Staying Healthy with Clinical Preventive Services

Dear Colleagues,

Preventing disease is a key strategy for promoting health and the timely delivery of clinical preventive services helps ensure that we provide the best possible care for all VHA patients. This issue of Public Health Matters offers useful information on two very important clinical preventive services: tobacco use cessation (TUC) among veterans who suffer from serious mental illness and annual immunization to prevent influenza. The article on smoking and serious mental illness concisely summarizes the substantial health burden among the mentally ill who smoke and previews exciting work that is being conducted in the VHA to develop and test interventions for smokers with mental illness. Readers who want to pursue this subject in further detail can visit any of the Web-based resources listed at the end of the article.

Successful efforts to improve influenza immunization programs in three different VHA settings are described in the “best practices” article. Given that “flu season” is just around the corner, the examples shared by these dedicated VHA nurses provide real-life, practical approaches to encourage the most effective method known for preventing influenza virus infection and its sometimes serious complications: ANNUAL VACCINATION.

Preventing illness through the use of recommended vaccines and the provision of scientifically proven interventions like TUC are critical mechanisms for ensuring healthy patients, providers and communities. After all, an ounce of prevention is worth a pound of cure!

Wishing you Good Health,

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Chief Consultant, Public Health SHG
Smoking among individuals with a mental illness: Prevalence, impact, and intervention strategies

Smoking is common among individuals with a serious mental illness (SMI), but a great deal of variability exists regarding the reported prevalence both within and outside VA. Studies suggest that up to 80 percent of individuals with SMI such as schizophrenia or bipolar disorder smoke, that individuals with a mental illness or addiction consume 44 percent of all cigarettes smoked in the United States, and that members of the SMI-population are two to three times more likely to be smokers compared to the general population. However, the Survey of Healthcare Experiences of Patients (SHEP), administered to a stratified random sample of veterans cared for by the VA system, suggests that only 31 percent of veterans with SMI smoke. Administrative data from the Veterans Health Administration (VHA) and Medicare, obtained from outpatient and inpatient treatment files, indicate an even smaller prevalence (15 percent) of smoking among patients with SMI. This variability in reported smoking rates among individuals with a serious mental illness is likely influenced by a number of factors, including the type of mental health condition and the presence of other substance or alcohol abuse conditions.

Another way to look at the relationship between smoking and mental illness is to examine rates of mental illness among diagnosed smokers (Figure 1); which shows more agreement between SHEP (38 percent) and VHA-Medicare data (41 percent). These data suggest that smoking may be less frequently diagnosed and treated among veterans with SMI, and thus not recorded in treatment plans. Two key reasons for the lower identification may be the commonly held belief that individuals with an SMI have other, more pressing, mental health issues that need to be addressed or are simply not motivated to quit smoking.

Given the significant adverse consequences of tobacco use, under reporting of smoking represents an opportunity to improve clinical care. Individuals with SMI tend to be heavy smokers with high levels of measurable tobacco metabolites (Cotinine), suggesting a deeper inhalation of nicotine. Furthermore, the metabolism of tobacco can substantially influence psychiatric medication dosing requirements and blood levels by inducing the P450 liver cytochrome (CYP1A2) enzymes. Tobacco use can result in a 40 percent reduced serum level of certain commonly prescribed psychiatric medications, including antipsychotics.

Figure 1
COMPARISON OF SMOKERS IN SHEP AND VHA AND MEDICARE DUAL USE DATA IN FY2003

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Note: SHEP: Survey of Healthcare Experiences of Patients; VHA: Veterans Health Administration. MI: mental illness (Schizophrenia, Bipolar, Depression, other Psychoses and PTSD)
(clozapine, olanzepine, haloperidol, and fluphenazine), antidepressants (amitriptyline, nortriptyline, imipramine, clomipramine, fluvoxamine, and trazodone), and several other over-the-counter and prescribed medications. Smoking is also a tremendous financial burden; one study suggests that individuals with schizophrenia spend approximately 27 percent of their monthly income on cigarettes. Health care expenditures are similarly high. A recent study involving veterans with schizophrenia who smoke indicated that VA spends, on average, $13,836 annually per patient, which increased if individuals also used alcohol or other illicit drugs. Even more troubling are data suggesting that individuals with schizophrenia have a 20 percent shorter life expectancy than the national average, with cardiovascular mortality being twice as high as found in the general population.

Pharmacotherapy/Psychosocial Treatment

Pharmacotherapy and psychosocial treatments for tobacco use have proven effective for this population. Seven pharmacotherapy regimens are FDA approved for tobacco dependence, five of which involve varying administrations of nicotine replacement therapies (NRT; i.e., gum, transdermal patch, inhaler, nasal spray, and lozenge), along with bupropion sustained-release (SR), and most recently, varenicline. While not specifically approved for individuals with a serious mental illness, the nicotine replacement therapies are safe and generally well tolerated among this population. No systematic studies are reported in the literature with varenicline, the newest FDA approved nicotinic agonist, although several recent case reports indicate that it may exacerbate psychosis and manic episodes. Bupropion has shown some promise for reducing smoking in patients with schizophrenia and appears well tolerated with no evidence that it worsens psychotic symptoms. According to the Public Health Service Tobacco Use Cessation Treatment Guidelines, combining psychosocial treatments with medications significantly increases tobacco abstinence rates (27.6 percent) compared to the delivery of either counseling alone (14.6 percent) or medication alone (21.7 percent), but only a few specialized psychosocial treatments that simultaneously focus on mental health and smoking issues have been developed for individuals with SMI. These specialized treatments often include the use of motivational interviewing with personalized feedback about cigarette consumption, as well as individual and group therapy using cognitive-behavioral treatment techniques for smoking cessation. Studies integrating psychosocial and pharmacological treatment have shown the benefit of adding bupropion SR to high-dose combination NRT and weekly group cognitive behavioral therapy (CBT) for individuals with schizophrenia. A recently funded HSR&D study SDP 07-034 involves setting-up a specialized telephone-based care coordination intervention in VISN 1 and VISN 3 for smokers with a mental illness. This intervention will include both specialized counseling, utilizing motivational interviewing/cognitive behavioral techniques, and NRT’s, along with ongoing support to address the unique needs of individuals with SMI, including ongoing motivation to quit, medication treatment adherence issues (for both NRT and psychotropic medication) and transportation barriers. VA has also supported other projects focusing on smoking among individuals with a mental illness. One such highly successful initiative was a VA preceptorship program in 2005-2006 that focused on integrating tobacco dependence treatment into mental health care. This preceptorship involved training on the Integrated Care (IC) model, which systematically incorporates the delivery of tobacco use cessation treatment by the mental health professional into routine psychiatric care. The IC approach assumes that mental health clinicians are uniquely positioned to serve as change agents for tobacco cessation, given that they frequently have ongoing contact with patients, providing an ideal opportunity for continuous monitoring of tobacco use and “recycling” of patients who relapse after a quit attempt.

Impact of Smoking Among Individuals with a Serious Mental Illness (SMI)

**Pharmacological:**
- Heavier smoking among SMI (i.e., deeper inhalation of nicotine)
- Reduced medication tolerability and efficacy for mental health conditions
- Newest smoking cessation agent (varenicline) may exacerbate psychiatric symptoms

**Psychosocial:**
- Low rate of diagnosis and intervention
- High personal expenditures on tobacco

**Health Outcomes:**
- Increased morbidity, mortality
- High health care expenditures on SMI patients who smoke
Organizational Response
In addition to developing strategies to address tobacco use at the patient level, researchers are beginning to focus on organizational change strategies that more broadly target program and policy. These strategies are well suited to the VA system. One such strategy, Addressing Tobacco Through Organizational Change (ATTOC), includes a treatment manual for implementation and is currently being tested through a NIDA R01 grant evaluating the intervention at three NIDA Clinical Trials Network Community Based Provider agencies.12 The theoretical model draws from the literature of organizational change (developed in management studies and the social sciences) and includes: increasing self-efficacy of the staff; providing structural reinforcements in the system; acknowledging organizational resistance to innovation; and investigating factors that support organizational change. The HSR&D branch in conjunction with the Substance Abuse Disorder and Mental Health QUERIs (Quality Enhancement Research Initiative), recently funded a feasibility study (RFP 08-253) of the ATTOC intervention at several CBCs in VISION,13 recognizing that organizational readiness must come at multiple levels.

Conclusions
The rate of tobacco use among veterans with SMI obtained from the general SHEP survey data and the VHA-Medicare data is very much smaller than the rate seen in the population of smokers with mental illness, suggesting that smoking in this population is being under-addressed by clinicians. While smoking is detrimental to all patients, those with mental illness are impacted even more due to the fact that they smoke at more than twice the rate of those without a mental illness and have, on average, a 20 year shorter life span. Because of the high frequency of smoking among individuals with SMI and its substantial negative impacts, it is essential for VA clinicians to identify and address this public health problem. Current effective treatments (e.g., behavioral therapy in conjunction with nicotine replacement) are available for the general population of smokers and, more recently, among those with an SMI. However, additional studies are still needed. The recent advances in the field of smoking cessation for individuals with mental illness and VA’s willingness to support such multi-system efforts are major steps toward improving outcomes among this population of extremely vulnerable veterans.

SMOKING CESSATION RESOURCES FOR VHA PROVIDERS AND PATIENTS

- VA/DoD Clinical Practice Guidelines for Tobacco Cessation  

- VA Public Health Strategic Health Care Group Smoking and Tobacco Use Cessation  
  www.publichealth.va.gov/smoking

- VA in the Vanguard Conference Proceedings and Preceptorship Proceedings  
  (sponsored by VA Public Health Strategic Health Care Group)  
  www.publichealth.va.gov/docs/smoking_2004conference.pdf

- 1-800.QuitNow  
  http://1800quitnow.cancer.gov

- New Jersey Quitnet (sponsored by New Jersey Department of Health and Senior Services)  
  http://nj.quitnet.com

- Nicotine Anonymous  
  http://www.nicotine-anonymous.org

- American Cancer Society Guide to Quitting Smoking  
  www.cancer.org/docroot/PED/content/PED_10_13X_Guide_for_Quitting_Smoking.asp

REFERENCES


Flu season can begin as early as mid-October, and the VHA’s 2008-2009 influenza vaccination campaign has already started. Current VA “mission critical” performance measurement standards require that all enrolled veterans aged 50 and older (with certain medical exceptions) receive a flu vaccination. Results of the VA’s External Peer Review Program (EPRP) show that vaccination rates for veterans have ranged from 70 to 75 percent since Fiscal Year 2003. Using a different methodology, the Survey of Healthcare Experiences of Patients (SHEP) illustrates vaccination rates by age group, and these data are shown in Figure 1. The vaccination rate is highest among veterans who are 65 and older, and thus at high risk for influenza complications, but vaccination rates have been increasing among veterans of all ages.

The VA Influenza Toolkit Manual contains helpful strategies for increasing influenza vaccination rates among veterans and VHA employees. This article describes how three different VHA facilities have applied these strategies and engineered novel approaches to increase the number of patients and staff who receive influenza vaccine. The VAMC Martinsburg, West Virginia, developed the “Veterans, Friends and Family Flu Shot Clinic”; VISN 3 New York/New Jersey developed an effective Employee Flu Vaccination Program; and the West Palm Beach VAMC implemented a broad-based Influenza Prevention Program. What all three programs had in common were creative ideas, dedicated staff, and the support of their administration to try new approaches.

Martinsburg VAMC

After receiving many requests and comments from veterans wanting their spouses or other family members to be able to receive flu shots at the medical center, the Flu Vaccine Planning Committee of the Martinsburg VAMC developed the “Veterans, Friends and Family Flu Shot Clinic.” A VA committee member contacted the Berkeley County Office of the West Virginia State Health Department and invited them to participate in a joint flu vaccination clinic to be held at the Martinsburg VAMC. Health Department staff enthusiastically accepted, and a date was set for a Saturday in November 2007. The event was planned in accordance with VA regulations. Health Department officials agreed that they would vaccinate any non-veteran over the age of 16 free of charge, regardless of whether they were a resident of Berkeley County. Fliers were posted in primary care clinics and sent out in appointment letters announcing the first-ever “Veterans, Friends and Family Flu Shot Clinic.” A large poster was also placed in the medical center lobby to advertise the event. With Health Department nurses giving 102 vaccinations and VA nurses giving 69, the four-hour clinic was a great success and many compliments were received from those who attended. The “Friends and Family” clinic is being planned again for this flu vaccination season.

VISN 3

Influenza vaccination of health care workers is important to prevent them from passing the flu virus to vulnerable patients, but also to keep staff healthy and able to work.
To protect the patients served by health care workers, to prevent disruption of treatment provision, and to protect the workers themselves, the CDC recommends that all health care workers receive an annual influenza vaccination. The influenza vaccination rate for health care workers nationwide is estimated at 36-40 percent. The vaccination rate for VHA employees (65 percent in 2007-2008) is higher. However, rates are variable and some VHA facilities may need to take action to ensure good rates of influenza vaccination among their staff, as VISN 3 did with their Employee Flu Vaccination Program.

At the end of the 2006 flu season, VISN 3 noted a 36 percent influenza vaccination rate among network employees. A multidisciplinary network group was formed that included representatives from nursing, medicine, administration, infection control, pharmacy, public affairs, emergency management, patient safety, human resources, information technology, occupational health, and volunteer services. The group met monthly by conference call and also held a summer planning retreat. The monthly meetings were helpful in brainstorming, determining FY07 strategies, and identifying group roles and expertise.

Marketing strategies in VISN 3 included the use of posters, stickers, pins, Outlook messages, screensavers, fliers, and giant lobby thermometers to track facility and network progress. The most successful approaches included designation of facility “champions,” as well as top management support. This was best demonstrated by: (a) featuring the facility director getting a flu shot on a screensaver message, (b) developing a facility Web site, and (c) implementing a computer “pop-up” reminder. Kick-off campaign events featured vaccinations, education, refreshments, and prize drawings, with prizes supplied by the canteen. Additional approaches included adding and extending clinic hours and bringing vaccine to employee workstations via push pods and mobile carts. Vaccinations were available on all shifts and during weekends. Distributing “fast flu facts” (such as those featured in the sidebar on this page) via e-mail, bulletin board messages, handouts at staff meetings and canteen tray liners, further enhanced meeting the employee vaccination goal.

**FAST FLU FACTS**

- The best way to prevent the flu is getting a vaccination each year.
- Influenza vaccines are safe and effective. You CANNOT get the flu from a flu shot.
- Serious complications of seasonal flu cause an average of 226,000 hospitalizations and 36,000 deaths annually.
- Health care workers who become infected with influenza can shed flu virus for up to 1-2 days before symptoms develop. Thus they are often found at work while infectious where they may spread flu virus to vulnerable patients without knowing it.
- All health care professionals, including those in training, should be vaccinated annually against influenza. Unvaccinated employees and trainees have caused flu outbreaks in health care settings.

Tracking progress by updating data on employee influenza vaccination rates, and sharing this information with staff was critical. The result of the FY07 effort was a 23 percent improvement in VISN 3 employee vaccinations from the previous year. This positive change was a result of support by VISN 3 leadership, facility champions, the creative multidisciplinary group and VACO resources, such as the VA Influenza Toolkit Manual.

**West Palm Beach VAMC**

At the West Palm Beach VAMC, the influenza vaccination program has evolved over the past few years and continues to encourage each veteran, employee, volunteer, and student to receive a flu shot. Program goals are to increase accessibility of flu vaccine and to continue to educate multiple audiences on the value of seasonal influenza vaccination.

In years past, the most frequent complaint from veterans was about the long wait time they experienced after driving around searching for a parking place, then having to wait in line to receive a flu shot. The West Palm Beach VAMC implemented a Drive-thru Flu Clinic that has been very popular with veterans because of its convenience. Under a Memorandum of Understanding with VA, community health departments in five local counties administered flu shots to veterans free of charge with vaccine provided by VA so that they did not need to travel long distances. Veterans also complained about their spouses not being able to receive a VA flu shot, so West Palm Beach VA clinicians vaccinated veterans at Veterans Service Organizations concurrently with a private vaccination provider who gave flu shots to the veterans’ spouses.

Immunization rates have improved from 71 percent to 80 percent among veterans, and from 59 percent to 70 percent among employees. Clearly, these positive program experiences demonstrate the importance of listening to and addressing the needs of veterans and staff. The success of the program is largely due to creative approaches, administrative support, and strong teamwork.

Many of these strategies are applicable at other VA medical centers and are good examples of how all of VHA can seek out opportunities for continuous improvement in influenza vaccination, with the goal of limiting the annual toll of this preventable disease.
Racial Differences in Hepatitis C Treatment

An analysis of VISN 20 medical records for 4,263 patients with hepatitis C indicated significant racial differences in hepatitis C care across eight medical facilities, with Blacks significantly less likely to receive antiviral treatment (OR = .38), have necessary laboratory testing completed (OR = .69), and receive viral genotype testing (OR = .68). This retrospective review could not determine the causes of racial differences, thus further study is needed to understand these disparities.


Managing HIV/HCV Co-infection

This review analyzed the results of five randomized clinical trials of hepatitis C antiviral treatment in patients co-infected with HIV. Sustained virologic response rates (SVR) ranged from 27 percent to 56 percent among those treated with ribavirin and pegylated interferon-alfa. The authors noted that the treatment outcomes observed were suboptimal and called for further studies to identify effective treatments for persons co-infected with HIV and HCV.


Low HIV Testing Rates in VHA

An electronic survey of clinical laboratory services at 135 VHA facilities indicated a total of 112,033 HIV screening tests were performed in Fiscal Year 2006 (FY06), with 81 percent of tests performed on an outpatient basis. There was no significant difference in HIV prevalence between inpatients (1.62 percent) and outpatients (1.46 percent). Overall, HIV prevalence was 1.49 percent. The authors estimated that less than 10 percent of inpatients and less than 5 percent of outpatients were likely tested for HIV in FY06, indicating the need for strategies to promote increased routine testing in VHA health care facilities.


Smoking Cessation for Schizophrenic Patients

This double-blind placebo-controlled trial of bupropion sustained release (SR) with transdermal nicotine patch (TNP) in smokers with schizophrenia found this treatment significantly more effective than placebo with TNP (Fischer’s Exact Test, p < .05), with 27.6 percent of the bupropion plus TNP group achieving continuous abstinence from smoking, vs. only 3.4 percent for the placebo plus TNP group. The study also found bupropion SR plus TNP was well tolerated by the participants with neither bupropion nor smoking abstinence resulting in significant changes in positive or negative symptoms of schizophrenia.

PHSHG WELCOMES JANET DURFEE AS DEPUTY CHIEF CONSULTANT

Ms. Janet Durfee, RN, MSN, APRN, is the new Deputy Chief Consultant for the Public Health Strategic Health Care Group. Ms. Durfee comes to VA Central Office from her former position as Co-Director of the Minneapolis Hepatitis C Resource Center and Clinical Advisor to the hepatitis C clinic at the Minneapolis VA Medical Center.

VA Public Health Portal Links

- Public Health Strategic Health Care Group  
  www.publichealth.va.gov/about/pubhealth
- VA Smoking & Tobacco Use Cessation Program  
  www.publichealth.va.gov/smoking
- VA HIV/AIDS Web site  
  www.hiv.va.gov
- VA Hepatitis C Web site  
  www.hepatitis.va.gov
- Infection: Don’t Pass It On  
  www.publichealth.va.gov/infectiondontpassiton/
- Center for Quality Management in Public Health  
  www.publichealth.va.gov/quality
- Office of Public Health Surveillance & Research  
  www.publichealth.va.gov/research/surveillance
- Previous Issues of “Public Health Matters”  
  www.publichealth.va.gov/newsletters/publichealthmatters.asp
- Featured Public Health Product:  

To order Influenza Toolkit materials, go to: www.publichealth.va.gov/flu/materials/index.asp.

www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=1752

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Contact/Comments

If you have any comments or suggestions, we welcome your feedback. We will read and consider all comments and suggestions but, due to the large volume of correspondence received, may not be able to reply to each individual directly. Comments about this newsletter can be addressed to: publichealth@va.gov.

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