



## DEPARTMENT OF VETERANS AFFAIRS

### Rural Veterans' Use of CBOCs for Primary Care: FY07

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## Introduction

Community Based Outpatient Clinics (CBOCs) were designed to address a lack of locally available Veterans Health Administration (VHA) facilities by bringing VHA primary care facilities closer to rural Veterans' residences. Within the last decade, the VHA has opened hundreds of CBOCs nationwide. Upon enrollment in the VA Health Care System, Veterans are assigned to a primary care facility, which may be a CBOC, Veterans Affairs Medical Center (VAMC), or other VHA facility type (e.g., VA Nursing Home). However, Veterans are not required to use the assigned facility and may seek care at virtually any other VHA facility in the nation. CBOCs provide primary care services, but it is possible that Veterans who require more specialized care may access a VAMC for both their primary and specialty care. Many VHA providers, staff, and administrators report anecdotal evidence suggesting this is common, but no extensive analyses to date have determined if Veterans do, in fact, choose to bypass a nearer CBOC for care at a farther VAMC and, if they do, who they are and why they do so.

This brief builds on a previous study entitled *Rural Veterans' Geographic Access to VA Health Services* in which a summary of VA's enrolled population and the travel times for access to primary care, acute inpatient care, and tertiary inpatient care are described.

## Key Findings

- In FY07, approximately two-thirds of the primary care (PC) visits made by rural and highly rural VA users assigned to a CBOC occurred within a CBOC.
- Approximately one-third of rural and highly rural Veterans assigned to a CBOC for PC chose to access a VAMC for some or all of their PC, even if it meant traveling farther to do so.
- For Veterans assigned to a CBOC for PC, analyses of visits to VAMCs for PC showed they tended to include multiple same-day services (e.g., lab work, x-rays).
- Two-thirds of highly rural and half of rural clinical video telehealth (CVT) users lived farther than 30 minutes driving time from the nearest VHA facility.

This work was funded by the Veterans Administration Office of Rural Health (ORH). For more information about this study, contact Michelle Mengeling at (319) 338-0581 (Ext. 7703) or [michelle.mengeling@va.gov](mailto:michelle.mengeling@va.gov).

The results presented are based on fiscal year 2007 (FY07) data. FY07 provided a unique dataset that supported the analyses used for this study. The VA has devoted additional resources to new rural clinics and specialty-care access since 2007, which are not captured by this data.

## Methods

This issue brief presents findings using Fiscal Year 2007 national data for primary care health care users by rural status, travel time, and primary care facility type. Travel times are broken into five categories: less than 15 minutes, 15 to 30 minutes, 30 to 60 minutes, 60 to 90 minutes, and over 90 minutes. Rurality is broken out into Urban, Rural, and Highly Rural, a rural-urban classification system developed by the Department of Veterans Affairs Planning Systems Support Group (PSSG) in collaboration with the Census Bureau.

The data set created for these analyses merged a subset of the FY07 Medical SAS Outpatient datasets (OPC) with the VHA Assistant Deputy Under Secretary for Health (ADUSH) monthly enrollment file for FY07. Facilities assigned and accessed were identified as CBOCs or VAMCs using VA Site Tracking database (VAST). Results presented in Figure 1 and in Tables 1-3 are based on enrollment data; subsequent results used the merged Austin outpatient, PSSG enrollment, and VAST data. The outpatient records included all records that had the same day and location as records identified as having a face to face primary care visit. The merge required that the outpatient visit occurred in the enrollee's assigned VISN or a contiguous VISN (e.g., a VISN 1 enrollee's outpatient visit could have occurred in VISN 1 or VISNs 2 or 3, which are contiguous to VISN 1.)

## Results

### Health Care Use by Rurality

The national percentage of rural and highly rural Veterans was 37% in FY07 [41% in FY2012]<sup>1</sup>, but for

Individual VISNs, ranged from a low of 5% in VISN 3 to a high of 62% in VISN 23 (Figure 1).

Rurality is just one indicator of access to care. Another indicator of access to care is drive time. Within the urban-rural categories, the percentage of enrollees in each travel time bands (TTB) is shown in Table 1. Although the majority of enrollees were within 60 minutes of the nearest VHA facility, 16% of rural Veterans and 45% of highly rural Veterans had to drive more than 1 hour to get to the nearest VHA facility.

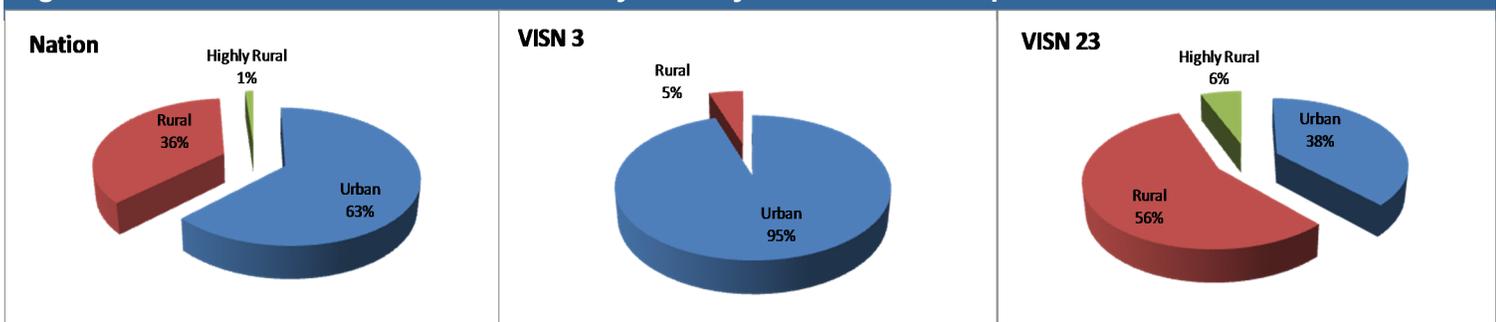
Distance to care affects access in terms of selection of providers, utilization of services, and adherence to follow-up. Without acceptable geographic access, some patients may go without services, others might alter their selection of where to receive services, perhaps seeking services outside of the VA, and some may suffer the additional burdens of more time off work and higher travel expenses. To address these concerns, the Veterans Health Administration set benchmarks to ensure adequate geographic access for all Veterans. Table 2 describes the Capital Asset Realignment of Enhanced Services (CARES) benchmarks for geographic access.

Based on the data presented in Tables 1 and 2, in FY07 71% of all enrollees lived within 30 minutes of a VHA PC facility and 99% lived within 60 minutes. However, at that time the 70% goal for primary care access for rural (30 minutes) and highly rural (60 minutes) Veteran users was not being met.

### Primary Care Location by Rurality

A large majority of rural and highly rural Veterans are assigned to a CBOC for primary care (Table 3).

Figure 1. FY07 VHA Health Care Enrollees by Rurality: The Nation Compared to VISNs 3 and 23



<sup>1</sup>VHA Support Service Center (VSSC), Rural Health Briefing Book 2012

Veterans are typically assigned to the nearest VHA facility for primary care. (Veterans assigned to a VA Nursing Home (VANH), an Integrated Operations Center (IOC), or Residential Rehabilitation Treatment Program (RRTP) site for primary care were excluded from this analysis).

Comparisons between assigned primary care facility type (CBOC vs. VAMC) and Veteran rural status, although similar, showed that those assigned to a VAMC for primary care had a slightly greater average number of PC visits as well as comorbidities than those

assigned to CBOCS, and a greater percentage were women (Table 4).

### CBOC-Assigned VHA Health Care Users

Veterans who have the greatest travel times to the nearest VHA facility are also those who could benefit most from the addition of a CBOC in their area. Therefore, it is important to understand in detail how CBOCs were being used by Veterans assigned to CBOCs. This, in turn, can help determine the importance travel time burden plays in Veteran choice of VHA facility for primary care.

**Table 1. FY07 Enrollee Drive Time to Nearest VA Primary Care**

Travel Time Bands (TTB)		Nationally	Urban	Rural	Highly Rural
<b>Drive Times to Nearest VHA PC Facility</b>					
TTB	0 – 15 min	39.6%	54.8%	14.3%	15.8%
TTB	15.1 – 30 min	31.2%	35.9%	23.8%	10.2%
TTB	30.1 – 60 min	22.4%	8.7%	45.8%	29.6%
TTB	60.1 – 90 min	5.9%	.6%	14.1%	28.0%
TTB	More than 90 min	1.0%	0%	2.0%	16.5%
<b>VHA Facilities within 1 hour drive time</b>					
	Median	2	4	1	1
	Range	0-30	0-30	0-25	0-5

Source: FY2007 Geocoded Enrollment Files. FY2007 was used because the enrollment data includes information about all VA sites available by travel time band (TTB). Veterans may have 0, 1, or more than 1 VA primary care site within a specific TTB.

**Table 2. FY07 National VA Drive Time Access Standards**

	Urban	Rural	Highly Rural	Threshold Criteria
Primary Care	30 min	30 min	60 min	70%
Acute Care	60 min	90 min	120 min	65%
Tertiary Care	240 min	240 min	Community Standard	65%

Source: CARES Commission Report to the Secretary of Veterans Affairs, February 2004.

**Table 3. FY07 Enrollee Primary Care Facility Assignments: CBOC or VAMC**

		Urban	Rural	Highly Rural
CBOC	69%	64%	77%	86%
VAMC	31%	36%	23%	14%

Veterans are not limited to a single VHA site for care—they have the option to select virtually *any* VA medical facility, regardless of their primary care assignment. Table 5 provides an overview of how Veterans assigned to a CBOC for primary care split their primary care between CBOCs and VAMCs. While a majority of Veterans in all residence categories used CBOCs for primary care, a third were more likely to turn to a VAMC for their primary care needs, regardless of rural status. Only a few Veterans sought primary care at both CBOCs and VAMCs, and this, too, was similar across rural groups.

We explore these data in greater detail in Table 6, which shows that Veterans assigned to a CBOC for primary care tended to have over half of their primary care visits at their assigned CBOC. Highly rural Veterans were slightly more likely to go to their assigned site than were rural or urban Veterans and a large majority of all Veterans chose to use either their assigned CBOC or a different facility that was within approximately the same TTB as their assigned site. It is important to note, however, that 21% of highly rural primary care visits were at a VHA facility outside of the Veteran's TTB. Almost half of all PC visits occurred at a facility other than the assigned CBOC for primary care.

It is unclear from the data in Table 6 precisely why Veterans chose a particular VHA facility for primary care. The data in Table 7 test the idea that those with assigned CBOCs for primary care may voluntarily travel to VAMCs in order to schedule multiple same-day appointments.

Those who had a primary care appointment at a VAMC were more likely to have additional same-day appointments in comparison to those who had a

**Table 4. FY07 VA Primary Care User Characteristics by Assigned Facility Type (CBOC or VAMC)**

	Nationally	Urban	Rural	Highly Rural
<b>CBOC-assigned</b>				
Age, mean (median)	65 (65)	65 (65)	65 (65)	66 (66)
% Female	5.2	5.9	4.3	4.2
# of PC <sup>1</sup> visits, mean (median)	3.0 (2)	3.1 (2)	2.8 (2)	3.1 (2)
# of Comorbidities, mean (median)	2.5 (2)	2.5 (2)	2.5 (2)	2.3 (2)
<b>VAMC-assigned</b>				
Age, mean (median)	63 (63)	63 (62)	64 (64)	64 (63)
% Female	6.5	7.0	5.3	5.6
# of PC <sup>1</sup> visits, mean (median)	3.4 (3)	3.5 (3)	3.2 (2)	3.7 (3)
# of Comorbidities, mean (median)	2.7 (2)	2.8 (2)	2.7 (2)	2.6 (2)

<sup>1</sup>Primary Care visits are defined by the following clinic stop codes: 301, 318, 322, 323, 348, 350, 531, and 563.

**Table 5. FY07 Primary Care Facility Type Use by CBOC-assigned Users**

Assigned to a CBOC for Primary Care (PC)	Nationally	Urban	Rural	Highly Rural
Accessed PC care at CBOCs only	66%	68%	65%	65%
Accessed PC care at VAMCs only	31%	30%	32%	32%
Accessed PC care at both CBOCs and VAMCs	3%	3%	3%	3%

**Table 6. FY07 Primary Care Visits of CBOC-assigned Veterans Examined by Facility Type, Assignment, and Relative Distance**

Primary Care Site	Nationally	Urban	Rural	Highly Rural
Assigned:				
CBOC	53%	55%	52%	58%
Not Assigned:				
CBOC within TTB	5%	4%	6%	3%
VAMC within TTB	26%	29%	23%	18%
<b>Subtotal: Uses Assigned CBOC or facility within TTB</b>	<b>84%</b>	<b>87%</b>	<b>81%</b>	<b>79%</b>
CBOC outside TTB	7%	7%	7%	7%
VAMC outside TTB	9%	6%	12%	14%
<b>Subtotal: Uses Facility outside TTB of assigned CBOC</b>	<b>16%</b>	<b>13%</b>	<b>19%</b>	<b>21%</b>

\*TTB = Travel Time Band

primary care visit at a CBOC (2.3 vs. 1.3). The most commonly scheduled visits included laboratory, x-ray, and electrocardiograms (Table 7). It should be noted that CBOCs may provide some of the services that appear most frequently with same-day primary care visits at a VAMC. It is possible that Veterans chose to schedule a series of appointments on the same day to save time, minimize costs and travel expenses. If this is the case, it may have been more economical for these Veterans to make a single trip to a VAMC, possibly outside their TTB, rather than multiple trips to different facilities, even when a CBOC is nearby.

### Clinical Video Telehealth Use

One way that the VHA has addressed the issue of geographical access is through the use of Clinical Video Telehealth (CVT), which allows a provider to deliver care to a patient over distance, from one VHA facility to another, thus making some services available at CBOCs in rural areas that might not otherwise be delivered. Table 8 details how CVT was being used nationally in FY07 to deliver outpatient care to Veterans. This table shows CVT use by patient rurality for all

outpatients, not just those assigned to a CBOC for primary care. Within CVT clinics (e.g., primary care, mental health, etc.) rural Veterans were the most common CVT users. Thirty-six percent of CVT users lived more 30 minutes away from the nearest VHA facility, and the majority of these were rural and highly rural Veterans.

The interaction of CVT use by rurality may be dependent on the CVT appointment types. The most common CVT appointment types were mental health (including PTSD), dermatology, substance use treatment, primary care, and the MOVE! program (Table 9).

Additional work done by the Veterans Rural Health Resource Center-Central Region (<http://www.ruralhealth.va.gov/education/wbncrcha/ChallengesOpportunities.pdf>) found that rural Veterans who are VHA users are accepting of long travel distances for specialty care, such as cardiology or neurology, but for simple diagnostic services (e.g., x-ray) and uncomplicated specialty care (e.g., podiatry, vision, and audiology), long travel distances are viewed as unnecessary barriers.

**Table 7. FY07 Primary Care CBOC-assigned Veterans: Number and Types of Clinic Stops as Same-day Face-to-Face Primary Care Visit**

	Primary Care Facility Type	
	VAMC	CBOC
Number of Clinic Stops per Visit mean(median)	2.3 (2.0)	1.3 (1.0)
Most common clinic stops (CL) accompanying a VAMC PC visit	% of visits with CL	
Laboratory (CL=108)	26%	8%
X-ray (CL=105)	6%	3%
Electrocardiogram/graph (CL=107)	2%	1%
Ophthalmology; Optometry (CL=407, 408)	1%	1%

**Table 8. FY07 Use of Clinical Video Telehealth by Rurality and Drive Times**

	Nationally n=36,938	Urban n=12,492	Rural n=23,504	Highly Rural n=942
VHA outpatients who used telemedicine at least once <sup>1</sup>		34%	64%	3%
Drive Times to Nearest VHA PC Facility				
0 – 15 min	38%	59%	28%	15%
15.1 – 30 min	26%	32%	23%	17%
30.1 – 60 min	28%	9%	39%	34%
60.1 – 90 min	7%	0%	10%	23%
More than 90 min	1%	0%	1%	11%

<sup>1</sup> Telemedicine use was identified using the secondary clinic stop code 690.

## Conclusions

These findings are based on actual Veteran use and show that in FY07 the majority of Veterans assigned to a CBOC for primary care used their assigned or a nearby VA facility. However, roughly 20% of CBOC-assigned rural and highly rural user primary care visits occurred at a VA facility located farther than the assigned CBOC. Possible reasons why Veterans would choose to drive farther to a VHA medical center, rather than to schedule an appointment at the nearest CBOC have been explored here using outpatient data from a year in which this was available. However, in order to better understand the role drive time plays in Veteran choice and how distance competes with other components of access to care, additional data on Veteran preferences and priorities is needed.

## Impact

This brief provides a generalization of Rural Veteran use of CBOCs across all VISNs for FY07. It is important to note that national data presents a summary across all VISNs. As there are notable VISN-unique variations in rurality, briefs are also available at the VISN level. The information provided here may be of greatest interest to VISNs that have large proportions of their population located in rural and highly rural areas. Published briefs FY07 for VISNs 1, 8, 11, 12, 15, 16, 17, 19, and 23 are readily available.

**Table 9. FY07 Clinical Video Telehealth Appointments by Care Type and Rurality**

	Mental Health (including PTSD)		Substance Use		
	Dermatology	Treatment	Primary Care	Move!	
Number of Appointments	43,967	4,883	3,948	3,878	3,675
Urban	31%	28%	28%	2%	41%
Rural	64%	72%	70%	97%	57%
Highly Rural	5%	<1%	2%	1%	2%

Note: Clinic stop codes (CL) for Mental Health (502, 509, 510, 512, 531, 550, 557, 558, 576, 577) and PTSD (516, 540, 561, 562); Dermatology (304); Substance Use Treatment (513, 517, 518, 519, 532, 533, 545, 547, 559, 560, 566); Primary Care (323,348); Move Program (372, 373);. These codes are used in conjunction with secondary stop code 690 to denote clinical video telehealth appointments.

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