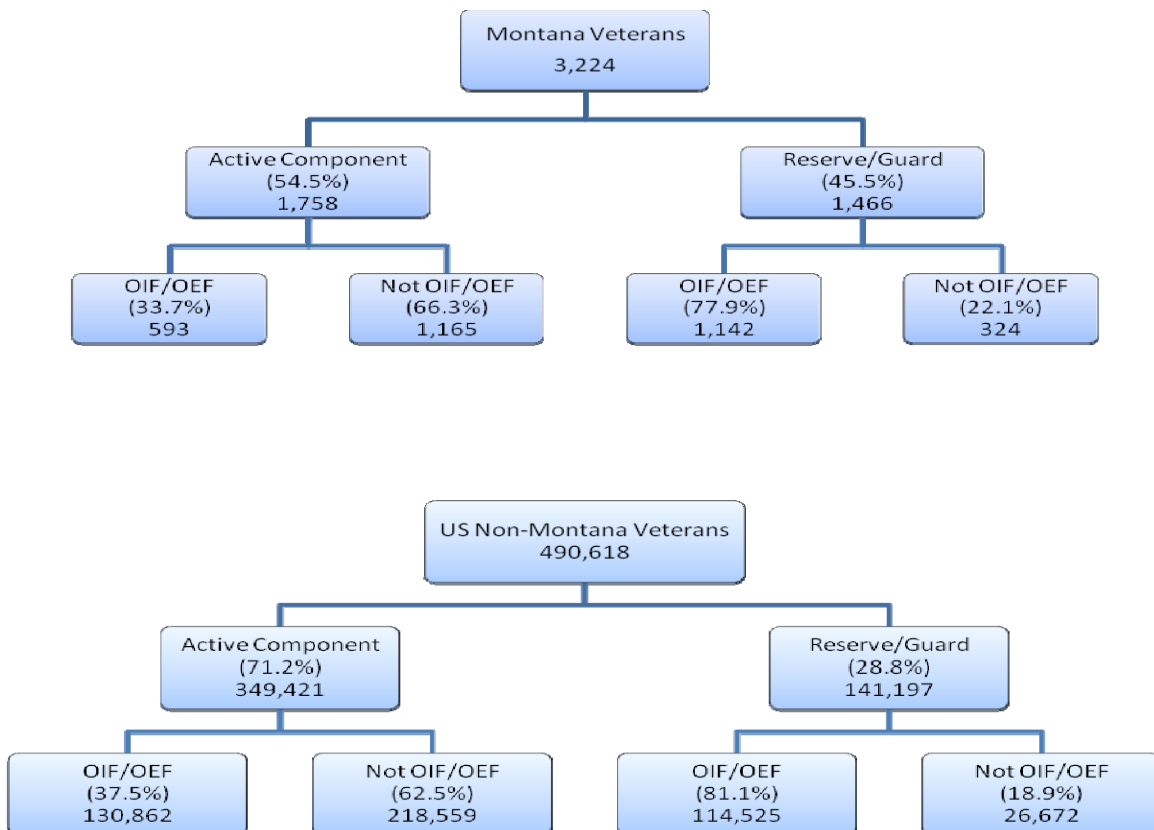


Table 2 shows the socio-demographic and military service related characteristics, health service utilization, and service-connected disability ratings of Montana veterans, by military component (active or reserve) and OIF/OEF status. Compared to their reserve counterparts at the time of separation from military duty, service members in the active component were more than 5 years younger on average; less than half had served in the Army; more than 54 percent were in the E1–E4 pay grade; and they were more likely to

have had a mental health diagnosis (mental disorder and/or psychosocial or behavioral problems).

Regardless of military component, compared to their non-OIE/OEF counterparts, Montana OIF/OEF veterans were twice as likely to use VA health care; over three times as likely to have had a VA mental health diagnosis; and more than twice as likely to be receiving VA compensation.

These patterns were similar to those of the non-Montana (All U.S. other than Montana) veteran population (See **Table 3**).

Compared to their non-Montana counterparts, Montana veterans were younger when they separated from active military service: the median discharge age of Montana service members was 1 year younger, except for non-OIF/OEF Montana reserve service members, whose median age at separation was 4 years younger (32 vs. 36). The median age of 32 means half of them were younger and half of them older than 32 at their discharge time. Average ages were greater than median ages, indicating distributions of age at separation were more skewed towards younger service members than elderly ones.

More Montana reserves had served in the Army than non-Montana reserves. Most of the veterans (94 percent or more), Montana or non-Montana, had at least one disease diagnosed while serving their active military duty (from July 1, 2002 until their separation). However, the percentage of Montana veterans who had at least one disease diagnosed by DoD (including TriCare) after separation was at least 9 points lower than their non-Montana counterparts, indicating fewer Montana veterans sought DoD health care after separation.

In contrast, the percent of OIF/OEF Montana veterans who sought VA care was over 10 points higher than their non-Montana counterparts after discharge from active duty (54 percent and 63 percent for Montana OIE/OEF active and reserve component, respectively; compared with 43 percent and 47 percent for non-Montana OIE/OEF active and reserve component, respectively). For those who had not served in OIF/OEF, the percentages of seeking VA care were similar, irrespective of their residency.

Percentages of mental health diagnoses (combined ICD-9-CM mental disorder and V-codes for psychosocial or behavioral problems) were generally comparable among Montana and non-Montana veterans, regardless of whether diagnosed by DoD or VA and before or after separation, although Montana tended a bit lower. The noticeable exception was OIF/OEF veterans who served in the reserve component: the mental health diagnosis by VA after separation was much higher among Montana veterans (38 percent) than non-Montana (26 percent), mostly for mental disorders (37 percent vs. 24 percent).

Table 2: Distributions of socio-demographic and military service characteristics, health service utilization and service-connected disability ratings of 3,224 Montana veterans discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge), by military component and OIF/OEF status.

	Active Component [1,758]		Reserve/Guard [1,466]	
	OIF/OEF [593]	Not OIF/OEF [1,165]	OIF/OEF [1,142]	Not OIF/OEF [324]
Age (years)				
Mean	27.0	26.4	32.7	33.6
Median	24	23	31	32
Sex (%)				
Male	88.0	76.5	92.1	85.8
Female	11.6	22.6	6.8	12.4
Missing	0.3	0.9	1.1	1.9
Branch (%)				
Army	41.5	48.8	86.4	91.1
Navy	17.2	14.9	1.3	0.3
Air Force	21.9	27.0	9.3	7.7
Marines	19.1	6.1	3.0	0.9
Other	0.3	3.2	0.0	0.0
Character of Service (%)				
Honorable/General	94.6	82.9	90.6	97.5
Other than Honorable	3.0	3.2	0.2	0.0
BC/Dishonorable	0.0	0.2	0.0	0.0
Uncharacterized/Missing	2.4	13.7	9.2	2.5
Pay Grade (%)				
E1-E4	54.3	68.2	34.7	33.0
E5-E9	36.9	24.2	53.2	52.5
O1-O3	6.2	3.6	4.9	7.7
O4-O10	2.0	3.3	4.1	6.5
Other	0.5	0.7	3.1	0.3
DoD Diagnosed (FY2002-FY2008) (%)				
Before Discharge	99.5	95.1	97.7	98.2
After Discharge	99.3	94.2	96.9	97.8
VA Diagnosed (FY2004-FY2008) (%)				
Before Discharge	18.0	28.5	26.5	26.2
After Discharge	56.2	25.8	65.2	32.1
DoD Diagnosed (FY2002-FY2008) (%)				
Mental Health (Mental Disorders + V-codes)				
Before Discharge	10.1	7.3	9.0	9.6
After Discharge	53.6	22.6	63.1	29.0
Mental Disorders (ICD-9-CM: 290-319)				
Before Discharge	46.5	35.9	11.7	22.5
After Discharge	6.1	8.3	5.4	6.2
V-codes for Psychosocial/Behavioral Problems				
Before Discharge	35.6	28.8	9.4	19.8
After Discharge	4.9	5.7	4.9	5.9
VA Diagnosed (FY2004-FY2008) (%)				
Mental Health (Mental Disorders + V-codes)				
Before Discharge	30.5	22.8	4.6	7.1
After Discharge	-	4.0	1.7	-
Mental Disorders (ICD-9-CM: 290-319)				
Before Discharge	1.7	0.8	2.3	2.2
After Discharge	26.5	7.6	38.1	6.5
V-codes for Psychosocial/Behavioral Problems				
Before Discharge	1.2	-	2.3	-
After Discharge	26.0	7.0	36.8	6.2
Percent with Service Connected Disability				
Overall Disability Rating, Mean	45.0	21.2	39.2	17.6
Overall Disability Rating, Median	41.4	39.7	35.9	26.8
Percent with Service Connected PTSD				
Overall Disability Rating, Mean	40	40	30	20
Overall Disability Rating, Median	13.5	-	19.8	-
	52.3	-	47.0	-
	50	-	40	-

- Not reported because there were fewer than 10 veterans.

Table 3: Distributions of socio-demographic and military service characteristics, health service utilization and service-connected disability ratings of 493,842 non-Montana (U.S. excluding Montana) veterans discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge), by military component and OIF/OEF status.

	Active Component [349,421]		Reserve/Guard [141,197]	
	OIF/OEF [130,862]	Not OIF/OEF [218,559]	OIF/OEF [114,525]	Not OIF/OEF [26,672]
Age (years)				
Mean	28.1	27.4	33.1	35.9
Median	25	24	32	36
Sex (%)				
Male	88.1	78.1	89.2	80.7
Female	11.4	20.1	9.0	16.8
Missing	0.5	1.9	1.9	2.5
Branch (%)				
Army	42.0	45.9	77.5	72.4
Navy	22.5	20.0	4.6	4.4
Air Force	15.9	19.0	10.9	11.4
Marines	19.4	12.1	6.9	6.7
Other	0.2	3.0	0.1	5.2
Character of Service (%)				
Honorable/General	94.4	82.2	86.6	84.1
Other than Honorable	3.3	4.7	0.2	0.6
BC/Dishonorable	0.1	0.2	0.0	0.0
Uncharacterized/Missing	2.3	12.8	13.2	15.3
Pay Grade (%)				
E1-E4	51.0	63.4	32.3	25.7
E5-E9	40.1	26.0	53.8	53.8
O1-O3	5.1	4.7	5.4	8.1
O4-O10	3.1	5.1	7.0	10.5
Other	0.8	0.8	1.5	2.0
DoD Diagnosed (FY2002-FY2008) (%)				
Before Discharge	99.5	96.6	95.5	94.6
After Discharge	99.3	95.6	93.5	92.7
After Discharge	27.4	38.2	45.7	53.9
VA Diagnosed (FY2004-FY2008) (%)				
Before Discharge	46.3	25.9	50.6	30.9
After Discharge	8.5	7.1	13.1	13.1
After Discharge	43.2	22.4	47.3	26.2
DoD Diagnosed (FY2002-FY2008) (%)				
Mental Health (Mental Disorders + V-codes)				
Before Discharge	45.0	38.2	16.6	22.5
After Discharge	6.3	10.1	8.7	11.5
Mental Disorders (ICD-9-CM: 290-319)				
Before Discharge	33.3	30.5	10.5	17.3
After Discharge	5.4	7.3	7.5	9.7
V-codes for Psychosocial/Behavioral Problems				
Before Discharge	29.0	22.9	9.6	11.0
After Discharge	1.9	4.5	3.1	4.2
VA Diagnosed (FY2004-FY2008) (%)				
Mental Health (Mental Disorders + V-codes)				
Before Discharge	1.1	1.1	3.2	2.9
After Discharge	23.1	8.2	26.3	10.2
Mental Disorders (ICD-9-CM: 290-319)				
Before Discharge	0.8	0.9	2.6	2.3
After Discharge	20.7	7.0	23.5	8.9
V-codes for Psychosocial/Behavioral Problems				
Before Discharge	0.4	0.5	1.2	1.0
After Discharge	9.6	3.3	11.1	4.0
Percent with Service Connected Disability	34.0	21.4	18.0	14.6
Overall Disability Rating, Mean	39.1	40.4	37.3	37.5
Overall Disability Rating, Median	40	40	30	30
Percent with Service Connected PTSD	7.0	0.5	5.4	0.7
Overall Disability Rating, Mean	56.9	63.9	57.9	64.3
Overall Disability Rating, Median	60	60	60	60

As of September 2008, more Montana veterans received VA compensation, especially for those who had served in OIF/OEF: 45 percent for active component and 39 percent for reserve component Montana veterans, compared to 34 percent for active component and 18 percent for reserve component among non-Montana veterans. The overall disability ratings were quite similar. For the overall disability ratings which included any component for PTSD, the percentage of Montana OIF/OEF veterans receiving compensation was more than twice as high as for their non-Montana counterparts. The median PTSD disability rating was 50 percent for Montana active component and 40 for reserve; it was 60 percent for non-Montanans.

2. Distribution of Disease Diagnostic Categories and Mental Disorder Diagnoses

Table 4 details the distribution of 17 broad ICD-9-CM diagnostic categories and the V-codes for psychosocial or behavioral problems, by military component and OIF/OEF status for Montana veterans. The neoplasm category was split into two subcategories, malignant or benign neoplasm. These diagnoses are combined from both DoD (during FY2002 – FY2008) and VA (during FY2004 – FY2008).

Table 4: Distributions of ICD-9-CM broad disease categories of DoD and VA diagnoses (from October 1, 2001 to September 30, 2008) of 3,224 Montana veterans discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge), by military component and OIF/OEF status.

ICD-9 CM Categories	Active Component [1,758]		Reserve/Guard [1,466]	
	OIF/OEF [593]	Not OIF/OEF [1,165]	OIF/OEF [1,142]	Not OIF/OEF [324]
	Infectious and Parasitic Disease (001-139)	42.0	32.4	20.3
Malignant Neoplasm (140-208)	1.7	1.0	0.9	-
Benign Neoplasm (210-239)	11.1	8.2	6.5	10.8
Endocrine, Nutritional and Metabolic Disease, and Immunity Disorders (240-279)	26.0	20.8	19.4	20.4
Diseases of the Blood and Blood Forming Organs (280-289)	2.5	2.7	2.3	-
Mental Disorders (290-319)	48.7	34.9	43.1	26.9
Diseases of the Nervous System and Sense Organs (320-389)	73.9	60.4	64.0	63.6
Diseases of the Circulatory System (390-459)	20.2	13.9	14.9	14.8
Diseases of the Respiratory System (460-519)	59.2	55.3	36.2	67.6
Diseases of the Digestive System (520-579)	37.3	26.4	34.8	29.9
Diseases of the Genitourinary System (580-629)	21.8	19.3	9.2	13.0
Complications of Pregnancy, Childbirth, and the Puerperium (630-677)	20.7	18.1	7.8	11.7
Diseases of the Skin and Subcutaneous Tissue (680-709)	39.6	31.7	19.6	25.6
Diseases of the Musculoskeletal System and Connective Tissue (710-739)	70.7	56.1	58.1	60.2
Congenital Anomalies (740-759)	7.1	5.0	2.2	-
Certain Conditions Originating in the Perinatal Period (760-779)	-	-	-	-
Symptoms, Signs, and Ill-Defined Conditions (780-799)	64.8	50.1	49.8	51.2
Injury and Poisoning (800-999)	72.3	50.9	43.9	55.3
V-Codes Indicating a Psychosocial or Behavioral Problem ¹	34.7	25.8	14.1	9.6

- Not reported because there were fewer than 10 veterans.

¹See Appendix D for specific codes.

More than half of Montana veterans had a diagnosis of disease of the nervous system and sense organs, and disease of the musculoskeletal system and connective tissues,

regardless of their active or reserve, OIF/OEF status. However, more than 70 percent of veterans separated from active OIF/OEF service had the diagnoses. Veterans served in OIF/OEF were more likely to have a mental disorder diagnosis (49 percent for active component and 43 percent for reserve), compared to their non-OIF/OEF counterparts (35 percent for active and 27 percent for reserve). Veterans separated from active component were 2.5 times more like to have a psychosocial/behavioral problem than their reserve counterparts.

Similar patterns were observed for non-Montana veterans (**Table 5**) although the absolute magnitude fluctuated.

Table 5: Distributions of ICD-9-CM broad disease categories of DoD and VA diagnoses (from October 1, 2001 to September 30, 2008) of 490,618 non-Montana veterans (U.S. excluding Montana) veterans discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge), by military component and OIF/OEF status.

ICD-9 CM Categories	Active Component [349,421]		Reserve/Guard [141,197]	
	OIF/OEF [130,862]	Not OIF/OEF [218,559]	OIF/OEF [114,525]	Not OIF/OEF [26,672]
	Infectious and Parasitic Disease (001-139)	43.5	37.8	21.3
Malignant Neoplasm (140-208)	1.4	1.6	1.2	1.9
Benign Neoplasm (210-239)	11.0	10.3	6.9	11.1
Endocrine, Nutritional and Metabolic Disease, and Immunity Disorders (240-279)	28.0	24.1	22.1	27.1
Diseases of the Blood and Blood Forming Organs (280-289)	4.5	4.9	2.7	4.1
Mental Disorders (290-319)	44.7	37.1	33.3	28.2
Diseases of the Nervous System and Sense Organs (320-389)	67.7	60.6	47.4	55.1
Diseases of the Circulatory System (390-459)	20.9	18.5	17.2	23.5
Diseases of the Respiratory System (460-519)	60.3	61.3	41.7	49.9
Diseases of the Digestive System (520-579)	38.5	32.2	29.4	30.0
Diseases of the Genitourinary System (580-629)	22.8	22.5	13.3	20.8
Complications of Pregnancy, Childbirth, and the Puerperium (630-677)	20.8	20.6	10.2	16.1
Diseases of the Skin and Subcutaneous Tissue (680-709)	41.8	36.7	25.2	30.5
Diseases of the Musculoskeletal System and Connective Tissue (710-739)	69.5	61.9	52.9	58.8
Congenital Anomalies (740-759)	6.2	6.0	3.1	5.3
Certain Conditions Originating in the Perinatal Period (760-779)	0.3	0.3	0.1	0.2
Symptoms, Signs, and Ill-Defined Conditions (780-799)	66.0	58.5	48.8	56.1
Injury and Poisoning (800-999)	68.1	57.9	42.2	51.3
V-Codes Indicating a Psychosocial or Behavioral Problem ¹	35.7	27.5	21.8	17.7

¹See Appendix D for specific codes.

Table 6 shows the distribution of each individual category of mental disorders (based on the first 3 digits of ICD-9-CM codes from 290.0 to 319.0), PTSD, and adjustment reaction excluding PTSD for Montana veterans.

Table 6: Distributions of VA and DoD mental disorder diagnoses (from October 1, 2001 to September 30, 2008) of 3,224 Montana veterans discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge), by military component and OIF/OEF status.

Mental Disorders (ICD-9-CM: 290-319)	Active Component		Reserve/Guard	
	[1,758]		[1,466]	
	OIF/OEF [593]	Not OIF/OEF [1,165]	OIF/OEF [1,142]	Not OIF/OEF [324]
Alcohol and Drug induced mental disorders (Alcohol & drug psychoses) (291 & 292)	1.7	0.8	1.1	-
Episodic mood disorders (Affective psychosis) (296)	8.8	6.4	7.4	3.7
Anxiety, dissociative and somatoform disorders (Neurotic Disorders) (300)	12.0	9.0	9.6	4.3
Personality disorders (301)	2.7	4.3	0.8	-
Sexual and gender identity disorders (302)	2.5	1.6	1.5	-
Alcohol dependence syndromes (303)	8.9	2.8	5.3	-
Drug dependence (304)	2.0	1.2	-	-
Non-dependent abuse of drugs (305)	29.7	14.9	21.4	16.1
Special symptoms or syndromes, not elsewhere classified (307)	7.8	5.3	5.1	3.1
Acute reaction to stress (308)	2.7	2.0	3.0	-
Adjustment reaction excluding PTSD (309 excluding 309.81)	14.5	14.2	10.1	4.9
PTSD (309.81)	18.4	2.4	25.2	-
Specific non-psychotic mental disorders due to brain damage (310)	-	-	1.5	-
Depressive disorder, not elsewhere classified (311)	18.0	11.0	19.7	7.1
Disturbance of conduct, not elsewhere classified (312)	-	-	-	-
Other mental disorder diagnoses ¹	6.1	3.7	4.3	-

- Not reported because there were fewer than 10 veterans.

¹Other ICD-9-CM codes for mental disorders (290-319) than those already listed in the table.

For Montana veterans, the most common mental disorder diagnoses were non-dependent abuse of drugs, PTSD, and depressive disorders. While diagnoses of non-dependent abuse of drugs were similar for the non-OIF/OEF active components (15 percent) and non-OIF/OEF reserve components (16 percent), they were considerably lower than for both the OIF/OEF active (30 percent) and reserve (21 percent) counterparts. For PTSD, there is a marked difference when comparing the OIF/OEF active (18 percent) and OIF/OEF reserve component veterans (25 percent). Two percent of the non-OIF/OEF active component veterans had at least one PTSD diagnosis. The number of non-OIF/OEF reserve service members diagnosed with PTSD was too small to report (fewer than 10 veterans). Depressive disorder was also lower in the non-OIF/OEF active (11 percent) and reserve components (7 percent) than their OIF/OEF counterparts.

Table 7 shows that for non-Montana veterans, the most common mental disorder diagnoses were also non-dependent abuse of drugs, although it was lower in the non-OIF/OEF than in the OIF/OEF, as was the case with Montana veterans. Noticeably, among the non-Montana veterans this diagnosis was 5 points lower in both OIF/OEF active and reserve components compared with their Montana counterparts. As with Montana veterans, a marked difference was noted in the percentage of PTSD in OIF/OEF veterans compared with their non-OIF/OEF counterparts. PTSD and depressive disorder percentages were higher in the Montana OIF/OEF active and reserve components compared with non-Montana OIF/OEF active and reserve components.

Table 7: Distributions of VA and DoD mental disorder diagnoses (from October 1, 2001 to September 30, 2008) of 490,618 non-Montana veterans (U.S. excluding Montana) veterans discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge), by military component and OIF/OEF status.

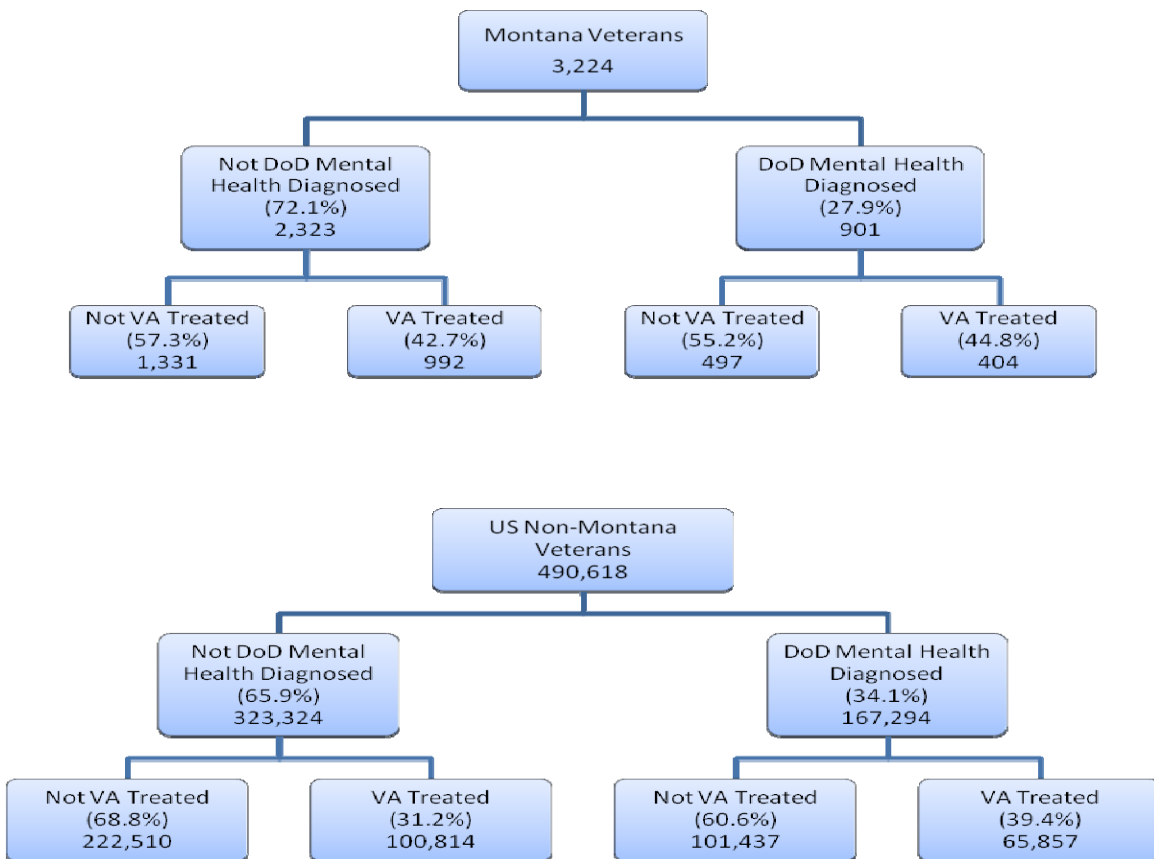
Mental Disorders (ICD-9-CM: 290-319)	Active Component		Reserve/Guard	
	[349,421]		[141,197]	
	OIF/OEF [130,862]	Not OIF/OEF [218,559]	OIF/OEF [114,525]	Not OIF/OEF [26,672]
Alcohol and Drug induced mental disorders (Alcohol & Drug Psychoses) (291 & 292)	1.6	1.1	0.9	0.9
Episodic mood disorders (Affective psychosis) (296)	7.9	6.3	5.7	4.5
Anxiety, dissociative and somatoform disorders (Neurotic Disorders) (300)	12.5	10.0	9.1	7.1
Personality disorders (301)	2.8	4.3	1.0	1.3
Sexual and gender identity disorders (302)	2.1	1.9	2.3	2.9
Alcohol dependence syndromes (303)	6.4	3.4	2.8	2.2
Drug dependence (304)	1.9	1.3	1.0	0.9
Non-dependent abuse of drugs (305)	24.0	15.5	16.1	13.5
Special symptoms or syndromes, not elsewhere classified (307)	5.8	6.2	3.4	3.9
Acute reaction to stress (308)	2.8	1.9	2.0	1.4
Adjustment Reaction Excluding PTSD (309 Excluding 309.81)	14.2	13.7	11.0	7.7
PTSD (309.81)	13.8	2.5	13.6	3.4
Specific non-psychotic mental disorders due to brain damage (310)	1.6	0.6	1.6	0.7
Depressive disorder, not elsewhere classified (311)	13.0	10.1	10.2	7.5
Disturbance of conduct, not elsewhere classified (312)	0.6	0.5	0.4	0.3
Other mental disorder diagnoses ¹	4.7	4.1	3.4	2.8

¹Other ICD-9-CM codes for mental disorders (290-319) than those already listed in the table.

3. Characteristics of VA Users and Non-VA Users

Figure 3 shows that 28 percent (901/3,224) of Montana veterans were diagnosed with mental health issues (mental disorders and/or psychiatric disabilities) by DoD before their separation, compared with 34 percent of non-Montana veterans (167,294/490,618). Montana veterans were more likely to become VA care users after separation (43 percent of those without DoD mental health diagnoses and 45 percent of those with diagnoses) than non-Montana veterans (31 percent of those without DoD mental health diagnoses and 39 percent of those with diagnoses). The VA care included care provided both by VHA providers and by providers under VA auspices (paid service).

Figure 3: Montana and non-Montana (all U.S., excluding Montana) veterans discharged from active military service during 7/1/2005 - 9/30/06 (17-65 years old at discharge), stratified by DoD mental health¹ diagnoses before discharge and VA users and non-users.



¹ICD-9-CM mental disorders (290-319) and v-codes indicating a psychosocial or behavioral problem.

Table 8 gives the socio-demographic and military service related characteristics, mental health service utilization, and VA compensation and disability ratings of Montana veterans by users of VA care after separation and non-users, stratified by DoD mental health diagnoses before discharge. For Montana veterans who were diagnosed with mental health issues (mental disorder and/or psychosocial or behavioral problems) by DoD before separation, users of VA care tended to be older than non-users; a higher percentage were male, served in the Army and OIF/OEF, earned honorable character of service, were in the E5–E9 pay grade, and were receiving VA compensation. Note that Bad Conduct and Dishonorable discharges issued by general courts martial may bar VA benefits. Veterans separated administratively under “Other Than Honorable” conditions may request that their discharge be reviewed for possible re-characterization for the purpose of obtaining VA benefits.

Although different somewhat in magnitude, similar patterns were observed for Montana veterans who were not diagnosed with mental health issues and who were users of VHA.

The distributions of characteristics of Montana VA and non-VA users were quite similar to those of non-Montanans (See **Table 9**). One noticeable difference was that lower percentages of non-Montana VA users were receiving compensation as of September 2008 (65 percent for DoD mental health diagnosed and 46 percent for not diagnosed vs. corresponding 78 percent and 63 percent in Montana), but percentages of non-Montana non-VA users were somewhat higher (11 percent for DoD mental health diagnosed and 7 percent for not diagnosed vs. corresponding 5 percent and 4 percent in Montana). In addition, 22 percent of Montana VA users were receiving compensation that included a component for PTSD, regardless of DoD mental health diagnoses; but the percentages for non-Montana VA users were lower, 13 percent for those with DoD mental health diagnoses and 7 for those without.

Table 8: Distributions of socio-demographic and military service characteristics, military components and service-connected disability ratings of 3,224 Montana veterans discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge) of VA users and non-users, stratified by DoD mental health¹ diagnoses before discharge.

	Not DoD MH Diagnosed [2,323]		DoD MH Diagnosed [901]	
	Not VA Treated [1,331]	VA Treated [992]	Not VA Treated [497]	VA Treated [404]
Age (years)				
Mean	27.7	33.3	25.7	30.5
Median	24	31	23	27
Sex (%)				
Male	84.8	92.0	75.1	81.4
Female	13.9	7.4	23.7	18.4
Missing	1.4	0.6	1.2	0.3
Branch (%)				
Army	63.0	78.1	47.7	60.6
Navy	8.3	6.0	16.5	9.9
Air Force	19.8	8.2	29.8	20.8
Marines	7.4	7.3	3.8	7.9
Other	1.5	0.5	2.2	0.7
Character of Service (%)				
Honorable/General	86.1	93.6	83.7	96.0
Other than Honorable	1.4	0.1	7.0	0.7
BC/Dishonorable	0.1	0.0	0.2	0.0
Uncharacterized/Missing	12.5	6.4	9.1	3.2
Pay Grade (%)				
E1-E4	55.1	34.3	69.6	49.8
E5-E9	34.2	52.8	24.6	44.1
O1-O3	5.8	5.7	2.6	3.5
O4-O10	3.8	4.7	2.6	1.7
Other	1.1	2.5	0.6	1.0
Active Component (%)				
OIF/OEF	11.5	16.5	24.6	38.1
Not OIF/OEF	46.5	12.9	56.9	33.4
Reserve Component (%)				
OIF/OEF	28.3	63.6	8.9	22.3
Not OIF/OEF	13.7	7.0	9.7	6.2
DoD MH Diagnosis after Discharge ¹ (%)	5.7	3.8	10.1	12.6
VA Mental Health Diagnosis ¹ (%)	-	47.3	-	59.7
Before Discharge	-	2.2	-	5.9
After Discharge	-	46.7	-	58.9
Percent with Service Connected Disability	4.1	63.0	5.2	77.5
Overall Disability Rating, Mean	30.0	35.7	31.2	43.8
Overall Disability Rating, Median	30	30	20	40
Percent with Service Connected PTSD	-	22.2	-	22.3
Overall Disability Rating, Mean	-	46.0	-	54.9
Overall Disability Rating, Median	-	40	-	60

- Not reported because there were fewer than 10 veterans.

¹ICD-9-CM mental disorders (290-319) and v-codes indicating a psychosocial or behavioral problem.

Table 9: Distributions of socio-demographic and military service characteristics, military components and service-connected disability ratings of 490,618 non-Montana veterans (U.S. excluding Montana) veterans discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge) of VA users and non-users, stratified by DoD mental health¹ diagnoses before discharge.

	Not DoD MH Diagnosed [323,324]		DoD MH Diagnosed [167,294]	
	Not VA Treated [222,510]	VA Treated [100,814]	Not VA Treated [101,437]	VA Treated [65,857]
Age (years)				
Mean	28.7	32.1	27.1	31.0
Median	25	29	24	27
Sex (%)				
Male	85.4	86.9	78.6	79.2
Female	12.6	11.7	20.2	20.0
Missing	2.0	1.5	1.2	0.8
Branch (%)				
Army	51.0	62.7	47.5	58.7
Navy	16.0	12.1	21.6	15.0
Air Force	16.6	10.4	19.5	16.3
Marines	14.0	13.8	10.3	9.3
Other	2.5	1.1	1.2	0.7
Character of Service (%)				
Honorable/General	83.8	91.0	82.5	95.7
Other than Honorable	3.1	0.2	7.4	0.8
BC/Dishonorable	0.1	0.0	0.3	0.0
Uncharacterized/Missing	13.1	8.9	9.7	3.5
Pay Grade (%)				
E1-E4	51.2	39.1	63.6	47.5
E5-E9	34.6	48.9	28.7	45.0
O1-O3	6.6	4.7	3.8	3.0
O4-O10	6.5	5.8	3.3	3.6
Other	1.0	1.6	0.6	1.0
Active Component (%)				
OIF/OEF	20.0	27.2	29.3	44.2
Not OIF/OEF	49.3	25.1	59.0	35.9
Reserve Component (%)				
OIF/OEF	23.5	42.9	8.0	16.6
Not OIF/OEF	7.2	4.7	3.7	3.4
DoD MH Diagnosis after Discharge ¹ (%)	6.6	6.8	12.5	14.0
VA Mental Health Diagnosis ¹ (%)	0.3	43.1	1.3	59.2
Before Discharge	0.3	2.7	1.3	5.1
After Discharge	-	42.3	-	58.4
Percent with Service Connected Disability	7.1	45.7	10.7	65.3
Overall Disability Rating, Mean	31.1	35.9	36.9	46.4
Overall Disability Rating, Median	30	30	30	40
Percent with Service Connected PTSD	0.2	7.1	0.5	12.9
Overall Disability Rating, Mean	48.4	53.7	50.5	62.0
Overall Disability Rating, Median	50	50	50	60

- Not reported because there were fewer than 10 veterans.

¹ICD-9-CM mental disorders (290-319) and v-codes indicating a psychosocial or behavioral problem.

4. Representativeness of Montana Veterans Included in the Access To Care Analyses

After excluding 701 from the Montana veteran population of 3,224 (42 of them had moved out of the state or had invalid addresses and 659 were geo-coded at the accuracy of ZIP level), 78 percent (2,523/3,224) of this population were included in the analysis of access to care (geo-coded Montana veterans). We compared the distribution of selected characteristics among the geo-coded Montana veterans with that of the Montana veteran population to check for the representativeness of these geo-coded veterans.

Comparing **Tables 10–13** with corresponding Tables 2, 4, 6, and 8, the magnitude of the differences was very small. Thus, the population of geo-coded Montana veterans included in the analyses of access to care can be considered to be reasonably representative of the Montana population from which they were drawn, in terms of their characteristics, disease diagnoses, and becoming VA users after separation from military active duty.

5. Geographic Access to Mental Health Care in Montana

Table 14 shows travel times to the nearest VA mental health care providers (including paid services) in Montana by military component and OIF/OEF status. Over 82 percent of this veteran population had access to a VA mental health provider (offering at least medication management or therapy service) within 15 minutes of travel. Access to a provider within half an hour of travel increased this to 95 percent of the population. Almost all have access to a provider within an hour of travel. As a result, distributions of travel times to nearest mental health providers were very similar across military component and OIF/OEF status. The distributions of travel times to a nearest provider offering at least therapy service were very similar to those of access to the nearest VA mental health provider as observed above.

Over 70 percent of the population had access within 15 minutes of travel to a nearest provider with both medications and therapy services, and over 88 percent of veterans had access within one hour. The marked exception was non-OIF/OEF reserve component veterans; 12 percent of them had to travel over 1 hour, and 4 percent had to travel over 2 hours. Similar travel time distributions were observed for access to providers offering at least medication service.

Table 10: Distributions of socio-demographic and military service characteristics, health service utilization and service-connected disability ratings of 2,523 Montana geo-coded veterans (excluding veterans geo-coded at zip-code level) discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge), by military component and OIF/OEF status.

	Active Component [1,382]		Reserve/Guard [1,141]	
	OIF/OEF [455]	Not OIF/OEF [927]	OIF/OEF [908]	Not OIF/OEF [233]
Age (years)				
Mean	27.0	26.7	32.8	33.8
Median	24	23	31	32
Sex (%)				
Male	88.6	76.9	92.2	85.8
Female	11.0	22.3	6.7	12.5
Missing	0.4	0.8	1.1	1.7
Branch (%)				
Army	39.8	48.2	86.1	88.8
Navy	17.1	13.6	1.2	0.4
Air Force	22.9	28.8	9.9	9.4
Marines	20.0	6.4	2.8	1.3
Other	0.2	3.0	0.0	0.0
Character of Service (%)				
Honorable/General	94.3	84.3	91.2	96.6
Other than Honorable	3.3	2.8	0.1	0.0
BC/Dishonorable	0.0	0.2	0.0	0.0
Uncharacterized/Missing	2.4	12.7	8.7	3.4
Pay Grade (%)				
E1-E4	53.4	67.6	33.6	32.2
E5-E9	36.3	24.9	53.5	51.1
O1-O3	7.0	3.2	5.4	7.7
O4-O10	2.6	3.5	4.5	8.6
Other	0.7	0.8	3.0	0.4
DoD Diagnosed (FY2002-FY2008) (%)				
Before Discharge	99.6	94.6	97.5	97.9
After Discharge	99.3	93.6	96.7	97.4
After Discharge	18.5	28.5	27.2	27.9
VA Diagnosed (FY2004-FY2008) (%)				
Before Discharge	57.4	26.1	65.4	32.6
After Discharge	9.9	8.3	8.9	8.6
After Discharge	55.0	22.7	63.1	29.6
DoD Diagnosed (FY2002-FY2008) (%)				
Mental Health (Mental Disorders + V-codes)				
Before Discharge	44.0	36.3	10.9	24.0
After Discharge	6.4	8.5	5.5	6.4
Mental Disorders (ICD-9-CM: 290-319)				
Before Discharge	32.5	28.7	8.8	21.9
After Discharge	5.1	5.8	5.0	6.0
V-codes for Psychosocial/Behavioral Problems				
Before Discharge	29.2	23.7	4.2	6.4
After Discharge	-	3.9	1.8	-
VA Diagnosed (FY2004-FY2008) (%)				
Mental Health (Mental Disorders + V-codes)				
Before Discharge	-	-	2.4	-
After Discharge	25.7	7.8	36.8	7.3
Mental Disorders (ICD-9-CM: 290-319)				
Before Discharge	-	-	2.4	-
After Discharge	25.3	7.4	35.6	6.9
V-codes for Psychosocial/Behavioral Problems				
Before Discharge	-	-	-	-
After Discharge	5.7	1.3	8.6	-
Percent with Service Connected Disability	45.5	22.8	38.7	17.2
Overall Disability Rating, Mean	41.7	39.5	36.3	27.3
Overall Disability Rating, Median	40	40	30	20
Percent with Service Connected PTSD	14.1	-	20.0	-
Overall Disability Rating, Mean	52.3	-	46.8	-
Overall Disability Rating, Median	50	-	40	-

- Not reported because there were fewer than 10 veterans.

Table 11: Distributions of ICD-9-CM broad disease categories of DoD and VA diagnoses (from October 1, 2001 to September 30, 2008) of 2,523 Montana geo-coded veterans (excluding veterans geo-coded at zip-code level) discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge), by military component and OIF/OEF status.

ICD-9 CM Categories	Active Component		Reserve/Guard	
	[1,382]		[1,141]	
	OIF/OEF [455]	Not OIF/OEF [927]	OIF/OEF [908]	Not OIF/OEF [233]
Infectious and Parasitic Disease (001-139)	41.5	32.6	20.0	27.0
Malignant Neoplasm (140-208)	-	1.1	-	-
Benign Neoplasm (210-239)	11.0	8.9	6.8	9.0
Endocrine, Nutritional and Metabolic Disease, and Immunity Disorders (240-279)	24.6	20.9	19.6	22.8
Diseases of the Blood and Blood Forming Organs (280-289)	-	2.7	1.9	-
Mental Disorders (290-319)	46.8	34.6	41.5	28.3
Diseases of the Nervous System and Sense Organs (320-389)	74.7	61.5	64.8	60.9
Diseases of the Circulatory System (390-459)	20.9	13.9	14.4	15.5
Diseases of the Respiratory System (460-519)	61.1	55.6	37.0	67.4
Diseases of the Digestive System (520-579)	37.8	27.5	34.8	30.0
Diseases of the Genitourinary System (580-629)	22.0	20.4	8.5	11.6
Complications of Pregnancy, Childbirth, and the Puerperium (630-677)	20.4	18.5	8.4	9.9
Diseases of the Skin and Subcutaneous Tissue (680-709)	40.9	31.6	19.8	27.5
Diseases of the Musculoskeletal System and Connective Tissue (710-739)	71.0	56.6	57.7	62.2
Congenital Anomalies (740-759)	7.3	5.0	2.4	-
Certain Conditions Originating in the Perinatal Period (760-779)	-	-	-	-
Symptoms, Signs, and Ill-Defined Conditions (780-799)	64.8	50.7	50.1	50.2
Injury and Poisoning (800-999)	72.3	51.6	44.3	56.2
V-Codes Indicating a Psychosocial or Behavioral Problem ¹	33.9	26.4	13.8	8.6

- Not reported because there were fewer than 10 veterans.

¹See appendix for specific codes.

Table 12: Distributions of VA and DoD mental disorder diagnoses (from October 1, 2001 to September 30, 2008) of 2,523 Montana geo-coded veterans (excluding veterans geo-coded at zip-code level) discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge), by military component and OIF/OEF status.

Mental Disorders (ICD-9-CM: 290-319)	Active Component		Reserve/Guard	
	[1,382]		[1,141]	
	OIF/OEF [455]	Not OIF/OEF [927]	OIF/OEF [908]	Not OIF/OEF [233]
Alcohol and Drug induced mental disorders (Alcohol & Drug Psychoses) (291 & 292)	-	-	-	-
Episodic mood disorders (Affective Psychosis) (296)	8.1	6.2	7.1	-
Anxiety, dissociative and somatoform disorders (Neurotic Disorders) (300)	12.3	8.5	9.0	4.7
Personality disorders (301)	2.9	4.3	-	-
Sexual and gender identity disorders (302)	2.9	1.7	1.5	-
Alcohol dependence syndromes (303)	8.4	2.5	4.9	-
Drug dependence (304)	-	1.4	-	-
Non-dependent abuse of drugs (305)	28.4	15.2	20.4	17.6
Special symptoms or syndromes, not elsewhere classified (307)	8.1	5.7	5.6	-
Acute reaction to stress (308)	3.3	1.8	2.9	-
Adjustment reaction excluding PTSD (309 excluding 309.81)	12.8	13.8	9.6	6.4
PTSD (309.81)	18.7	2.4	24.2	-
Specific non-psychotic mental disorders due to brain damage (310)	-	-	1.8	-
Depressive disorder, not elsewhere classified (311)	17.6	11.4	18.8	7.7
Disturbance of conduct, not elsewhere classified (312)	-	-	-	-
Other mental disorder diagnoses ¹	5.9	3.9	4.1	-

- Not reported because there were fewer than 10 veterans.

¹Other ICD-9-CM codes for mental disorders (290-319) than those already listed in the table.

Table 13: Distributions of socio-demographic and military service characteristics, military components and service-connected disability ratings of 2,523 Montana geo-coded veterans (excluding veterans geo-coded at zip-code level) discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge) of VA users and non-users, stratified by DoD mental health¹ diagnoses before discharge.

	Not DoD MH Diagnosed [1,832]		DoD MH Diagnosed [691]	
	Not VA Treated [1,036]	VA Treated [796]	Not VA Treated [385]	VA Treated [306]
Age (years)				
Mean	28.0	33.1	26.0	30.8
Median	24	31	23	27
Sex (%)				
Male	84.7	92.5	74.8	82.4
Female	14.1	6.8	24.2	17.7
Missing	1.3	0.8	1.0	0.0
Branch (%)				
Army	62.1	77.4	44.9	60.5
Navy	7.9	5.9	15.1	9.5
Air Force	21.3	8.7	33.8	20.6
Marines	7.1	7.7	4.4	8.8
Other	1.6	0.4	1.8	0.7
Character of Service (%)				
Honorable/General	86.3	94.4	84.4	95.8
Other than Honorable	1.4	0.1	6.5	0.7
BC/Dishonorable	0.1	0.0	0.3	0.0
Uncharacterized/Missing	12.3	5.5	8.8	3.6
Pay Grade (%)				
E1-E4	54.0	34.7	68.1	50.0
E5-E9	34.7	51.5	25.5	43.8
O1-O3	6.0	5.8	2.6	3.6
O4-O10	4.3	5.3	3.4	2.0
Other	1.2	2.8	0.5	0.7
Active Component (%)				
OIF/OEF	11.5	17.1	22.3	37.3
Not OIF/OEF	47.3	12.7	59.0	35.6
Reserve Component (%)				
OIF/OEF	29.1	63.8	8.8	21.2
Not OIF/OEF	12.2	6.4	9.9	5.9
DoD MH Diagnosis after Discharge ¹ (%)	6.0	3.9	11.2	12.1
VA Mental Health Diagnosis ¹ (%)	-	45.6	-	59.5
Before Discharge	-	2.1	-	5.6
After Discharge	-	45.1	-	59.2
Percent with Service Connected Disability	4.2	63.3	5.7	78.4
Overall Disability Rating, Mean	29.8	36.4	31.8	43.6
Overall Disability Rating, Median	30	30	20	40
Percent with Service Connected PTSD	-	23.4	-	20.9
Overall Disability Rating, Mean	-	46.4	-	54.7
Overall Disability Rating, Median	-	40	-	60

- Not reported because there were fewer than 10 veterans.

¹ICD-9-CM mental disorders (290-319) and v-codes indicating a psychosocial or behavioral problem.

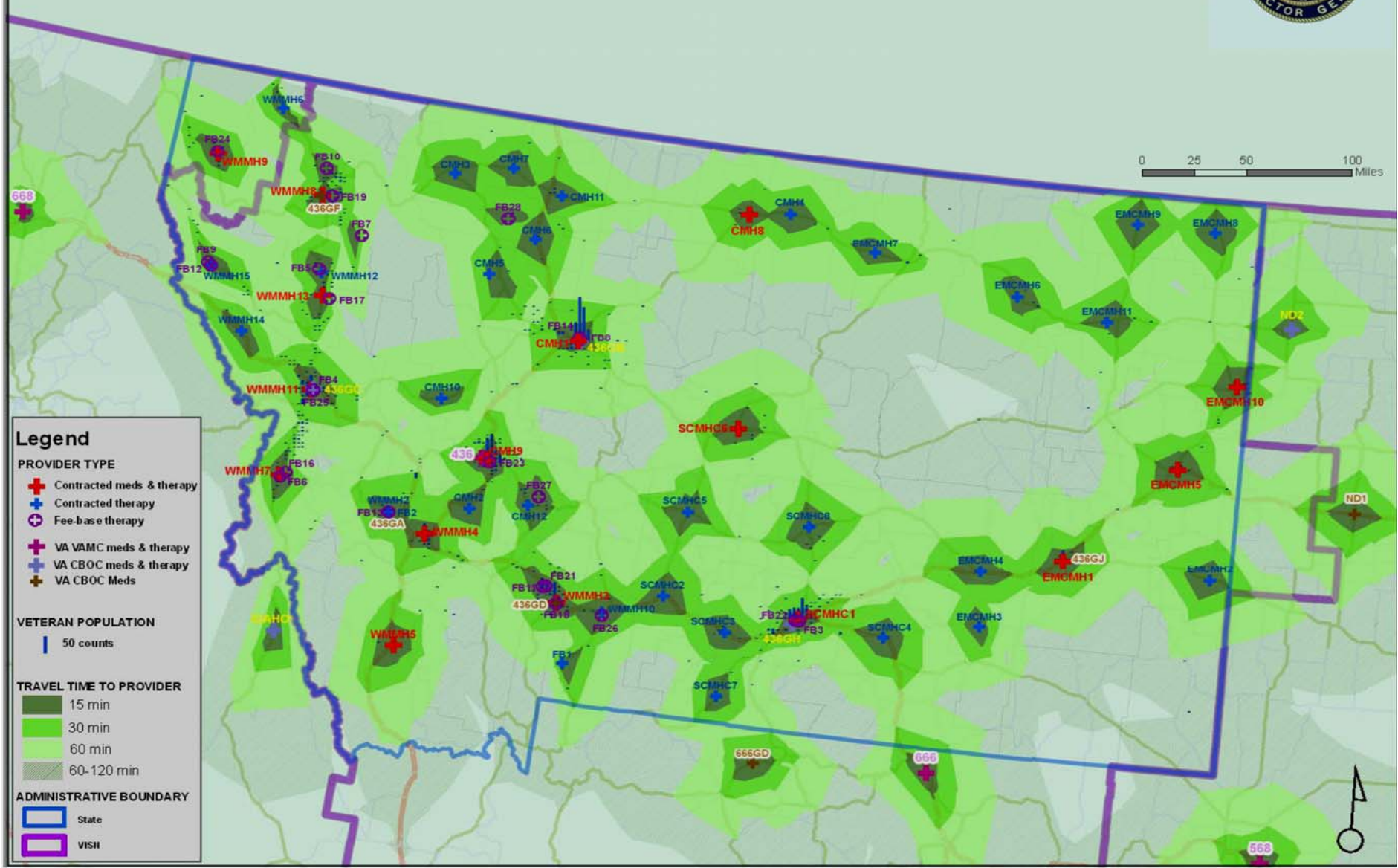
Table 14: Distributions of travel times to VHA mental health facilities and paid services¹ of 2,523 Montana geo-coded veterans (excluding veterans geo-coded at zip-code level) discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge), by military component and OIF/OEF status.

	Active Component		Reserve/Guard	
	[1,382]		[1,141]	
	OIF/OEF [455]	Not OIF/OEF [927]	OIF/OEF [908]	Not OIF/OEF [233]
Access to any MH provider (%)				
Travel Time: within 15 min	82.6	82.3	82.3	85.0
15+ to 30 min	13.4	13.6	13.1	11.6
30+ to 60 min	3.7	3.6	4.4	3.4
60+ to 90 min	0.0	0.3	0.2	0.0
90+ to 120 min	0.2	0.2	0.0	0.0
MH Facility with both meds and therapy (%)				
Travel Time: within 15 min	72.5	73.6	76.1	70.0
15+ to 30 min	15.2	12.5	13.7	9.9
30+ to 60 min	8.8	9.1	6.6	8.2
60+ to 90 min	2.0	2.3	2.4	1.7
90+ to 120 min	0.4	1.5	0.9	6.0
120+	1.1	1.1	0.3	4.3
MH Facility with access to meds (%)				
Travel Time: within 15 min	73.4	74.3	76.8	70.0
15+ to 30 min	15.4	12.9	13.8	9.9
30+ to 60 min	7.7	7.9	5.8	8.2
60+ to 90 min	2.0	2.4	2.4	1.7
90+ to 120 min	0.7	1.4	0.9	6.0
120+	0.9	1.1	0.3	4.3
MH Facility with access to therapy (%)				
Travel Time: within 15 min	82.4	82.2	82.3	85.0
15+ to 30 min	13.6	13.7	13.1	11.6
30+ to 60 min	3.7	3.6	4.4	3.4
60+ to 90 min	0.0	0.3	0.2	0.0
90+ to 120 min	0.0	0.2	0.0	0.0
120+	0.2	0.0	0.0	0.0

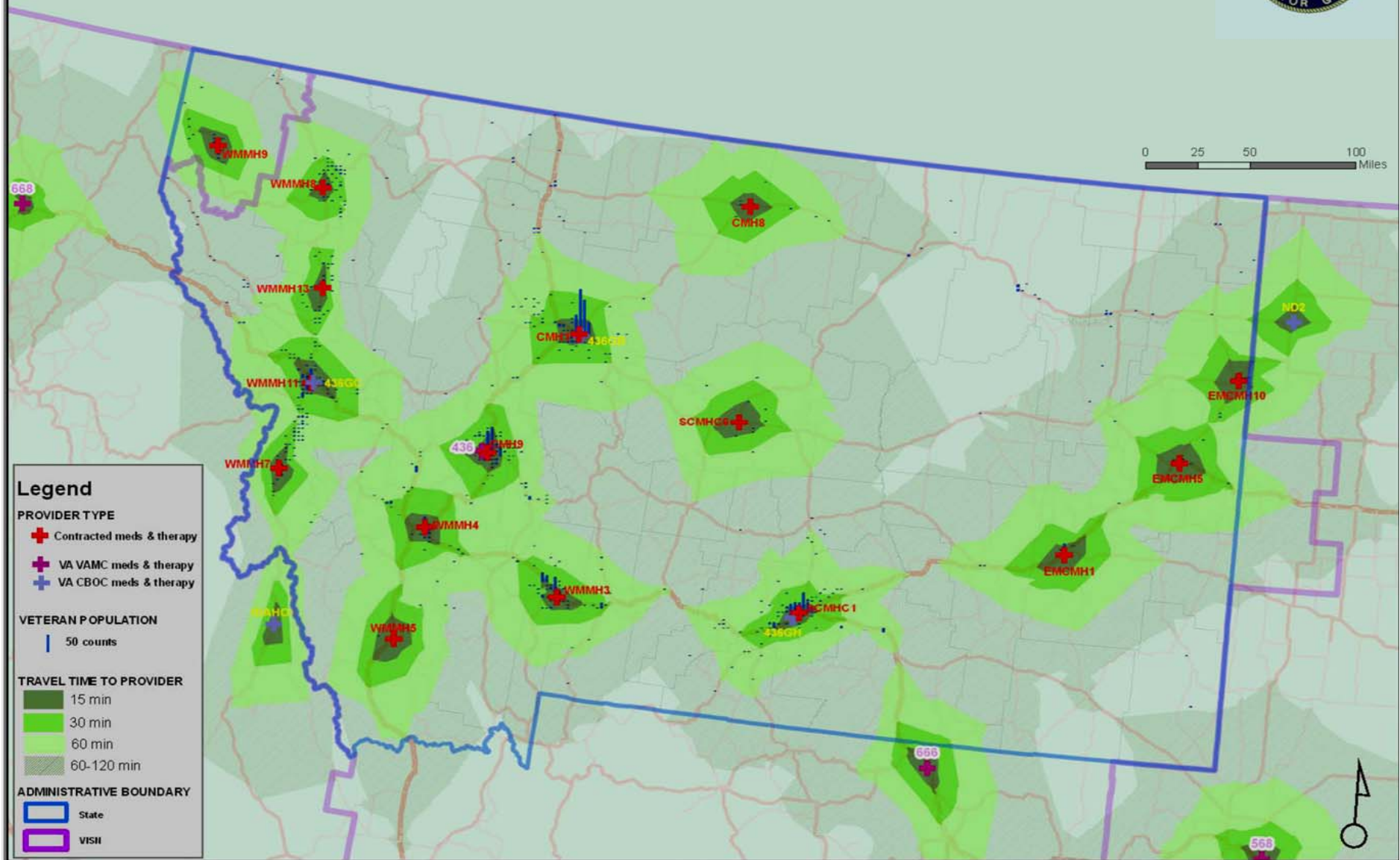
¹Paid services including both under fee basis and contractual agreement.

Maps 2 – 5 display Montana veteran travel times to VA mental health providers, one map for each provider service type.

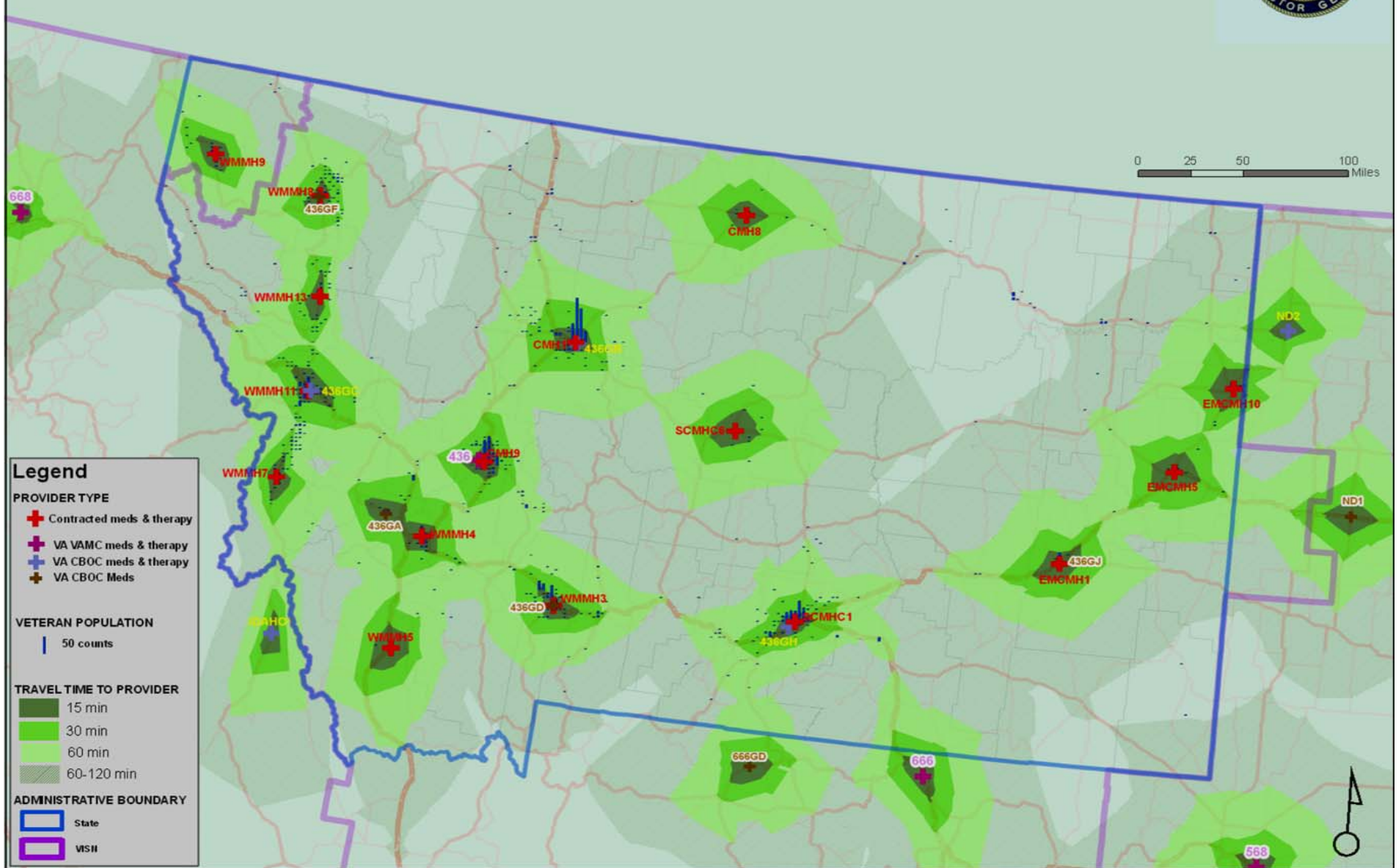
Map 2. Montana Veterans' Travel Time to Any Mental Health Care Providers
 Veterans Discharged from Military Duty from 7/01/2005 to 9/30/2006



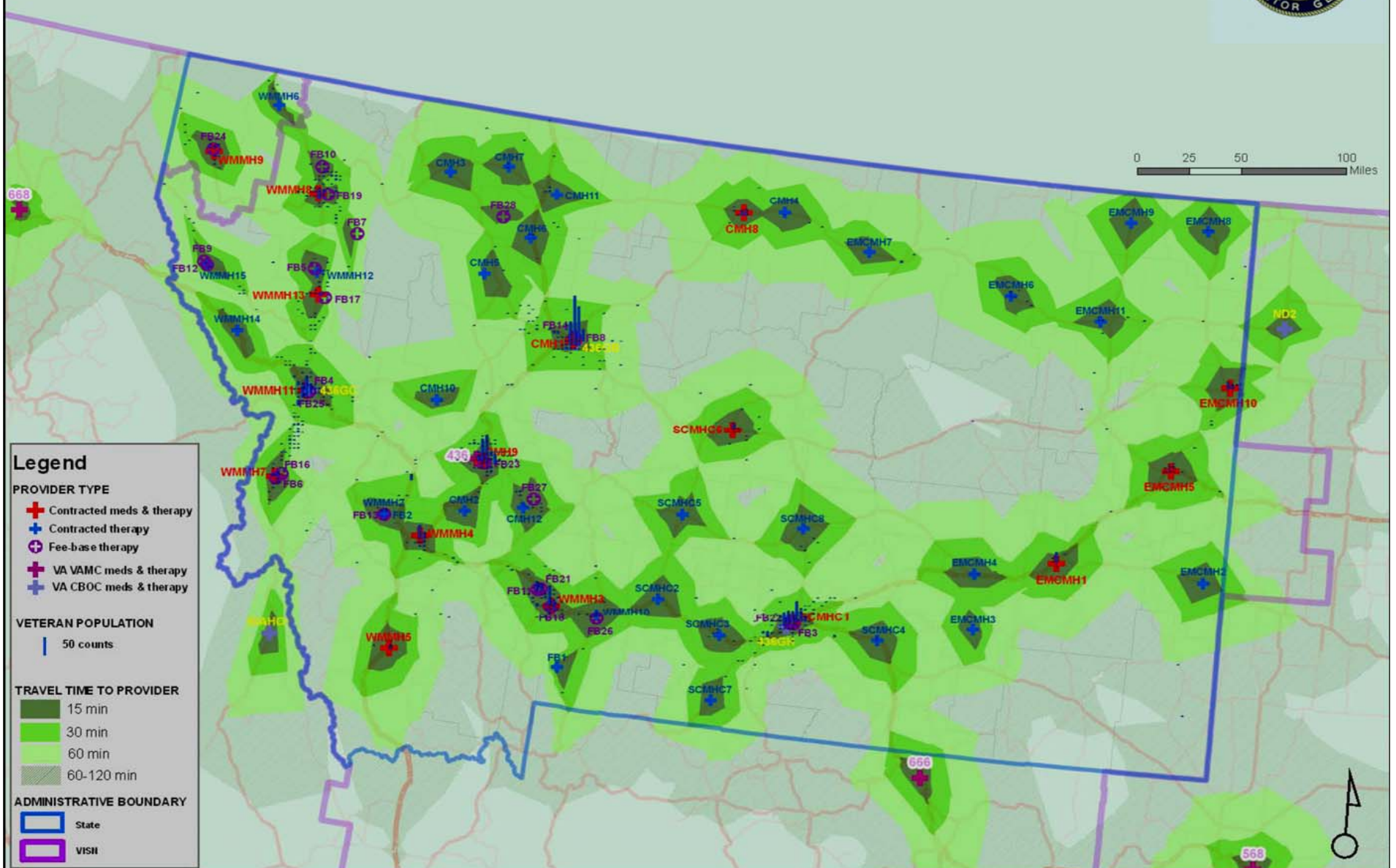
Map 3. Montana Veterans' Travel Time to Mental Health Care Providers (Meds & Therapy) Veterans Discharged from Military Duty from 7/01/2005 to 9/30/2006



Map 4. Montana Veterans' Travel Time to Mental Health Care Providers (Meds)
 Veterans Discharged from Military Duty from 7/01/2005 to 9/30/2006



Map 5. Montana Veterans' Travel Time to Mental Health Care Providers (Therapy) Veterans Discharged from Military Duty from 7/01/2005 to 9/30/2006



6. Travel Times and Utilization of VA Care in Montana

We investigated the impact of travel times (to nearest mental health care providers) on becoming users of VA care after discharge from active military duty, separately, for veterans who were diagnosed with mental health issues by DoD before separation and for veterans without DoD mental health diagnoses.

Table 15 gives distributions of travel times to nearest VA mental health care providers by users of VA care after separation and non-users, stratified by DoD mental health diagnoses before discharge. For a given type of mental health care service, no differences (all p-values were greater than 0.05) were observed in travel time distributions across those with or without mental health diagnoses and whether or not VA users. This could be explained, at least in part, by the fact that over 93 percent of Montana veterans were within 30 minutes of travel time to a nearest mental health provider and virtually all of them had access to a provider within an hour of travel.

Table 15: Distributions of travel times to VHA mental health facilities and paid services¹ of 2,523 Montana geo-coded veterans (excluding veterans geo-coded at zip-code level) discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge) of VA users and non-users, stratified by DoD mental health² diagnoses before discharge.

	Not DoD MH Diagnosed [1,832]		DoD MH Diagnosed [691]	
	Not VA Treated [1,036]	VA Treated [796]	Not VA Treated [385]	VA Treated [306]
Access to any MH provider (%)				
Travel Time: within 15 min	83.1	82.4	82.1	82.0
15+ to 30 min	13.2	13.4	14.0	11.4
30+ to 60 min	3.4	3.9	3.1	6.5
60+ to 90 min	0.1	0.3	0.5	0.0
90+ to 120 min	0.2	0.0	0.3	0.0
MH Facility with both meds and therapy (%)				
Travel Time: within 15 min	73.4	74.6	74.6	73.5
15+ to 30 min	13.3	13.8	12.5	11.8
30+ to 60 min	7.7	7.8	9.1	8.5
60+ to 90 min	2.4	1.8	1.3	3.9
90+ to 120 min	1.5	1.1	2.1	2.0
120+	1.7	0.9	0.5	0.3
MH Facility with access to meds (%)				
Travel Time: within 15 min	74.0	75.0	75.8	74.2
15+ to 30 min	13.5	14.3	12.7	11.4
30+ to 60 min	6.9	6.9	7.5	8.2
60+ to 90 min	2.5	1.8	1.3	3.9
90+ to 120 min	1.4	1.1	2.3	2.0
120+	1.7	0.9	0.3	0.3
MH Facility with access to therapy (%)				
Travel Time: within 15 min	83.0	82.4	81.8	82.0
15+ to 30 min	13.3	13.4	14.3	11.4
30+ to 60 min	3.4	3.9	3.1	6.5
60+ to 90 min	0.1	0.3	0.5	0.0
90+ to 120 min	0.2	0.0	0.0	0.0
120+	0.0	0.0	0.3	0.0

¹Paid services including both under fee basis and contractual agreement.

²ICD-9-CM mental disorders (290-319) and v-codes indicating a psychosocial or behavioral problem.

7. Impact of VA Paid Service on Geographic Access to Mental Health Care in Montana

To explore whether VA paid service improved geographic access to mental health care in Montana, we recalculated travel times to nearest VHA mental health providers after excluding those providers under VA paid service.

Table 16 reports what the distributions of travel times would have been if the paid service not been acquired, by military component and OIF/OEF status. Because VA paid service did not include providers with only medication management service, travel times to VHA providers with only medication management service and travel times to VHA providers with only therapy coincided with travel times to nearest VHA providers offering at least medications or therapy.

Table 16: Distributions of travel times to VHA mental health facilities of 2,523 Montana geo-coded veterans (excluding veterans geo-coded at zip-code level) discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge), by military component and OIF/OEF status.

	Active Component [1,382]		Reserve/Guard [1,141]	
	OIF/OEF [455]	Not OIF/OEF [927]	OIF/OEF [908]	Not OIF/OEF [233]
Access to any MH provider (VHA) (%)				
Travel Time: within 15 min	55.4	56.1	57.4	47.6
15+ to 30 min	19.8	19.7	24.7	19.7
30+ to 60 min	10.6	8.5	8.3	8.6
60+ to 90 min	8.6	7.6	5.7	8.6
90+ to 120 min	2.6	4.4	1.7	6.4
120+	3.1	3.7	2.3	9.0
MH Facility with both meds and therapy (VHA) (%)				
Travel Time: within 15 min	43.1	45.7	44.3	39.1
15+ to 30 min	11.2	11.9	18.2	15.5
30+ to 60 min	8.4	7.0	7.5	7.3
60+ to 90 min	11.9	10.8	7.8	9.4
90+ to 120 min	9.0	7.9	12.8	10.3
120+	16.5	16.7	9.5	18.5

Comparing Table 16 with Table 14 showed that without paid service, percentages of travel within 15 minutes to nearest providers would have been reduced by at least 25 points and would have been reduced by at least 28 points to nearest providers with both medications and therapy services. Over 35 percent of veterans would have had to travel more than an hour to seek care for their need of both medications and therapy. **Table 17** indicated that over 10 percent of VHA users and over 16 percent of non-users would have had to travel more than 2 hours in order to get care from VHA providers offering both medications and therapy treatment.

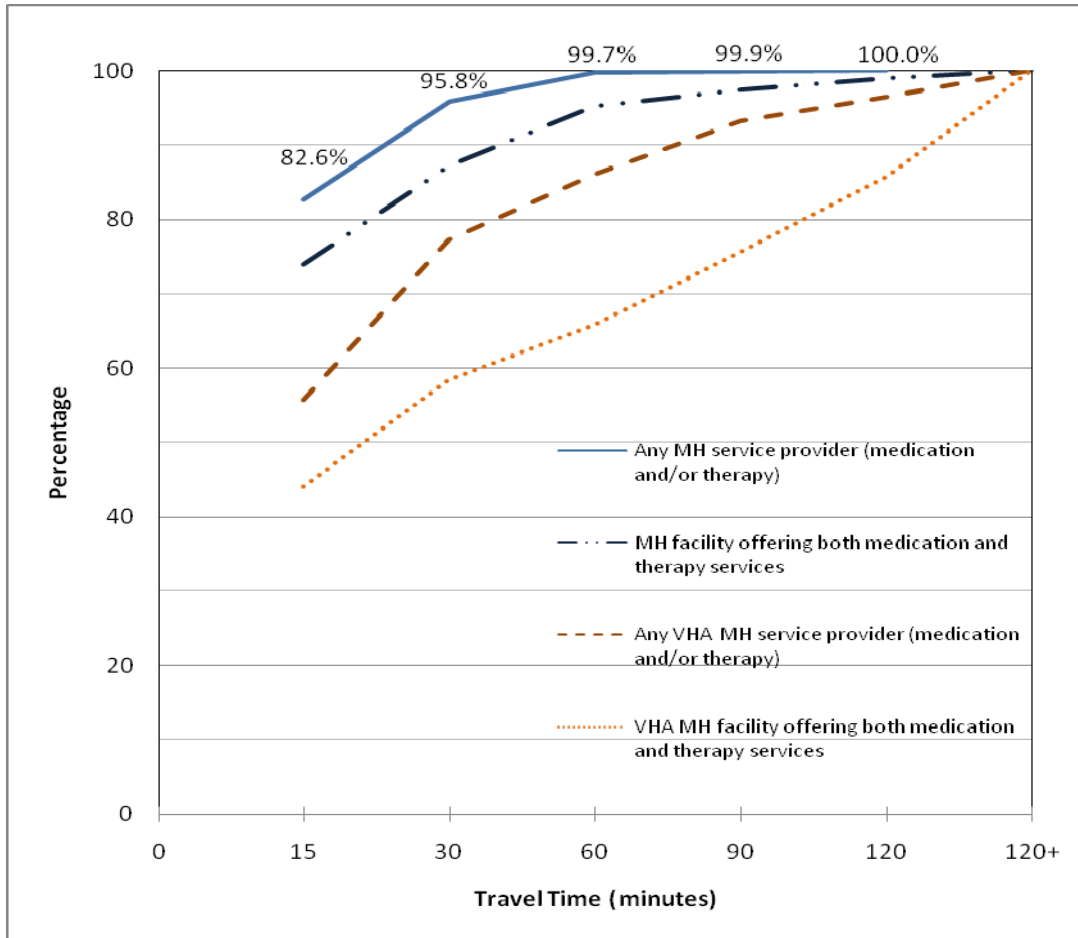
Table 17: Distributions of travel times to VHA mental health facilities of 2,523 Montana geo-coded veterans (excluding veterans geo-coded at zip-code level) discharged from active military service during 7/1/2005 - 9/30/06 (who were 17-65 years old at discharge) of VA users and non-users, stratified by DoD mental health¹ diagnoses before discharge.

	Not DoD MH Diagnosed [1,832]		DoD MH Diagnosed [691]	
	Not VA Treated [1,036]	VA Treated [796]	Not VA Treated [385]	VA Treated [306]
Access to any MH provider (VHA) (%)				
Travel Time: within 15 min	52.9	56.7	59.7	57.2
15+ to 30 min	22.2	24.8	16.1	17.7
30+ to 60 min	8.8	8.7	8.8	9.2
60+ to 90 min	7.5	5.4	8.6	8.8
90+ to 120 min	4.3	1.6	4.2	3.3
120+	4.3	2.9	2.6	3.9
MH Facility with both meds and therapy (VHA) (%)				
Travel Time: within 15 min	42.2	42.6	48.8	48.7
15+ to 30 min	14.4	17.5	9.9	11.8
30+ to 60 min	7.5	7.0	7.5	8.2
60+ to 90 min	10.8	7.3	9.6	13.1
90+ to 120 min	9.0	13.4	7.8	7.8
120+	16.1	12.2	16.4	10.5

¹ICD-9-CM mental disorders (290-319) and v-codes indicating a psychosocial or behavioral problem.

Figure 4 plots the percentage of this Montana veteran population by travel times to the nearest VA mental health care providers, with and without paid services. It shows clearly a marked improvement in geographic access to care providers after adding the paid service.

Figure 4: Cumulative percentage of travel times to VHA-only mental health facilities, and VHA mental health facilities & paid services¹ combined, for 2,523 Montana geo-coded veterans (excluding veterans geo-coded at zip-code level) discharged from active military service during 7/1/2005 - 9/30/06 (17-65 years old at discharge).



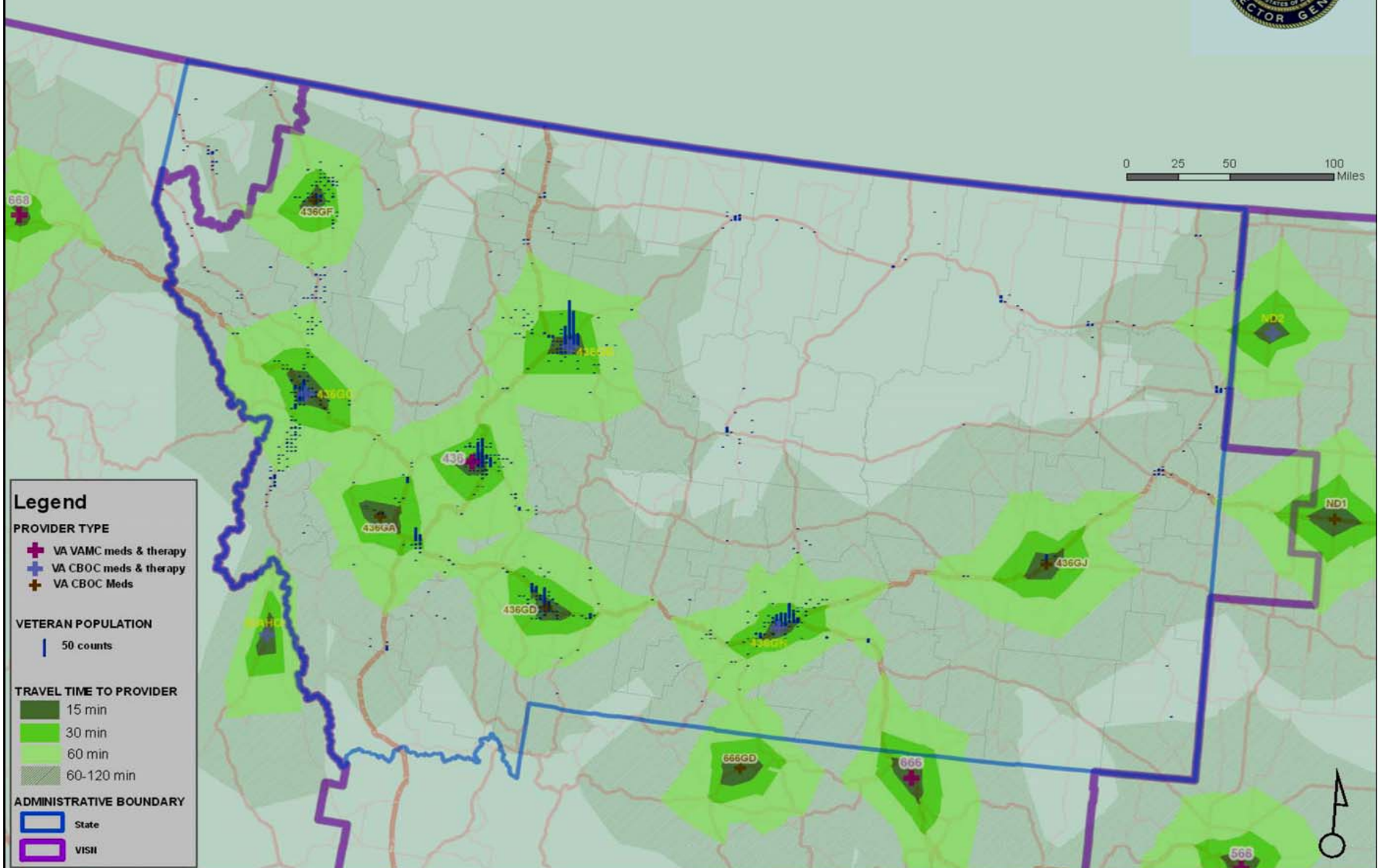
82.6% of Montana geo-coded veterans are within 15 minutes of any mental health service provider (medication and/or therapy), 95.8% are within 30 minutes, 99.7% are within 60 minutes, 99.9% are within 90 minutes, and 100% are within 120 minutes.

¹Paid services including both under fee basis and contractual agreement.

Maps 6 and 7 separately depict what Montana veterans’ travel times to VA mental health providers would be had VA paid services not been acquired for provider sites offering medication management and/or therapy and for provider sites offering both medication management and therapy.

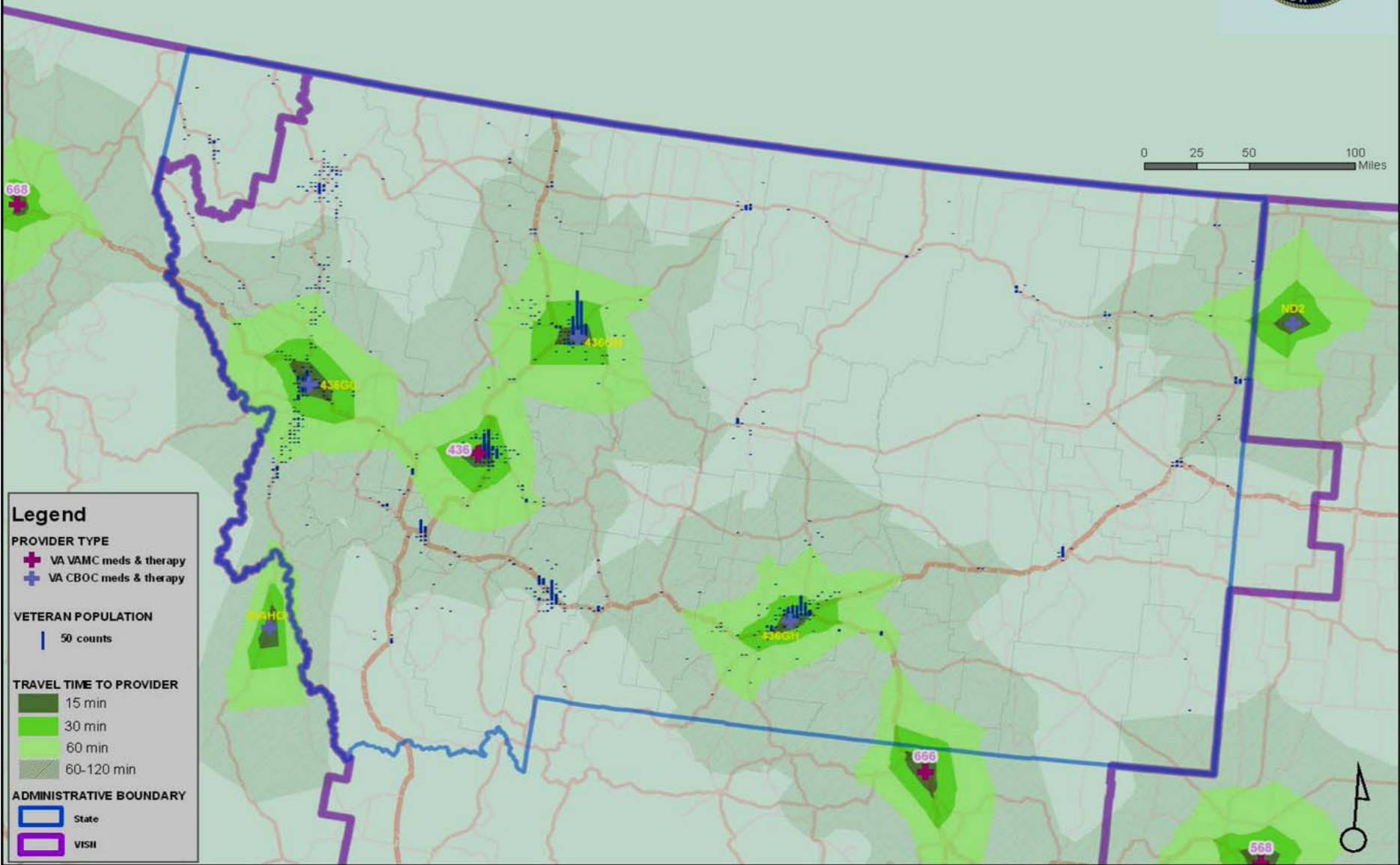
Map 6. Montana Veterans' Travel Time to Any VHA Mental Health Care Providers

Veterans Discharged from Military Duty from 7/01/2005 to 9/30/2006



Map 7. Montana Veterans' Travel Time to VHA Mental Health Care Providers (Meds & Therapy)

Veterans Discharged from Military Duty from 7/01/2005 to 9/30/2006



Legend

PROVIDER TYPE

- VA VAMC meds & therapy
- VA CBOC meds & therapy

VETERAN POPULATION

- 50 counts

TRAVEL TIME TO PROVIDER

- 15 min
- 30 min
- 60 min
- 60-120 min

ADMINISTRATIVE BOUNDARY

- State
- VISN

Conclusions for Issue 1 – Montana Veteran Characteristics and Geographic Access to Mental Health Care

We characterized the Montana veteran population who were discharged from active duty during July 1, 2005 – September 30, 2006 and compared them with their non-Montana veteran counterparts, with a total population of nearly half a million recently discharged veterans. We examined this Montana veteran population's access to VA mental health care.

This is the first report that examines an entire veteran population, whether or not they were users of VA care. This population-based approach eliminates potential bias of using only veterans who are VA users, because VA users may differ from non-VA users in a fundamentally different way that impacts their choices and utilization of health care. Because of the lack of population-based veteran data, previous studies on veteran access to and/or utilization of VA care were largely based on VA users, including those published in peer-reviewed journals. The LC database makes this population-based approach feasible.

We pioneered using veterans' travel times from their home addresses to providers' physical service locations. Traditionally, travel distances were measured as straight-linear distances between the location of providers' central administrative office and the centroid of the zip codes of veterans' residency. Real travel distances depend on availability of road network and are certainly longer than straight-linear distances. Health care providers' physical service locations can be a hundred miles apart from their central administrative office location, so can veterans' home addresses from the centroid of the zip codes of their residency because of the dispersed Montana population. We excluded Montana veterans with accuracy of their residency geographic coordinates at ZIP level, to eliminate the likely considerable uncertainty in their travel times.

In addition, we derived veterans travel times by provider's available services to address their geographical access. A veteran residing within 15 minutes of travel to a nearest provider offering only medication management would not have met his/her need for therapy if the nearest therapy providers were located more than 2 hours away.

The VA paid service (fee basis and contractual agreement) clearly improved Montana veterans' geographic access to VA mental health care. This signaled that strategies such as paid service or mobile units could be vital to improving veterans' access to VA care in highly rural areas where building VA care facilities may not be a cost-effective choice. In addition to geographic access, availability of specialized mental health services (such as prolonged exposure therapy for PTSD or buprenorphine substitution therapy for opiate addiction), patient satisfaction, and waiting time are some other aspects of access to care. It would be important to examine how improved access impacts utilization of VA care and the coordination of care.

The mapping of access to health care providers allowed us to visualize accessibility of providers, to identify geographic inequities, and to pinpoint specific communities in need.

We excluded from geographic access to care analyses of those Montana veterans whose accuracy of residency geographic coordinates was coded at the ZIP level. It is foreseeable that these excluded Montana veterans may be more likely to live in areas from where their travel times to mental health care are longer than those included in the analyses. If all of these excluded veterans had been living in a place of more than 2-hour travel to a mental health care, the absolute percentage of Montana veterans with access to care within an hour would reduce from over 99 percent to about 80 percent in Table 14. However, the relative patterns of Montana veterans' characteristics, disease diagnoses, and becoming VA users after separation from military active should not be altered, as demonstrated by the representative of geo-coded Montana veterans in our analyses.

Our findings may not be generalizable to Montana veterans who were discharged from the military during time periods other than July 1, 2005 – September 30, 2006. We had no data on these veterans who were not included in the LC database. Studies based on all veterans would allow for better strategic planning and resource decisions, improved targeting of specific veteran groups for outreach, and identification of required legislative and policy changes. The House Committee on Veterans' Affairs requested continued efforts to expand the LC database by including all veterans discharged from FY 2002 onwards. We are working collaboratively with other VA staff on this endeavor.

Issue 2: Other VAMHS Specialized Mental Health Care Issues

Within the past year, the facility has received approval from VA Central Office to build a 24 bed acute inpatient mental health unit comprised of 8 acute psychiatry beds, 8 beds for a specialized PTSD program, and 8 specialized substance use beds. VAMHS mental health leadership reported that they hope to break ground on the new unit in 2009.

The September 2008 VHA Handbook 1160.01, *Uniform Mental Health Services in VA Medical Centers and Clinics*, from VA Central Office specifies by VAMC and CBOC size, Mental Health Services that are to be available to all enrolled veterans at these sites by the end of FY 2009.

According to the handbook, VAMCs will be expected to provide general mental health services including consultation about special emphasis problems. Some of the specialty mental health services that are to be provided at VAMCs include specialized outpatient PTSD programs, evidence-based psychotherapy, and either a PTSD Clinical Team or alternatively PTSD specialists, based on locally-determined patient population needs. In the absence of another VA facility nearby, smaller CBOCs must provide needed PTSD services by referral to other VA facilities, telemental health, or by referral to community-based providers using sharing arrangements, contracts, or non-VA fee-basis to the extent that the veteran is eligible.

Substance use services at VAMCs include the expectation that coordinated, intensive substance use treatment programs will be available for all veterans who require them to establish early remission from the substance use disorder. Coordinated services can be provided either through intensive outpatient services at least 3 hours per day and at least 3 days per week in a designated program delivered by staff with documented training and competencies addressing substance use disorders, or through availability of a mental health residential rehabilitation treatment program (MHR RTP) that specializes in substance use disorders or availability of a substance use track within another MHR RTP such as one with a PTSD emphasis.²² In addition, the handbook indicates that all PTSD or Specialist programs must be able to address the care needs of veterans with both PTSD and substance use disorders (SUD).²³ These needs can be addressed through distinct PTSD dual diagnosis programs or tracks that include providers with specific expertise in both PTSD and SUD, or structures, processes, and formal mechanisms to support the coordination of care for PTSD with that provided in SUD programs.

VA established a National Suicide Prevention Hotline (NSPH) in 2007. From October 2008 through January 2009, they received 1024 calls from VISN 19. On 12/28/2008, NSPH started organizing data by area code. From that date to 2/07/2009 there have been 107 total calls from the Montana (406) area code to the hotline.

At the Fort Harrison VAMC, general mental health services including medication management and therapy for PTSD, depression, and other non-substance use conditions are available in the outpatient mental health clinic. Therapists use cognitive behavioral therapy and other therapeutic modalities to treat patients with PTSD and depression. Although some VAMHS clinicians have undergone VA training in specific evidence-based therapies for PTSD, cognitive processing therapy and prolonged exposure therapy are not consistently available for Montana veterans. The VAMHS is presently recruiting a clinician to serve as an evidence-based practices coordinator. The coordinator will be responsible for training CBOC personnel in specialized evidence based treatments for PTSD, depression, and other mental health conditions, and for monitoring and standardization of delivery of evidence based modalities across the VAMHS's mental health system.

General mental health services including treatment for PTSD, depression and other non-substance use conditions are available at the CBOCs in Anaconda, Billings, Great Falls, Kalispell, and Missoula. At the CBOCs in Bozeman, Lewistown, and Miles City mental health care is solely available via telehealth transmission to mental health providers at the Fort Harrison VAMC. Mental health services are not presently available in person or by telehealth at the CBOCs in Cut Bank, Glasgow, Glendive, or Havre. There are now two therapists at the CBOCs in Missoula, Great Falls, and Billings; one therapist at the

²² Department of Veterans Affairs, Veterans Health Administration, VHA Handbook 1160.01, *Uniform Mental Health Services in VA Medical Centers and Clinics*, Washington, D.C., September 2008.

²³ What was formerly termed substance abuse disorders is now frequently termed substance use disorders.

CBOC in Kalispell, and the VAMHS is presently recruiting a therapist for the Bozeman CBOC.

Substance abuse therapists are available at the Fort Harrison VAMC, and CBOCs in Missoula, Great Falls, Kalispell, and Billings. VAMHS has recruited an American Society of Addiction Medicine certified internal medicine physician to provide intensive outpatient substance use treatment. In addition, two mental health nurse practitioners have been recruited to facilitate coordination of substance use disorder related care.

At contract and fee-basis sites, general mental health services including treatment for PTSD, depression, and other non-substance use conditions, and case management are available. Cognitive behavioral therapy is generally available at these sites. Other specialized mental health therapies such as cognitive processing therapy for PTSD and specialized therapy for substance use conditions are available to veterans at only a few of the contract and fee-basis sites.

Conclusions for Issue 2 – Other VAMHS Specialized Mental Health Care Issues

Although some VAMHS clinicians have undergone VA training in specific evidence-based therapies for PTSD, cognitive processing therapy and prolonged exposure therapy have limited availability for Montana veterans.

Our data (Tables 6 and 7) show that in both the Montana and non-Montana LC population, alcohol and drug use (ICD-9-CM 303-305) were the most common mental health disorders. At present, access to specialty substance use therapy is only provided at a few CBOCs and contract or fee-basis sites.

Issue 3: The Vet to Vet Program in Montana

Vet to Vet was formed in West Haven, Connecticut by a veteran, Mo Armstrong, whose vision has been the starting point for chapters in at least 29 states.²⁴ Vet to Vet is self directed and does not include use of VHA or other professional counselors, although professionals may be invited to present information at chapter meetings. The Vet to Vet program is not intended as a substitute or alternative to professional mental health care but is an adjunctive source of peer-to-peer support, peer-to-peer education, and a channel for outreach. Meetings are led by veteran group members who act as facilitators or co-facilitators. Some chapters affiliated with VHA hold meetings at VHA facilities; other affiliated chapters hold meetings at non-VHA sites. Some chapters are not affiliated with VHA and may have non-VHA affiliations. Funding for Vet to Vet programs does not come from VHA.

²⁴ Vermont Vet to Vet brochure from website, <http://www.vtvettovvet.org/>.

In Montana, a VAMHS staff member acts as a liaison to Vet to Vet chapters. Veterans may come to Vet to Vet spontaneously, through outreach, or through referral from VHA providers. In certain circumstances, referral by peers to the VA for professional therapy or other services may be suggested to an individual attending a group. If a group member expresses suicidal and/or homicidal ideation, efforts will be made to assist the individual in receiving immediate professional help.²⁵

Leadership at Fort Harrison reported that facilitators for the groups try to get vets who appear in need of formal mental health services to access the VAMHS system. Mental health leadership observed that OIF/OEF veterans seemed less inclined than other era veterans to seek help early on for problems.

At present there are regular meetings of VAMHS affiliated Vet to Vet chapters for veterans from all service eras at Fort Harrison, Missoula, Great Falls, and Townsend. There are non-affiliated chapters in Kalispell, Polson, and Miles City. At the time of our visit to Montana, there were attempts to form new OIF/OEF specific Vet to Vet groups at Fort Harrison, Bozeman, and Missoula. Subsequently, we were informed that turnout for the proposed OIF/OEF-specific groups was poor and the groups did not launch.

We were told that most Vet to Vet participants come to Fort Harrison for at least one meeting or training. Participants have included veterans of all service eras but OIF/OEF veterans were reported to be under-represented. We were told that almost all participants in Fort Harrison have enrolled in VHA for care prior to attending Vet to Vet groups. Additionally, most have reportedly been seen by a VAMHS mental health provider prior to attending Vet to Vet groups. We were told that there have been few participants who attended Vet to Vet groups prior to accessing mental health care through VAMHS and that a few participants attend only Vet to Vet groups without seeking mental health care at VAMHS. These trends were reported to be consistent between VAMHS affiliated Vet to Vet sites.

The Vet to Vet program provides an opportunity to facilitate acceptance and utilization of VHA mental health clinical services by those in the group in need of care from mental health professionals. For confidentiality purposes, signing an attendance sheet is voluntary and some groups do not have attendance sheets. Therefore, analysis of data trends regarding utilization of Vet to Vet groups and the ability of Vet to Vet groups to help the VAMHS to reach out to veteran populations that are not enrolled in the VA but are in need of mental health services is limited to observations that the Vet to Vet group facilitators and the VAMHS Vet to Vet liaison shared with us.

We met with a group of Vet to Vet facilitators who shared their experiences with Vet to Vet, the VAMHS, and other issues. One concern expressed was that because of space

²⁵ Mission statement and program description for Fort Harrison Vet to Vet chapter.

issues the location and schedule for meetings had been disrupted. Plans are to have a group room available to the Vet to Vet program during the spring of 2009.

Conclusions for Issue 3 – The Vet to Vet Program in Montana

It would appear reasonable for VAMHS to encourage further efforts at forming affiliated OIF/OEF-specific Vet to Vet groups as part of their ongoing, comprehensive outreach effort, including Vet Center outreach and VHA partnerships with community mental health organizations, non-VA providers, veterans groups, and the Montana National Guard.

Conclusions

We characterized the Montana veteran population who were discharged from active duty during July 1, 2005 – September 30, 2006 and compared them with those of their non-Montana veteran counterparts, with a total of nearly one half million recently discharged veterans. We examined this Montana veteran population's access to VA mental health care. This is the first report that examines an entire veteran population, whether or not they were users of VA care. This population-based approach eliminates the potential bias of using only veterans who are VA users, because VA users may differ from non-VA users in a fundamentally different way that impacts their choices and utilization of health care.

We pioneered using veterans' travel times from their home addresses to providers' physical service locations by provider's available services to address their geographical access. Over 95 percent of Montana geo-coded veterans were within 30 minutes of a VHA or VHA paid mental health service provider. The VA paid service (fee basis and contractual agreement) clearly improved Montana veterans' geographic access to VA mental health care over the access afforded by VA staff alone. This signaled that strategies such as paid service or mobile units could be vital to improving veterans' access to VA care in highly rural areas.

Specific evidence-based therapies for PTSD (cognitive processing therapy and prolonged exposure therapy) have limited availability for Montana veterans. Our data show that in both the Montana and non-Montana LC population, alcohol and drug use (ICD-9-CM 303-305) were the most common mental health disorders in addition to PTSD and related mental health disorders. At present, access to specialty substance use therapy is limited.

Our findings may not be generalizable to Montana veterans who were discharged from the military during time periods other than July 1, 2005 – September 30, 2006. We had no data on these veterans who were not included in the LC database. Studies based on all veterans would allow for better strategic planning and resource decisions, improved targeting of specific veteran groups for outreach, and identification of required legislative

and policy changes. We think the current data provide a reasonable sample of veterans for this analysis; now we are working to expand the data set.

Recommendations

Recommendation 1: We recommended that the VISN 19 Director ensure that the VAMHS Director takes steps to increase the availability of evidence-based treatment for PTSD for Montana veterans.

Recommendation 2: We recommended that the VISN 19 Director ensure that the VAMHS Director takes steps to increase the availability of specialty substance use treatment for Montana veterans.

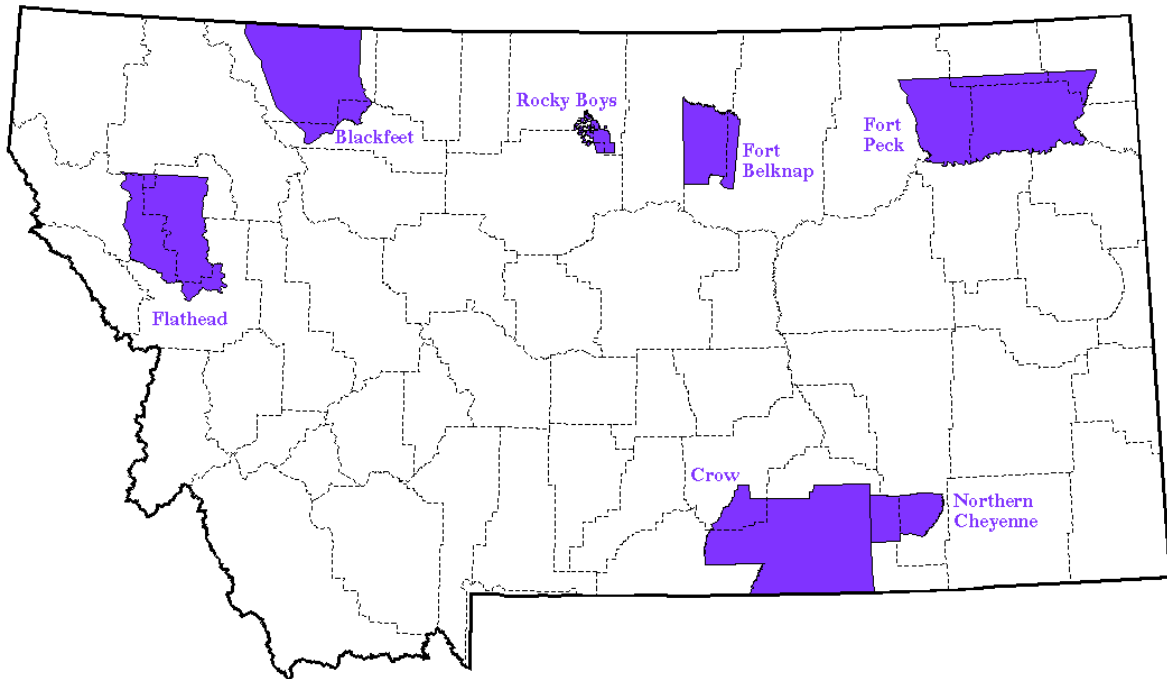
Contract and Fee-Basis Mental Health Sites and Locations of American Indian Reservations

EMCMHC	CMH	SCRMH	WMMHC
Miles City	Great Falls	Billings	Anaconda
Baker	Boulder	Big Timber	Bozeman
Colstrip	Browning	Columbus	Butte
Forsyth	Chinook	Hardin	Dillon
Glendive	Choteau	Harlowtown	Eureka
Glasgow	Conrad	Lewistown	Hamilton
Malta	Cut bank	Red Lodge	Kalispell
Plentywood	Havre	Roundup	Libby
Scobey	Helena		Livingston
Sidney	Lincoln		Missoula
Wolf Point	Shelby		Polson
	Townsend		Ronan
			Superior
			Thompson Falls

Appendix A.1. Locations of mental health sites available under VAMHS contracts.

Location	Number of Providers	Location	Number of Providers
Anaconda	2	Libby	1
Belgrade	2	Livingston	1
Billings	2	Missoula	2
Bozeman	1	Polson	2
Corvalis	1	Ronan	1
Emigrant	1	Thompson Falls	2
Great Falls	2	Townsend	1
Hamilton	1	Valier	1
Helena	1	Whitefish	1
Kalispell	2		

Appendix A.2. Location of sites for fee-basis mental health therapists utilized by VAMHS



Appendix A.3. Map of American Indian Reservations in Montana.
(Source: mt.govTM, Montana's Official Website).

ICD-9 CM Disease Categories

1. Infectious and Parasitic Diseases (001-139)
2. Neoplasms (140-239)
 - Malignant Neoplasms (140-208)
 - Benign Neoplasms (210-239)
3. Endocrine, Nutritional and Metabolic Diseases, And Immunity Disorders (240-279)
4. Diseases of the Blood and Blood-Forming Organs (280-289)
5. Mental Disorders (290-319)
6. Diseases of the Nervous System and Sense Organs (320-389)
7. Diseases of the Circulatory System (390-459)
8. Diseases of the Respiratory System (460-519)
9. Diseases of the Digestive System (520-579)
10. Diseases of the Genitourinary System (580-629)
11. Complications of Pregnancy, Childbirth, and the Puerperium (630-677)
12. Diseases of the Skin and Subcutaneous Tissue (680-709)
13. Diseases of the Musculoskeletal System and Connective Tissue (710-739)
14. Congenital Anomalies (740-759)
15. Certain Conditions Originating in the Perinatal Period (760-779)
16. Symptoms, Signs, and Ill-Defined Conditions (780-799)
17. Injury and Poisoning (800-999)
- V. Supplementary Classification of Factors Influencing Health Status and Contact with Health Services (V01-V86)

ICD-9 CM Mental Disorders (290-319)

Psychoses (290-299)

- 290 Dementias
- 291 Alcohol-induced mental disorders (Alcohol Psychoses)
- 292 Drug-induced mental disorders (Drug Psychoses)
- 293 Transient mental disorders due to conditions classified elsewhere
- 294 Persistent mental disorders due to conditions classified elsewhere
- 295 Schizophrenic disorders
- 296 Episodic mood disorders (Affective psychoses)
- 297 Delusional disorders
- 298 Other nonorganic psychoses
- 299 Pervasive developmental disorders

Neurotic Disorders, Personality Disorders, and Other Nonpsychotic Mental Disorders (300-316)

- 300 Anxiety, dissociative and somatoform disorders (Neurotic Disorders)
- 301 Personality disorders
- 302 Sexual and gender identity disorders
- 303 Alcohol dependence syndromes
- 304 Drug dependence
- 305 Nondependent abuse of drugs
- 306 Physiological malfunction arising from mental factors
- 307 Special symptoms or syndromes, not elsewhere classified

308 Acute reaction to stress

309 Adjustment reaction

310 Specific nonpsychotic mental disorders due to brain damage

311 Depressive disorder, not elsewhere classified

312 Disturbance of conduct, not elsewhere classified

313 Disturbance of emotions specific to childhood and adolescence

314 Hyperkinetic syndrome of childhood

315 Specific delays in development

316 Psychic factors associated with diseases classified elsewhere

Mental Retardation (317-319)

317 Mild mental retardation

318 Other specified mental retardation

319 Unspecified mental retardation

V-Codes Indicating a Psychosocial or Behavioral Problem

V15.4 Psychological trauma

Excludes:

history of condition classifiable to 290-316 (V11.0-V11.9)

V60 Housing, household, and economic circumstances

V60.0 Lack of housing

Hobos

Social migrants

Tramps

Transients

Vagabonds

V60.1 Inadequate housing

Lack of heating

Restriction of space

Technical defects in home preventing adequate care

V60.2 Inadequate material resources

Economic problem

Poverty NOS

V60.4 No other household member able to render care

Person requiring care (has) (is):

family member too handicapped, ill, or otherwise unsuited to render care

partner temporarily away from home

temporarily away from usual place of abode

Excludes:

holiday relief care (V60.5)

V61 Other family circumstances

Includes:

when these circumstances or fear of them, affecting the person directly involved or others, are mentioned as the reason, justified or not, for seeking or receiving medical advice or care

V61.0 Family disruption

Divorce

Estrangement

V61.1 Counseling for marital and partner problems

Excludes:

problems related to:

psychosexual disorders (302.0-302.9)

sexual function (V41.7)

V61.2 Parent-child problems

counseling for non-parental abuser (V62.83)

V61.21 Counseling for victim of child abuse

Child battering

Child neglect

Excludes:

current injuries due to abuse (995.50-995.59)

V61.22 Counseling for perpetrator of parental child abuse

Excludes:

counseling for non-parental abuser (V62.83)

V61.8 Other specified family circumstances

Problems with family members NEC

Sibling relationship problem

V61.9 Unspecified family circumstance

V61.10 Counseling for marital and partner problems, unspecified

Marital conflict

Marital relationship problem

Partner conflict

Partner relationship problem

V61.11 Counseling for victim of spousal and partner abuse

Excludes:

encounter for treatment of current injuries due to abuse (995.80-995.85)

V61.12 Counseling for perpetrator of spousal and partner abuse

V62 Other psychosocial circumstances

Includes:

those circumstances or fear of them, affecting the person directly involved or others, mentioned as the reason, justified or not, for seeking or receiving medical advice or care

Excludes:

previous psychological trauma (V15.41-V15.49)

V62.0 Unemployment

V62.2 Other occupational circumstances or maladjustment

Career choice problem

Dissatisfaction with employment

Occupational problem

V62.5 Legal circumstances

Imprisonment

Legal investigation

Litigation

Prosecution

V62.8 Other psychological

Under Secretary for Health Comments

**Department of
Veterans Affairs**

Memorandum

Date: Mar 26, 2009

From: Under Secretary for Health (10)

Subject: **Healthcare Inspection – Access to VA Mental Health Care for Montana Veterans** (WebCIMS 424681)

To: Assistant Inspector General for Healthcare Inspections (54)

1. I appreciate the opportunity to review and comment on your report about access to mental health care for Montana Veterans. Your findings are interesting, and reflect broad-based public health issues in rural communities that directly impact not only Veterans living in these communities, but also all other rural residents. Your report also reflects innovative steps that the VA Montana Healthcare System (VAMHS) is taking to improve mental health care access by utilizing both community and technological resources. I have reviewed Veterans Integrated Service Network 19's response to your recommendations, and believe that their detailed corrective actions appropriately address improvement options.

2. I continue to differ with one of your conclusions, however, that previous Veteran access studies that focus only on the enrolled Veteran population are inherently biased. VHA is responsible for providing health care to the enrolled Veteran population, not just to those enrolled Veterans who are currently VA patients. VHA authorized services do not extend to the entire Veteran population, regardless of enrollment status. A portion of the non-enrolled Veteran population is Priority 8, and currently not eligible to enroll. These Priority 8 Veterans may actually comprise a significant segment of the non-OEF/OIF reserve component that you report as having "poorer" access to service. Therefore, by including the total Veteran population in the equation, your report might misstate the extent of access issues in the VAMHS. Nevertheless, the details of your findings are useful, and we will certainly reference them in our planning activities.

Under Secretary for Health Comments

3. If additional information is required, please contact Margaret M. Seleski, Director, Management Review Service (10B5), at 461-8470.

(original signed by:)

Michael J. Kussman, MD, MS, MACP

VISN Director Comments

**Department of
Veterans Affairs**

Memorandum

Date: March 16, 2009

From: Director, VA Rocky Mountain Network (VISN 19)

Subject: OIG Draft Report, Healthcare Inspection, Access to VA Mental Health Care for Montana Veterans (WebCIMS 424681)

To: Director, Management Review Service (10B5)

1. There were two recommendation for improvement from this in-depth report of VA Montana Healthcare Sustum provision of mental health care to veterans. The VISN 19 response is submitted for your review.

2. *Recommendation 1: We recommend that the VISN 19 Director ensures that the VAMHS Director takes steps to increase the availability of evidence-based treatment for PTSD throughout Montana*

As the implementation of evidence-based practice is a national effort, the hiring of qualified clinicians and training of these and currently employed therapists is a priority for VA Montana Health Care System (VAMHCS). An Evidence-Based Practice Coordinator has been hired to facilitate the implementation and expansion of evidence-based therapy (EBT). VA staff attend VA Central Office sponsored EBT trainings, they participate in supported consultation and are currently offering evidence-based treatment modalities.

As indicated in the investigation, VA health care is augmented by contract providers throughout the state of Montana. The VAMHCS has sponsored trainings for contracted and fee basis mental health providers who serve Montana veterans. These EBT trainings included "Seeking Safety", presented in October of 2008 and "Support and Family Education" (SAFE) presented in February of 2009. VAMHCS plans to provide additional training opportunities to contract providers. Also the newly proposed contract requires clinicians to be trained in evidence-based therapies with the expectation that veterans will be offered/receiving EBTs per VA standardized protocols.

We are confident that these combined efforts meet recommendation 1.

**VISN Director’s Comments
to Office of Inspector General’s Report**

3. Recommendation 2: We recommend that the VISN 19 Director ensures that the VAMHS Director takes steps to increase the availability of specialty substance use treatment throughout Montana

June of 2008, VA Montana Healthcare System received 4.5 Intensive Outpatient Program (IOP) positions and is currently in the process of filling these positions.

Position	FTEE	Status
Psychiatrist	.5	Filled
Psychologist	1.0	To be selected
Addiction Counselor	2.5	.5 Filled
Program Support	.5	Filled

The 0.5 Psychiatrist is American Society of Addiction Medicine (ASAM) certified, with extensive clinical background in chemical dependency. He will start May 1, 2009. We are aggressively recruiting to fill the remaining positions.

VA Central Office also awarded a 1.0 position for a Substance Abuse therapist for PTSD. This position has been filled. Additionally a 1.0 Nurse Practitioner has been hired and assigned to support substance abuse services and the IOP.

Currently, we have contract IOP arrangements available for veterans in the Eastern part of the State. VA Montana Healthcare is in the process of developing a contract agreement with two community mental health centers which will provide IOP services and residential support as needed. VA Montana’s leadership has been actively developing and implementing a comprehensive expansion of specialty substance abuse services which include increased VA staffing and increased contract services throughout the state.

4. The “Access to VA Mental Health Care for Montana Veterans” report completed by the OIG was thorough and accurate; however, the report did raise concern regarding the use of telehealth for some patients. The quote: “However, tele-mental health services may not be appropriate for every patient”. An example provided “would be a patient with serious mental illness who has delusions focused on being electronically monitored by others.^[1]” I want to assure you our veterans are offered services based on their individualized preferences. This service is tailored to meet the needs of the veteran. Generally

^[1] Smith Henry A., LCSW, and Ronald A. Allison MA, *Telemental Health: Delivering Mental Health Care at a Distance*; A Summary Report, U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration Center for Mental Health Services, Health Resources and Services Administration, 1998.

**VISN Director's Comments
to Office of Inspector General's Report**

speaking, most veterans with serious and persistent mental illness are seen face-to-face; however, there are veterans, once stabilized on medications, that prefer telemental health over face-to-face appointments. The response we have received so far has been very positive from our veterans. Few have specifically requested to have face-to-face medication management and when they do arrangements are made to accommodate.

5. If you have any questions, please contact Marcie Sardinta (303) 639-6999.

(original signed by:)

Glen Grippen, FACHE

OIG Contact and Staff Acknowledgments

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