The State of Care for Veterans with HIV/AIDS

2011 Summary Report

DEPARTMENT OF VETERANS AFFAIRS

2012

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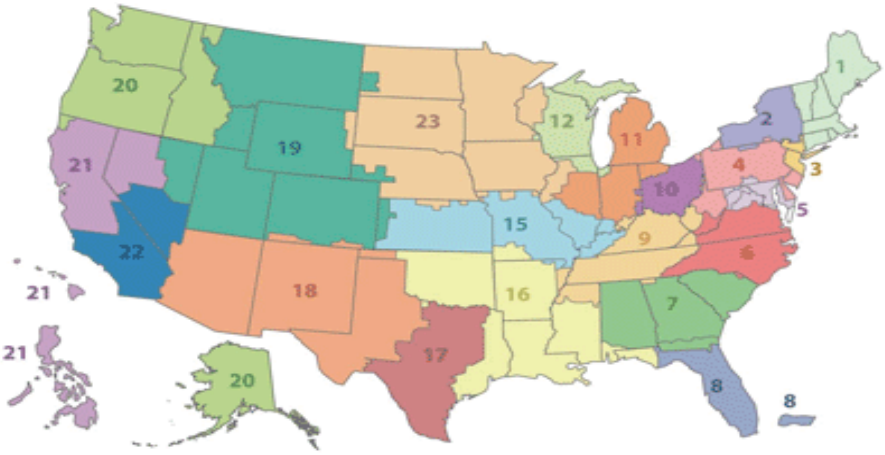
Preface

The purpose of this report is to characterize the US Department of Veterans Affairs' (VA) Veterans Health Administration (VHA) state of care for its population of Veterans in care for HIV/AIDS. The first step in providing responsive care is to learn about the affected population. This State of Care report describes the distribution of Veterans with HIV/AIDS within VHA and provides basic demographic data on this population. Additionally, the report describes pharmacologic treatment, other conditions commonly seen with HIV, monitoring, screening, and vaccinations. This report is intended to provide data which can be used to assess and guide interventions to improve the quality of care VHA delivers to Veterans with HIV/AIDS. Much of the data presented in this document comes from VHA's HIV registry, known as the Clinical Case Registry (CCR).

Veterans in Care

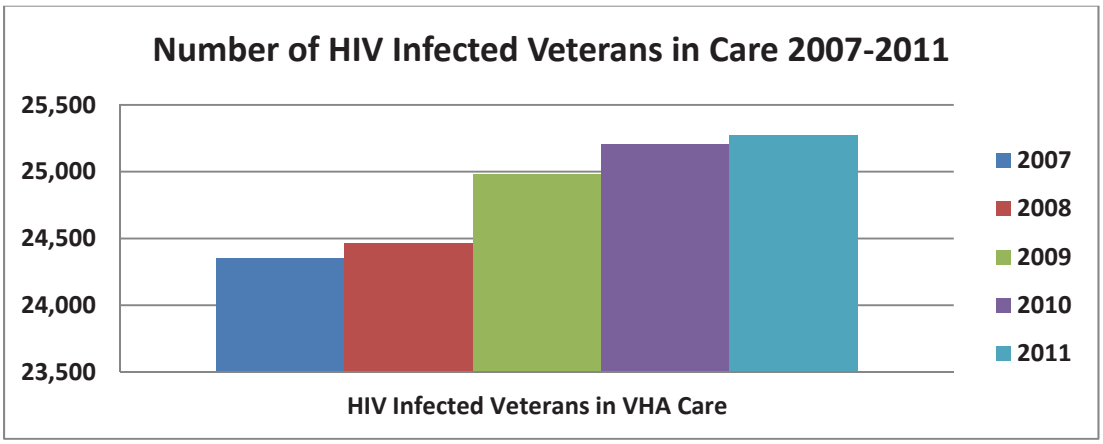
Nationally, 25,271 HIV-infected Veterans were in VHA care in 2011. The number of HIV-infected Veterans per Veterans Integrated Service Network (VISN; Figure 1) ranged from 343 (VISN 2) to 3,389 (VISN 8.) One-half of the VISNs had over 1,000 HIV-infected Veterans in care during the year, VISNs 3, 4, 5, 6, 7, 8, 16, 17, 21, and 22.

Figure 1. VHA VISN Map



Between 2007 and 2011, VHA has seen a 3.8% increase in the number of HIV-infected Veterans in care. In 2007 there were 24, 350 HIV-infected Veterans in VHA care and in 2011 that number rose to 25, 271 (Figure 2).

Figure 2. HIV-infected Veterans in VHA Care



Between 2007 and 2011, 15 VISNs had an increase in the number of HIV-infected patients receiving care while 5 VISNs had a decrease. The number of Veterans with HIV/AIDS fell in the East and increased in the South and Central U.S. VISNs 6, 7, 8, and 17 had the largest increases in caseloads of HIV-infected Veterans (159, 202, 111, and 131, respectively), while VISN 3 had the largest decrease in the numbers of HIV-infected Veterans in care (101).

In 2011, 35% of the Veteran population with HIV/AIDS in VHA care received care in the South, 28% received care in the East, 22% in the Central part of the country, and 22% in the West. This regional distribution of Veterans with HIV/AIDS in care mirrors the distribution of new U.S. AIDS cases in 2007. Some Veterans were seen in more than one VISN.

Sex

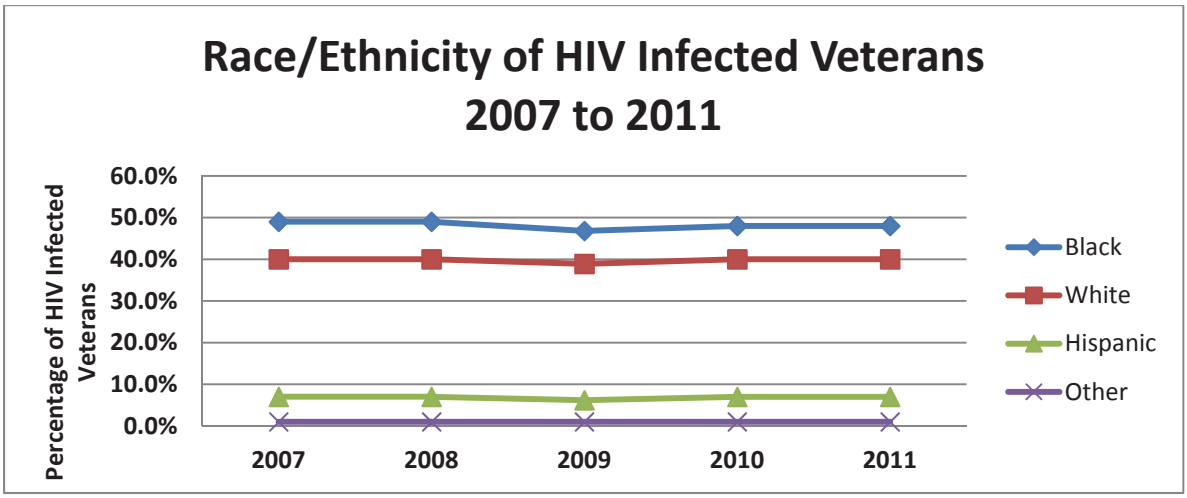
The majority of HIV-infected Veterans in VHA care are men (97%); however the Veterans Health Administration provides care to a significant number (over 600) of HIV-infected women. Although the proportion of HIV-infected Veterans in care who are female has remained stable over the past five years, according to U.S. Centers for Disease Control and Prevention (CDC) estimates, approximately one quarter of those infected with HIV in the U.S. are now women (1).

Race/Ethnicity

The majority of Veterans in VHA care for HIV/AIDS are nonwhite. Blacks are the largest racial group receiving VHA care for HIV. In 2011, Blacks comprised nearly half of the VHA HIV-infected population (48%). Whites constituted 40% of the VHA HIV-infected population. Seven percent of Veterans infected with HIV identified themselves as Hispanic or Latino. Less than 1% of HIV-infected Veterans in VHA care were American Indian, Alaskan Native, Asian, Native Hawaiian, or Pacific Islander. The percentages of

infected Veterans in VHA care according to race/ethnicity have remained consistent over the past five years (Figure 3).

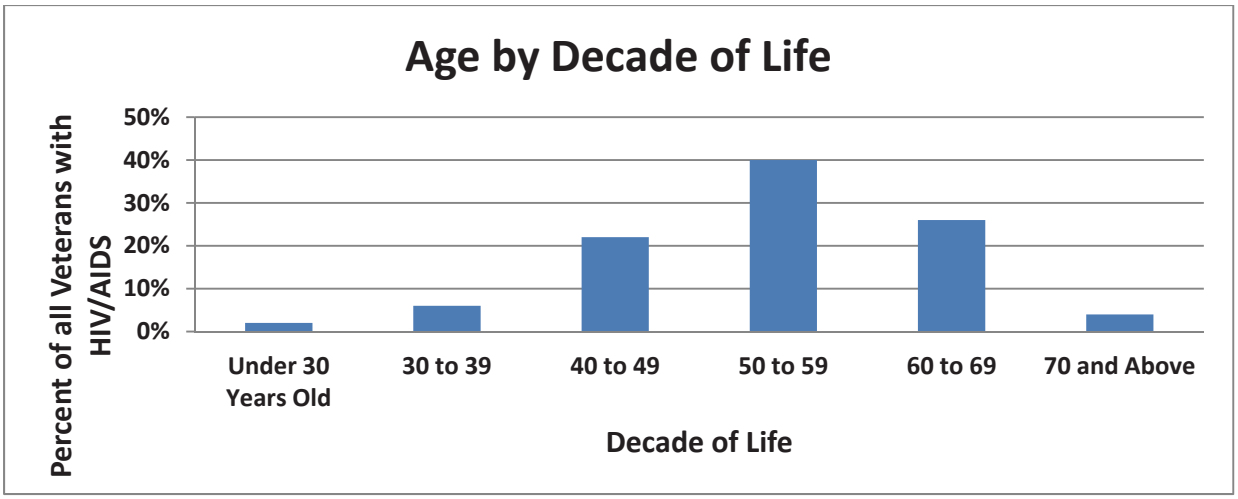
Figure 3. Race/Ethnicity of HIV-infected Veterans in VHA Care from 2007 to 2011



Age

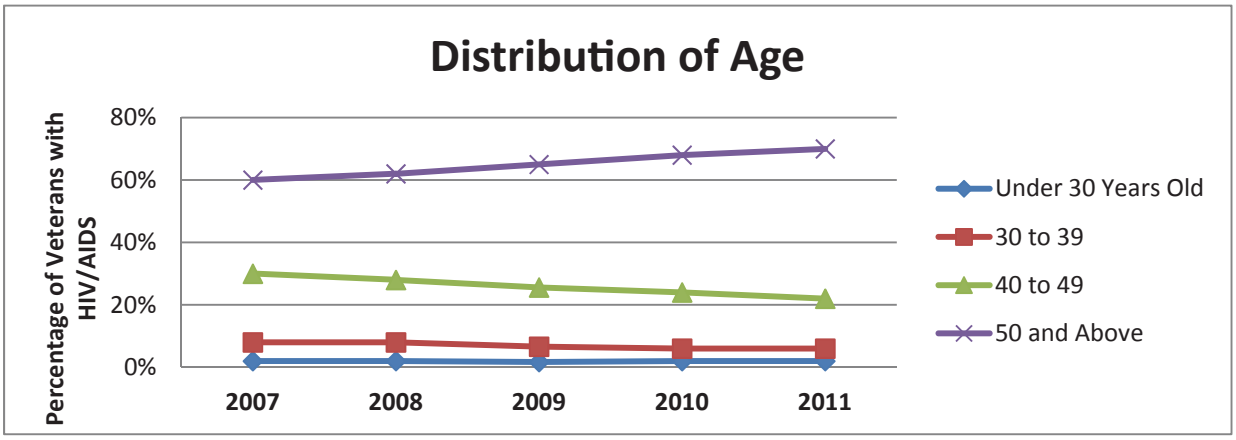
A breakdown of the age of HIV-infected Veterans in care in 2011, by decade of life, is presented in Figure 4. The majority of Veterans in VHA care infected with HIV are between the ages of 50 and 69 (66%). Between 2007 and 2011, the mean age of HIV-infected Veterans increased from 51.6 years to 54 years. During this time, the proportion of HIV-infected Veterans under the age of 50 has decreased and the proportion of Veterans over the age of 60 has increased. In 2011, persons aged 60 or older comprised 30% of newly identified HIV-infected Veterans in VHA care (includes Veterans previously diagnosed as HIV positive outside of VHA and truly new HIV diagnoses made within VHA).

Figure 4. HIV-infected Veterans in VHA Care 2011 – Age by Decade of Life



The age distribution of those with HIV infection is shown in Figure 5. The proportion of HIV-infected Veterans in VHA care over the age of 50 rose from 60% in 2007 to 70% in 2011. The increase in the number of persons aged 50 years and older living with HIV/AIDS in VHA is partially due to highly active antiretroviral therapy (HAART), which has made it possible for many HIV-infected persons to live longer.

Figure 5. Distribution of Age for HIV-infected Veterans in Care for 2007 to 2011



Veterans New to VHA Care for HIV/AIDS

Between January and September, 2011, 1,019 Veterans were newly added to the VHA National HIV CCR. These Veterans consist of newly diagnosed individuals as well as those previously diagnosed, such as Veterans receiving HIV/AIDS care outside the VA transferring into VHA care. There were 472 Veterans who transferred into VHA care. The median CD4 count of transferring Veterans was 408 with a minimum of 102 and a maximum of 584. There were 140 newly diagnosed Veterans in VHA care. The median CD4 count of newly diagnosed Veterans was 308 with a minimum of 42 and a maximum of 517.

Other Diseases and Conditions in Veterans with HIV/AIDS

Concurrent health issues, or co-morbid conditions, can add to the complex health needs of Veterans with HIV/AIDS. VHA's Office of Public Health routinely reports rates of co-morbid conditions in HIV-infected Veterans in VHA care, both for those who have ever had the co-morbid condition and those who have a new diagnosis of the co-morbid condition in a given calendar year (Table 1). Understanding the number of existing and new cases of various co-morbid conditions is important to administrators preparing workload and budget projections and to providers who must assess how these conditions affect the management of HIV disease. For example, the level of healthcare utilization for an otherwise healthy Veteran with HIV infection may be very different than for a Veteran with depression, diabetes, and hypertension as well as HIV.

In 2011, the most common co-morbid conditions requiring chronic medical management in the HIV population in care at VHA and their prevalence rates were as follows: depression (55%), hypertension (53%), dyslipidemias (50%), anemia (30%), neuroses or anxiety disorders (30%), chronic hepatitis C infection (26%), esophageal disease (25%), and diabetes (18%). Other important clinical conditions affecting HIV care included post-traumatic stress disorder (16%), chronic obstructive pulmonary disease (COPD) (13%), hepatitis B infection (12%), ischemic heart disease (12%), and chronic renal failure (11%). Substance use is quite prevalent in the HIV-infected Veteran population, with 34% reporting a history of alcohol abuse, 15% reporting a history of cannabis use, and 26% with a history of cocaine use.

Table 1. Rates of comorbid conditions for HIV-infected Veterans in VHA care in 2011.

Comorbid Condition Group	Comorbid Condition	Percent* with *Ever* Diagnosis of Condition
Bloodborne Viral Diseases	Hepatitis B	12%
	Hepatitis C	26%
Cardiovascular	Cardiomyopathy	3%
	Cerebral Vascular Conditions	3%
	Conduction Disorders / Dysrhythmias	10%
	Congestive Heart Failure	5%
	Hypertension	53%
	Ischemic Heart Disease	12%
Gastrointestinal	Esophageal Disease	25%
	Pancreatic Disease	4%
	Ulcers	3%
Hematologic	Anemia	30%
Hepatic	Cirrhosis	4%
Malignancy	Colon / Rectum	1%
	Hepatocellular Carcinoma	<1%
	Kaposi's Sarcoma	2%
	Kidney / Renal Pelvis	<1%
	Leukemia	<1%

	Lung / Bronchus	1%
	Lymphoma	2%
	Melanoma of the Skin	<1%
	Oral Cavity / Pharynx	1%
	Pancreatic	<1%
	Prostate	3%
	Urinary Bladder	<1%
Mental Illness	Bipolar Disorder	9%
	Depression	55%
	Neuroses and Anxiety States	30%
	PTSD	16%
	Schizophrenia	7%
	Any of the five mental illnesses listed above	61%

Comorbid Condition Group	Comorbid Condition	Percent* with *Ever* Diagnosis of Condition
Metabolic	Diabetes, Type I	3%
	Diabetes, Type II and Unspecified	18%
	Dyslipidemia	50%
	Male Hypogonadism	5%
Pulmonary	Asthma	8%
	COPD	13%
	Emphysema	2%
Renal	Renal Failure, Acute	10%
	Renal Failure, Chronic	11%
Substance Use	Alcohol Use	34%
	Amphetamines	4%
	Cannabis	15%
	Cocaine	26%
	Opioids	12%
	Other and Unspecified Drug Use	21%
	Tobacco Use	47%

*Number of Veterans in care in year used as denominator: 25,271

Veterans Receiving Antiretroviral Therapy

Potent combinations of antiretroviral medications have transformed HIV from an illness with uniformly high rates of fatality to one that more closely resembles a chronic disease. VHA follows the recommendations of the Department of Health and Human Services (DHHS) on prescribing antiretroviral therapy (2). In VHA, almost all of the 28 currently available Food and Drug Administration (FDA)-approved antiretroviral medications are included on the VA National Formulary and are available to Veterans with HIV/AIDS; the remainder are readily available through nonformulary requests. Veterans infected with HIV fill over one million VHA prescriptions annually, one-third of which are for antiretroviral medications. Antiretroviral medications are prescribed at all local VHA healthcare systems, and uptake of newly introduced antiretroviral medications is generally rapid across the system. In 2011, 93% of HIV-infected Veterans had ever filled an outpatient prescription for an antiretroviral medication.

Between 2007 and 2011, the proportion of Veterans ever prescribed antiretroviral medication rose from 78% to 93% (Figure 6). The proportion of Veterans receiving their first ever VHA-prescribed antiretroviral has increased slightly over the same period from 6.1% to 7% of those in care (Figure 7). The high percentage of HIV-infected Veterans on antiretroviral therapy demonstrates that access to antiretroviral therapy is widespread for Veterans receiving care from the VHA.

Figure 6. Percentage of HIV-infected Veterans in VHA Care Ever Prescribed Antivrals from 2007 to 2011

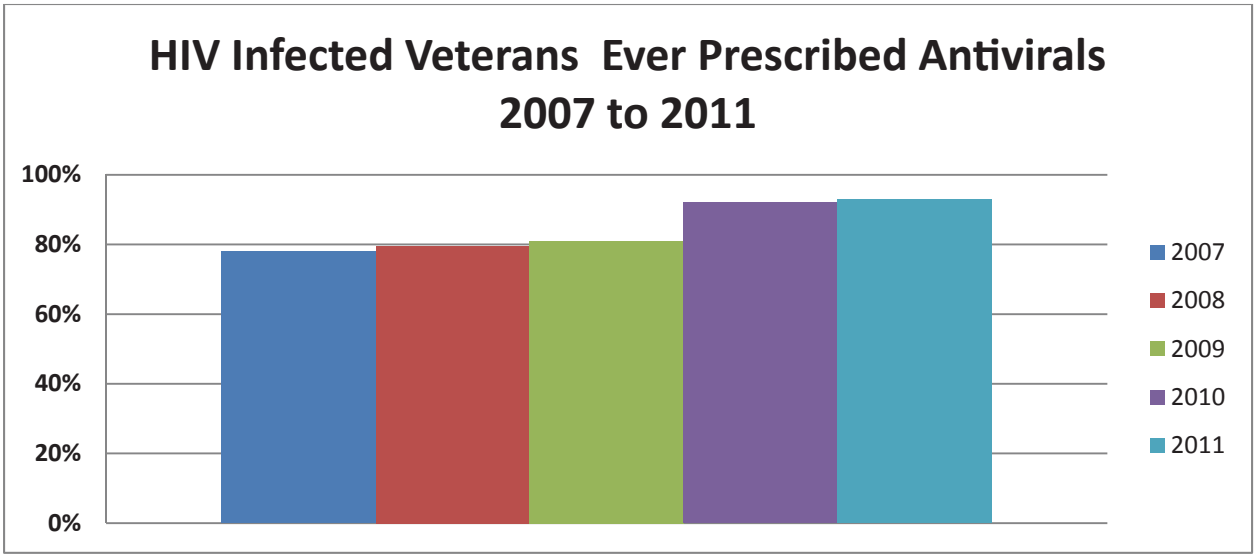
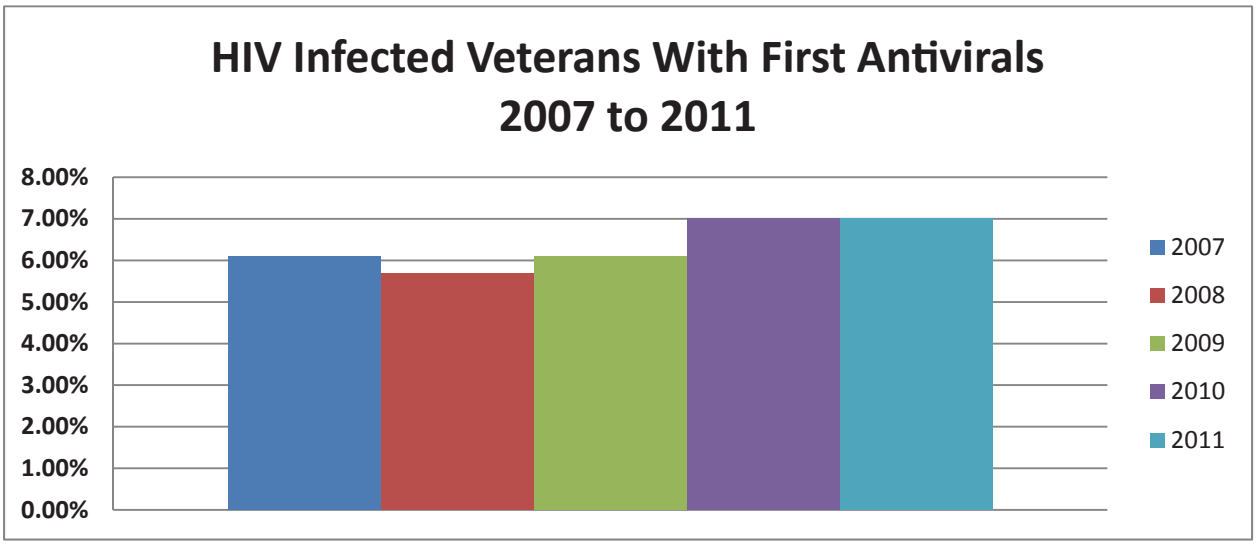


Figure 7. Percentage of HIV-infected Veterans in VHA Care with *First* Antivirals from 2007 to 2011



HIV RNA Control

The National Quality Forum (NQF) has endorsed a performance measure for HIV/AIDS care that includes the percentage of patients who are receiving HAART who have a viral load below the limit of quantification after at least 6 months of HAART (3). For HIV-infected Veterans receiving care in VHA in 2011, 74% had HIV RNA control, with a low of 63% in VISN 8 and a high of 89% in VISN 10. These statistics take into account all

Veterans in VHA care, not just the Veterans who qualify for antiretroviral therapy according to DHHS guidelines.

Influenza Vaccinations

VHA conducts a national campaign to maximize influenza vaccination among Veterans and staff each year. The VHA bases its influenza vaccination program on recommendations of the CDC's Advisory Committee on Immunization Practices (ACIP)(4). One target group of annual influenza vaccination as identified in these recommendations is persons with HIV. During the 2010/2011 flu season, 73% of HIV-infected Veterans in VHA care had Clinical Case Registry CCR documentation that they received an influenza vaccination. These vaccination rates likely underestimate the number of HIV-infected Veterans vaccinated because VHA providers may not consistently document influenza vaccinations received outside of VHA.

Hepatitis B Screening

Hepatitis B is a blood-borne and sexually transmitted disease with risk factors for acquisition similar to those for HIV (5). Once infected with hepatitis B, HIV-infected persons are significantly more likely to become chronic hepatitis B carriers and are more likely to have higher levels of hepatitis B viremia than HIV negative persons (6). Many patients with HIV/AIDS are at risk for acquiring hepatitis B and could benefit from effective hepatitis B vaccination.

Screening for hepatitis B and subsequent vaccination, if indicated, is part of comprehensive HIV medical care recommended by the ACIP. Ninety-eight percent of HIV-infected Veterans in VHA care in 2011 had been screened for hepatitis B infection. Veterans who do not have evidence of chronic hepatitis B infection during screening are considered eligible for the hepatitis B vaccination. In 2011, of the HIV-infected Veterans in VHA care considered eligible (18,871), 88% had either laboratory evidence of hepatitis B immunity (indicating likely prior hepatitis B vaccination) or had received at least one dose of a hepatitis B vaccine from the VHA.

Hepatitis C Screening

Hepatitis C is the most common chronic blood borne infection in the United States; risk factors for exposure to hepatitis C overlap with those for acquisition of HIV. Several national guidelines, including those from the American Association for the Study of Liver Disease , and the VHA National Hepatitis C Program Office, recommend that all HIV patients be tested for hepatitis C (7, 8). Unlike hepatitis A and B, there is no vaccine available to prevent hepatitis C. Patients infected with both HIV and hepatitis C may be at greater risk for liver disease progression than those with hepatitis C infection alone; thus the need for diagnosis and treatment of these individuals is high. In VHA, 98% of HIV-infected Veterans meeting NQF assessment criteria in 2011 had been screened for hepatitis C. The high screening rate indicates that VHA organizational initiatives to promote hepatitis C screening among all at-risk Veterans, along with specific emphasis on testing HIV-infected Veterans for hepatitis C have been successful.

Tuberculosis Screening

US Public Health Service guidelines for Prevention of Opportunistic Infections recommend that HIV-infected persons be screened for latent tuberculosis infection (LTBI) at the time of HIV diagnosis, regardless of other risk factors for TB (9). Tuberculosis screening can be performed by traditional tuberculin skin testing or via the newer interferon-gamma release assays. In 2011, just under eight hundred (3%) of HIV-infected Veterans had a history of TB documented in their VHA electronic medical record and 48 had a history of a tuberculin allergy-either which makes them ineligible for LTBI screening. Among HIV-infected Veterans in care in 2011 who were eligible for LTBI screening, 75% had a CCR record of a tuberculin skin test or an interferon gamma release assay ever performed by the VHA. Given the known inconsistencies in documentation of tuberculin skin testing in the electronic medical record, these percentages likely underestimate LTBI screening rates. It is possible that many HIV-infected Veterans have LTBI screening done prior to entering VHA care and those test results are documented in clinic notes, which are not captured by the current CCR.

Syphilis Screening

The link between syphilis and HIV is related to high-risk behaviors. The resurgence of syphilis among HIV-infected individuals in the United States underscores the importance of prevention and screening (9). HIV infection can impact the diagnosis and natural history of syphilis; clinical manifestations may be more apparent and progression of syphilitic disease may be accelerated (10). Routine serologic screening for syphilis is recommended at least annually for all sexually active HIV-infected persons, and various guidelines recommend more frequent testing on the basis of clinical history (e.g. ongoing risk behavior) (11) . In 2011, 65% of Veterans with HIV/AIDS in VHA care received a screening test for syphilis.

Lipid Testing

Several antiretroviral medications, including most protease inhibitors and efavirenz, have been shown to contribute to the elevation of serum lipids (12). Since these medications are commonly used among HIV-infected patients, hyperlipidemia occurs in a high proportion of HIV-infected Veterans, many of whom have other conditions and characteristics that put them at high risk for coronary heart disease, such as diabetes, hypertension, tobacco use, and being a male over age 45. The DHHS guidelines on antiretroviral therapy recommend that once antiretroviral therapy has been initiated, routine laboratory testing be performed to assess toxicity, including lipid testing (low density cholesterol (LDL) and triglycerides) (2).

The National Cholesterol Education Program (NCEP) recommends that HIV-infected persons at high risk of coronary heart disease receive lipid monitoring every four to six months (13). Using the more conservative NCEP lipid screening recommendations, 64% of HIV-infected Veterans who were in VHA care and on antiretroviral therapy underwent VHA lipid testing in the last six months of 2011. The percentage of Veterans on antiretroviral therapy who had semi-annual lipid testing increased since these rates were first reported in 2005.

Summary

This summary report provides a population view of VHA care for HIV disease. It serves to increase our understanding of the population of HIV-infected Veterans being served by VHA, how VHA addresses clinical and preventive service needs, and helps to identify significant variations in service. It describes the VHA population in VHA care and identifies trends that can help VHA as a system understand the needs of the HIV-infected population currently in care and anticipate emerging needs.

The VHA cared for over 25,000 Veterans with HIV disease in 2011. The VHA population with HIV/AIDS is concentrated in the southern United States. In general, the VHA's HIV population is overwhelmingly male, but includes over 600 female Veterans. The population has a median age of 54 years and 30% are age 60 or older. Rates of monitoring of HIV severity have improved as have rates of receipt of other recommended treatments such as screening and vaccinations where indicated. Although there are some specific areas and sites where the quality of care could be improved, overall VA provides high quality care to Veterans infected with HIV.

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