Analysis of VA Health Care Utilization among Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) Veterans

Cumulative from 1st Qtr FY 2002 through 3rd Qtr FY 2014 (October 1, 2001 – June 30, 2014)

Table of Contents

Introduction

This is a quarterly report on Veterans who served in Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), or Operation New Dawn (OND) and who have used VA health care. This report provides data on the use of VA health care resources by these Veterans.

The data only apply to OEF/OIF/OND Veterans who have accessed VA health care, and do not represent all recent Veterans who have become eligible for VA health care. This report is created by linking the DoD roster of returning Veterans to VA's electronic inpatient and outpatient health records.

Suggested citation: Epidemiology Program, Post-Deployment Health Group, Office of Public Health, Veterans Health Administration, Department of Veterans Affairs. (2014). *Analysis of VA Health Care Utilization among Operation Enduring Freedom, Operation Iraqi Freedom, and Operation New Dawn Veterans, from 1st Qtr FY 2002 through 3rd Qtr FY 2014.* Washington, DC: Author. Retrieved from (URL)

Check http://www.publichealth.va.gov/epidemiology for updates.

Current DoD Roster of Recent Veterans

Evolving roster development by DoD Defense Manpower Data Center (DMDC)

- In September 2003, DMDC developed an initial file of Veterans who had been deployed to the Iraqi and Afghan theaters of operation using proxy files: Active Duty and Reserve Pay, Combat Zone Tax Exclusion, and Imminent Danger Pay.

- In September 2004 and April 2013, DMDC revised procedures for creating periodic updates of the roster. DMDC now utilizes additional information from service branches of Veterans who served in OEF/OIF/OND to update the roster.

- VA's Office of Public Health provides ongoing assistance to DMDC to improve the accuracy and completeness of the roster and the information provided.

Latest update of roster

- Provided to VA's Office of Public Health, Post Deployment Health Group, Epidemiology Program on August 15, 2014

DoD's OEF/OIF/OND deployment roster

- Contains a list of Veterans and does not include currently serving active duty personnel

- Does not distinguish between OEF, OIF, or OND Veterans

- Roster only includes separated OEF/OIF/OND Veterans with out-of-theater dates through May 2014.

- Beginning with the 3rd Quarter Fiscal Year (FY) 2009 report, Veterans who received health care but subsequently died in-theater have been included in the quarterly analyses.

- The number of individuals who died in-theater from FY 2002 through 3rd Quarter FY 2014 (October 1, 2001 – June 30, 2014) is 5,858.

How VA uses the DoD Roster of Veterans

- The DoD roster is linked to VA's electronic inpatient and outpatient health records in which the standard International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) diagnostic codes are used to classify health problems in order to determine which OEF/OIF/OND Veterans accessed VA health care as of June 30, 2014.

- The diagnostic data available for this analysis are administrative data obtained from Veterans' VA medical records and are not based on a review of patient records or a confirmation of diagnoses. However, every clinical encounter is captured in VA's computerized patient record. The data used in this analysis are appropriate for health care planning purposes because the ICD-9-CM administrative data reflect the use of health care resources.

- These administrative data should be interpreted with caution because they ***only apply to those OEF/OIF/OND Veterans who have accessed VA health care.*** These data do not represent all 1,819,913 OEF/OIF/OND Veterans who have become eligible for VA health care since FY 2002 (beginning October 1, 2001) or the approximately 2.7 million troops (as of June 30, 2014) who have served or are serving in the two theaters of operation since the beginning of the conflicts in Iraq and Afghanistan[1].

- Because VA health data do not represent Veterans who have not accessed VA health care, epidemiological studies are required to answer specific questions about the health of all OEF/OIF/OND Veterans.

- Analyses based on this updated roster are not directly comparable to those in prior reports because the denominator (number of OEF/OIF/OND Veterans eligible for VA health care) and numerator (number of Veterans enrolling for VA health care) change with each update.

- This report presents data from VA's health care facilities and does not include Vet Center data or DoD health care data.

---

[1] Source: <u>CTS Deployment File Baseline Report</u>, Defense Manpower Data Center. Provided to Epidemiology Program by the Armed Force Health Surveillance Center, 6/30/2014.

How VA uses the DoD Roster of Veterans

- These health care data are **"*cumulative totals*"** since FY 2002 and <u>do not represent data from any single year</u>.

- The numbers provided in this report should not be manipulated to derive new data without first establishing the validity of the manipulations with VA's Office of Public Health.

- Updated Roster of OEF/OIF/OND Veterans through May 31, 2014

    o **1,819,913** OEF/OIF/OND Veterans have become eligible for VA health care since FY 2002

        - **1,082,697 (~59%)[2]** Former Active Duty

        - **737,216 (~41%)[2]** Reserve and National Guard

---

[2] Percentage reported is approximate due to rounding.

VA Health Care Utilization from FY 2002 – 3rd Qtr FY 2014 among OEF/OIF/OND Veterans

Among all 1,819,913 separated OEF/OIF/OND Veterans

- **1,089,668 (~60%)[3]** have obtained VA health care since FY 2002 (cumulative total).

  - **657,116 (~61%)[3] of 1,082,697** Former Active Duty

  - **432,552 (~59%)[3] of 737,216** Reserve/National Guard[4]

Among the 1,089,668 OEF/OIF/OND Veterans who received health care since FY 2002,

- **1,006,551 of 1,089,668 (~92%)[3]** have been seen only as outpatients by VA.

- **83,117 of 1,089,668 (~8%)[3]** have been hospitalized at least once in a VA health care facility.

Comparison of VA Health Care Utilization

- Of the cumulative total of 1,089,668 OEF/OIF/OND Veterans who utilized VA health care from FY 2002 through 3rd Qtr FY 2014, 658,147 Veterans accessed care during the past 12 months (July 1, 2013-June 30, 2014). This represents about 10% of the ~6.5 million individuals who received VA health care during fiscal year 2013 (October 1, 2012 – September 30, 2013).[5]

---

[3] Percentage reported is approximate due to rounding.
[4] May include both former and current Reserve/National Guard Members.
[5] The most recent full fiscal year for which data are available. Obtained from Office of the Assistant Deputy Under Secretary for Health Policy and Planning.

Veterans Integrated Service Network (VISN) Providing Treatment

OEF/OIF/OND Veterans Treated at a VA Facility[6,7]

Treatment Site	Number	Percent
VISN 1: VA New England Healthcare System	47,136	4.3
VISN 2: VA Healthcare Network Upstate New York	30,261	2.8
VISN 3: VA New York/New Jersey Healthcare System	39,179	3.6
VISN 4: VA Stars & Stripes Healthcare System	54,568	5.0
VISN 5: VA Capitol Health Care System	44,915	4.1
VISN 6: VA Mid-Atlantic Health Care Network	87,165	8.0
VISN 7: VA Southeast Network	93,421	8.6
VISN 8: VA Sunshine Healthcare Network	89,782	8.2
VISN 9: VA MidSouth Healthcare Network	65,519	6.0
VISN 10: VA Healthcare System of Ohio	37,489	3.4
VISN 11: Veterans in Partnership Healthcare Network	50,901	4.7
VISN 12: VA Great Lakes Health Care System	54,160	5.0
VISN 15: VA Heartland Network	50,295	4.6
VISN 16: South Central VA Health Care Network	106,476	9.8
VISN 17: VA Heart of Texas Health Care Network	93,756	8.6
VISN 18: VA Southeast Health Care Network	65,582	6.0
VISN 19: VA Rocky Mountain Network	58,396	5.4
VISN 20: VA Northwest Health Network	65,239	6.0
VISN 21: VA Sierra Pacific Network	57,866	5.3
VISN 22: VA Desert Pacific Healthcare Network	99,382	9.1
VISN 23: VA Midwest Health Care Network[8]	62,869	5.8

[6] The total number of OEF/OIF/OND Veterans who received treatment (n = 1,057,760) was used to calculate the percentage treated in any one VISN. The total may be higher than 1,057,760 unique Veterans because a Veteran can be treated in more than one VISN and each is entered separately in this table.
[7] Percentages reported are approximate due to rounding.
[8] In 2002, VA merged VISNs 13 and 14 to form VISN 23.
VA Health Care Utilization among OEF/OIF/OND Veterans

Demographic Characteristics of OEF/OIF/OND Veterans Utilizing VA Health Care[9]

Demographic Characteristics	% OEF/OIF/OND (n=1,089,668)
Sex	
Male	87.8
Female	12.2
Birth Year Cohort[10]	
1990 or later	2.5
1980-1989	48.5
1970-1979	24.6
1960-1969	18.7
1950-1959	5.1
1926-1949	0.7
Rank	
Enlisted	91.0
Officer	9.0
Unit Type	
Active Duty	60.3
Reserve/Guard	39.7
Branch	
Air Force	13.0
Army	58.9
Coast Guard[11]	0.1
Marines	14.0
Navy	13.9

---

[9] Hospitalization and outpatient visits recorded as of June 30, 2014.

[10] In 2nd Qtr FY12, the birth year category "1990 or later" was added, and the earlier 1980 group redefined as ending in 1989. This adjustment was made to better equalize the number of years represented in each range. Birth year ranges were introduced 3rd Qtr FY 2009 in order to account for younger Veterans.

[11] Beginning with the 4th Qtr FY 2012 report, the percentage of Coast Guard Veterans utilizing VA health care was added to the summary because the estimate reached a reportable level.

Diagnostic Data

- Veterans of recent military conflicts have presented to VA for outpatient and inpatient care with a wide range of medical and psychological conditions.

- Diagnoses have encompassed more than 8,000 discrete ICD-9-CM diagnostic codes.

- The three most frequent diagnoses of Veterans were musculoskeletal ailments (principally joint and back disorders), mental disorders, and "Symptoms, Signs and Ill-Defined Conditions."

- As in other outpatient populations, the ICD-9-CM diagnostic category "Symptoms, Signs and Ill-Defined Conditions" was commonly reported. This is **not** a diagnosis of an unknown syndrome or unusual illness. This ICD-9-CM code includes symptoms and clinical findings that are not coded elsewhere. It is a diverse, catch-all category that is commonly used for the diagnosis of outpatient populations. It encompasses more than 160 sub-categories and primarily consists of common symptoms that do not have an immediately obvious cause during a clinic visit or consists of laboratory test abnormalities that do not point to a particular disease process and may be transient. The most frequently reported codes in this category, in order of magnitude are: General Symptoms (ICD-9-CM 780), Symptoms Involving Respiratory System and Other Chest Symptoms (ICD-9-CM 786), and Symptoms Involving Head and Neck (ICD-9-CM 784).

Number of Diagnoses among OEF/OIF/OND Veterans

Disease Category (ICD-9-CM Categories)	Number[12]	Percent
Infectious and Parasitic Diseases (001-139)	186,647	17.1
Malignant Neoplasms (140-209)	17,281	1.6
Benign Neoplasms (210-239)	90,019	8.3
Diseases of Endocrine/Nutritional/Metabolic Systems (240-279)	402,394	36.9
Diseases of Blood and Blood Forming Organs (280-289)	51,324	4.7
Mental Disorders (290-319)	615,922	56.5
Diseases of Nervous System/ Sense Organs (320-389)	537,074	49.3
Diseases of Circulatory System (390-459)	256,949	23.6
Diseases of Respiratory System (460-519)	311,512	28.6
Diseases of Digestive System (520-579)	406,640	37.3
Diseases of the Genitourinary System (580-629)	189,523	17.4
Diseases of Skin (680-709)	262,025	24.0
Diseases of Musculoskeletal System Connective Tissue (710-739)	659,649	60.5
Symptoms, Signs and Ill Defined Conditions (780-799)	615,064	56.4
Injury/Poisonings (800-999)	345,775	31.7

---

[12] The total may be higher than 1,089,668 unique Veterans because a Veteran can have more than one diagnosis and each is entered separately in this table.

Number of Veterans with Mental Disorders[13] among OEF/OIF/OND Veterans Evaluated at VA Facilities since FY 2002[14]

Diagnosis (ICD-9-CM)	Number of OEF/OIF/OND Veterans[15]
Post-traumatic stress disorder (PTSD) (309.81)[16]	337,285
Depressive Disorders (311)	270,005
Neurotic Disorders (300)	254,972
Affective Psychoses (296)	168,747
Alcohol Dependence Syndrome (303)	78,575
Nondependent Abuse of Drugs (305)[17]	60,010
Special Symptoms, Not Elsewhere Classified (307)	50,623
Drug Dependence (304)	45,057
Sexual Deviations and Disorders (302)	38,089
Specific Nonpsychotic Mental Disorder due to Organic Brain Damage (310)	35,118

---

[13] Includes both provisional and confirmed diagnoses.

[14] These are cumulative data since FY 2002. ICD-9-CM diagnoses used in these analyses are obtained from computerized administrative data. Although diagnoses are made by trained health care providers, up to one-third of initial diagnostic codes may not be confirmed because the diagnosis is provisional, pending further evaluation.

[15] The total will be higher than the 615,922 unique patients who received a diagnosis of a possible mental disorder. A Veteran may have more than one mental disorder diagnosis and each diagnosis is entered separately in this table.

[16] This row of data does not include a) information on PTSD from VA's Vet Centers, b) data from Veterans not enrolled for VA health care, or c) Veterans who received only a diagnosis of adjustment reaction, ICD-9-CM 309 (n=78,751).

[17] This category currently excludes Veterans who have a diagnosis of a) tobacco use disorder only, ICD-9-CM 305.1 (n=160,426); b) alcohol abuse only, ICD-9-CM 305.0, (n=42,905); or both tobacco use disorder and alcohol abuse, ICD-9-CM 305.0 and 305.1, (n=36,343).

Summary

- Recent OEF/OIF/OND Veterans are presenting to VA with a wide range of health conditions. The three most frequent diagnoses of Veterans were musculoskeletal ailments (principally joint and back disorders), mental disorders, and "Symptoms, Signs and Ill-Defined Condition."

- The 1,089,668 OEF/OIF/OND Veterans who have accessed VA health care do not constitute a representative sample of all OEF/OIF/OND Veterans. For example, the fact that 49% of VA patient encounters were coded as being related to diseases of the nervous system/sense organs does not indicate that 49% of all recent Veterans are suffering from this health problem. Only epidemiological studies can evaluate the overall health of OEF/OIF/OND Veterans.

- Percentages of VA health care utilization by recent OEF/OIF/OND Veterans may be influenced by combat Veterans' enhanced access to VA health care enrollment (in January 2008, this authority was extended from two years to five years post discharge) and exemption from co-pay charges for any health problem possibly related to their military service.