



# Department of Veterans Affairs Office of Inspector General

---

## Audit of Veterans Health Administration's Efforts to Reduce Unused Outpatient Appointments

**To Report Suspected Wrongdoing in VA Programs and Operations  
Call the OIG Hotline – (800) 488-8244**

# Contents

	Page
<b>Executive Summary</b> .....	i
<b>Introduction</b> .....	1
Purpose.....	1
Background .....	1
Scope and Methodology .....	2
<b>Results and Conclusions</b> .....	4
Reducing Unused Outpatient Appointments Could Improve Timeliness of Veterans Patient Care and Enable Better Use of Resources .....	4
<b>Recommendations</b> .....	10
<b>Appendixes</b>	
A. Review of Unused Outpatient Appointments .....	12
B. Review of Consults and Patients Waiting for Care.....	15
C. Review of Missed Opportunity Strategies .....	17
D. Cost of Unused Appointments .....	19
E. Monetary Benefits in Accordance with IG Act Amendments .....	20
F. Under Secretary for Health Comments.....	21
G. OIG Contact and Staff Acknowledgements.....	28
H. Report Distribution.....	29

## Executive Summary

### Results in Brief

The Office of Inspector General (OIG) conducted an audit to evaluate the effectiveness of Veterans Health Administration's (VHA) efforts to minimize the number of unused outpatient appointments. The objectives for the audit were to determine if VHA has an effective method to accurately track and report unused outpatient appointments, whether VA medical facilities implemented effective processes for reducing the number of patient no-shows, and whether unused appointments could be used for patients who are waiting for care.

VHA did not have an effective method to accurately measure and report unused outpatient appointments, has not implemented effective processes for reducing the number of missed opportunities, and needs to ensure that, where possible, unused appointments are filled with patients currently on lists waiting for care.

We projected about 4.9 million (18 percent) of the scheduled 26.5 million annual outpatient appointments in VHA's 10 performance measure clinics were unused in Fiscal Year (FY) 2008. Minimizing the number of unused outpatient appointments could enable veterans to receive more timely patient care and VHA to make better use of resources valued at about \$76 million annually and \$380 million over a 5-year period.

### Background

A steadily increasing demand for VHA's outpatient services is making it more challenging for VHA to provide veterans and their dependents with timely health care. Ensuring every possible effort is made to use available appointments helps to address this challenge and enhances the use of VHA resources. The three primary groups of unused appointments are:

- *A patient does not show up for a scheduled appointment.* VHA refers to these 3.1 million "no-shows" as missed opportunities.
- *A patient cancels before their scheduled appointment, but facility personnel do not schedule a different patient into the available appointment.* In FY 2008, we projected this resulted in an additional 1.8 million unused appointments.
- *A medical facility never schedules a patient into an available appointment.* In some cases, this is done intentionally to ensure providers have the ability to see patients needing care that same day by leaving some appointments unscheduled. VHA does not have sufficient records to identify these appointments.

In FY 2006, VHA established a performance measure to monitor and track the number of missed opportunities for scheduled outpatient appointments. The measure was included in the Veterans Integrated Service Network (VISN) Directors' Performance Plans. This measure identified the percentage of scheduled appointments that facility personnel did not use because the patients did not show up for their appointments. VHA also included those appointments in this measure that were canceled by the patient and clinic, but VHA staff did not enter the cancellations into the Veterans Health Information Systems and Technology Architecture (VistA) scheduling package until after the appointment times.

To identify successful practices for reducing missed opportunities, a task force chartered by VHA's National Leadership Board in January 2006 reviewed strategies used by clinics with low missed opportunity rates. In their August 2007 report, they identified 18 strategies in use but concluded that no single strategy worked as well as using multiple strategies to reduce missed appointments. The team recommended that facilities should assess their own processes and then design and implement solutions targeted to their unique needs. They also noted that a future study on clinics that were struggling with high missed opportunity (no-show) rates would provide more insight. As of October 2008, no subsequent study had been done.

VHA established missed opportunity targets for 10 performance measure clinics—audiology, cardiology, dermatology, eye care, gastroenterology, mental health, orthopedics, podiatry, primary care, and urology. VHA Directive 2006-028, "Process For Ensuring Timely Access to Outpatient Clinical Care" (May 8, 2006), charges VA medical facility directors with responsibility for ensuring that a process is in place for monitoring and decreasing missed opportunities.

We projected the number of unused appointments that were canceled by patients before the appointment time from a random statistical sample of appointments. Similarly, we estimated the number of patients waiting for care as the total number of patients on the electronic wait list—patients waiting more than 30 days past their desired dates of care for appointments and patients waiting for specialty care. We projected the number of patients waiting for specialty care using a random statistical sample of consult referrals for specialty care.

We calculated the average cost of an unused appointment as \$182 using cost data from VHA's Decision Support System (Appendix D, Table 1.) Although our methodology provided us with a reasonable basis for identifying the overall financial impact of unused appointments, it did not allow us to match up available appointments to individual patients waiting for an appointment.

## Findings

### **1. VHA Lacked an Effective Method to Accurately Track and Report Unused Appointments.**

VHA did not have an adequate process to monitor and track the number of unused appointments. Instead, VHA monitored and tracked only missed opportunities (no-shows). In FY 2008, approximately 4.9 million (18 percent) of VHA's available outpatient appointments were unused. Approximately 3.1 million of those unused appointments occurred because the scheduled patients did not show up for them. Additionally, about 1.8 million of the appointments not used occurred because patients canceled them prior to the appointment times, and facility personnel did not refill the available appointment slots.

VHA personnel stated that facilities sometimes use overbooking to minimize the effect of vacant appointment slots but could not provide us with reliable information to determine the number of overbooked appointments. During our site visits, we asked facility personnel about their use of overbooking. We found that although overbooking occurred, it was not used very often because the practice of overbooking patients has the potential to increase the risk of patients having to wait longer for their appointments.

We also reviewed the facility Clinic Utilization Statistical Summary (CUSS) report that shows the total number of available appointments. We did this to determine how well each facility used their available appointments but found it to be inaccurate. For example, for the 1<sup>st</sup> Quarter FY 2008, the CUSS report showed that the six medical facilities we reviewed had about one million available appointments, of which about 745,000 were shown as unused (74 percent). Our interviews with VHA personnel and reviews of the clinic schedules revealed that facility staff did not keep schedules current to show the true number of appointments available for use. For example, the provider covering Tuesdays in one clinic left, and the facility had not replaced the provider. As a result, all of the Tuesday appointment slots were reported as unused because the clinic schedule had not been modified to show the actual number of providers. This erroneously overstated the facility's available appointments.

### **2. VHA Had Not Implemented Effective Processes for Reducing Missed Opportunities.**

At the six facilities we reviewed, VHA had processes in place to reduce the number of missed opportunities but VHA had not adequately assessed the effectiveness of these processes. We interviewed key personnel and reviewed performance data at the six medical facilities to determine how many of the strategies were being used and whether positive outcomes resulted. Staff at these facilities said that the strategies used by the clinics to address this issue had minimal effect in reducing missed opportunities. They

cited various factors, including weather, lack of transportation, fuel costs, and patient preferences as contributing factors to the low effectiveness of the reduction strategies.

We focused on strategies at the 6 medical facilities and found little correlation in the use of specific strategies with the reduction of missed opportunities. For example, about 61 percent of clinics used human reminder calls while about 39 percent did not. Both groups' results showed no statistically significant difference in terms of missed opportunity targets—45 percent of the clinics that used human reminder calls met targets while 47 percent of the clinics that did not use human reminder calls met targets. Appendix C presents more information on the results on the six strategies reviewed.

In FY 2008, about 3.1 million patients who did not contact the medical facility to cancel their appointment did not show up for their scheduled appointment. Although the 3.1 million patients represented a downward trend from past years (a reduction of 3 percent from FY 2007), VHA could not determine which strategies, if any, were responsible for the reduction. The number of unused appointments is significant and costly to the medical facility (about \$564 million annually). Reducing the number of missed opportunities by even one third (1.03 million patients) could allow facilities to more efficiently use \$188 million annually. Our calculation is based on an average cost of an outpatient appointment of \$182.

### **3. VHA Needs to Ensure Unused Appointments are Used for Patients Waiting for Care.**

VHA has not established procedures for facility personnel to follow to ensure that when patients cancel appointments, other patients currently waiting for appointments are contacted first and offered the available appointment slot. VHA Central Office personnel told us that when appointments become available from a patient cancellation, schedulers should try to fill the available appointment with a patient on the electronic wait list, waiting for a consult with a specialist, or that currently has a scheduled appointment more than 30 days past the desired date of care.

Facility personnel said that if an appointment became available, they would generally offer that appointment to the next patient requesting an appointment which essentially puts these patients ahead of those already waiting for an appointment. Personnel told us that occasionally they would contact a patient, if they knew the patient was waiting for an appointment and could come in on short notice. However, it was usually easier just to fill the appointment with the next patient who called or walked in. Under this ad hoc system, facilities were able to refill and use about 2.7 million (60 percent) of the 4.5 million appointments that were canceled prior to the appointment. However, the remaining 1.8 million appointments (40 percent) went unused. This number along with the 3.1 million no-shows represents the 4.9 million unused appointments in FY 2008.

Of the 1.8 million canceled appointments that facility personnel did not refill, 830,000 were canceled with at least 3 days notice. These unused appointment slots provided facilities with an excellent opportunity to schedule patients who were waiting for appointments or had appointments that were more than 30 days past their desired appointment dates. During that same timeframe, we projected that about 1.2 million patients were waiting to be scheduled for appointments or had appointments that were more than 30 days past their desired appointment dates.

Although providers may be accomplishing other patient care duties during an unused appointment, ensuring all appointments are used provides patients with timely health care in the most cost-effective manner. The financial impact to VHA by not using all of the 830,000 canceled appointments, where the facility had at least 3 days notice to try and refill the appointment, could be as much as \$151 million annually (830,000 patients X \$182, our calculated average cost of an outpatient appointment).

VHA Central Office personnel agreed that procedures should be established but told us it was not reasonable to expect facility personnel to refill all 830,000 unused appointments. We do not have adequate information to determine how successful facilities will be in scheduling patients for the unused appointments. However, even a conservative estimate that projects one half of the 830,000 appointments could be refilled equates to a better use of \$76 million annually (415,000 patients X \$182) and \$380 million over a 5-year period.

## **Conclusion**

Missed opportunities and unused appointments impact VHA's ability to provide veteran patients with timely health care. A conservative estimate projects that these issues represent substantial annual resources that could be more efficiently utilized. Although providers may be accomplishing other patient care duties during an unused appointment, ensuring all appointments are used allows VHA to work towards their goal of providing patients with timely health care in the most cost-effective manner. Providing management with more accurate information on clinic utilization will help ensure that resources are devoted to areas where they are most needed. We estimate that VHA could better use \$76 million annually and \$380 million over a 5-year period by refilling one half of the unused appointments that occur from known patient cancellations.

## **Recommendations**

1. We recommended the Under Secretary for Health establish procedures to ensure facilities measure and track all unused outpatient appointments, including those from no-shows, patient cancellations, and unscheduled appointment slots.
2. We recommended the Under Secretary for Health establish a system to measure the effectiveness of processes employed to reduce the number of missed opportunities and then implement any best practices nationwide.

3. We recommended the Under Secretary for Health establish procedures requiring facility directors ensure scheduling personnel offer appointments to patients who are either on the electronic wait list, waiting for appointments with specialists, or currently have appointments more than 30 days past the desired dates of care, when appointments become available and the facility has at least 3 days notice.

## **Under Secretary for Health's Comments**

The Under Secretary agreed with our findings, recommendations and monetary benefits. The Under Secretary's implementation plans for the recommendations were acceptable. See Appendix F for the full text of the Under Secretary's comments.

## **OIG Response**

In paragraph's 3, 4, and 5 of the Under Secretary's response, he acknowledges that our sampling methodology was statistically valid but has concerns with our use of national projections. Our use of national projections is consistent with generally accepted auditing standards and is appropriately disclosed in the scope and methodology section of the report as well as in Appendixes A and B. In this case, the Under Secretary's concern about the sample size is not applicable as our sample is large enough to give statistically valid, unbiased projections of the population and we identified the margins of error for each of the projections used in our report.

In paragraph 6, the Under Secretary stated that the 1.2 million patients we reported who were waiting for care was incorrect. As we stated in the report, the 1.2 million patients is an estimate and our methodology was not designed to match up available appointments to individual patients waiting for an appointment. We took steps that provided us reasonable assurance that patients were not counted twice.

In paragraph 7, the Under Secretary states that our report implies that VHA should attempt to fill every unused appointment slot. Although we recommended that VHA should try to fill unused appointments, we did not expect that it would be successful in using all appointment slots. In fact, our estimate of monetary benefits is based on only filling 50 percent of patient cancellations and does not include those cancellations that occurred within 3 days of the scheduled appointment or those appointment slots where the veteran did not show up for their scheduled appointment.

The Under Secretary adds that VHA's desire is to leave about 15 percent of the appointment slots open to account for variations in demand, which is comparable to our findings that 18 percent of all appointment slots were unused. That comparison is not valid. The 15 percent referred to by the Under Secretary would be considered unused appointment slots and are typically left open by facilities to accommodate patient

requests for same-day care. Our finding was that 18 percent of FY 2008 appointment slots went unused because of patient cancellations that were never refilled and because of patient no-shows. Our number does not include the 15 percent that may have been intentionally left open to accommodate unexpected patients.

In paragraph's 8, 9, and 10, the Under Secretary concurs with our estimate of potential monetary benefits but notes that achieving the savings is dependent upon many uncontrollable variables. The Under Secretary also states that open clinic time is almost always leveraged by staff to perform other clinic-related activities, and that we did not fully consider the added cost of filling the open slots. The Under Secretary did not provide us with a better estimate of benefits.

We acknowledge that achieving the savings is dependent upon many variables. This is why we used a conservative estimate based on filling only 50 percent of canceled appointments that occurred at least 3 days prior to the scheduled appointment. We did not determine what facility staff did during unexpected open clinic time. Finally, we do not see significant additional costs to fill the unused appointments since scheduling and medical staffs are already on hand at the VHA medical facilities.

In paragraphs 11 and 12, the Under Secretary stated that the method we used to review no-show strategies was not reliable to establish a cause and effect relationship between the actual strategy used and the results. The Under Secretary added that an evidence-based standard for strategies for reducing no-shows does not exist. We agree. To correct this shortcoming, we recommended that the Under Secretary establish a system to measure the effectiveness of processes employed to reduce the number of missed opportunities and then implement any best practices nationwide.

*(original signed by:)*

BELINDA J. FINN  
Assistant Inspector General  
for Auditing

## Introduction

### Purpose

The purpose of the audit was to evaluate the effectiveness of VHA's efforts to minimize the number of unused outpatient appointments. The objectives for the audit were to determine if VHA had an effective method to accurately track and report unused outpatient appointments, whether VA medical facilities implemented effective processes for reducing the number of patient no-shows, and whether unused appointments could be used for patients who are waiting for care.

### Background

The demand for VHA's outpatient services have steadily increased making it more challenging for VHA to provide veterans and their dependents with timely health care. One way to effectively address this challenge is to ensure every possible effort is made to use available appointments.

In FY 2006, VHA established a performance measure to monitor and track the number of missed opportunities for scheduled outpatient appointments. The measure was included in the VISN Directors Performance Plans. This measure identified the percentage of scheduled appointments that facility personnel did not use because the patients did not show up for their appointments. VHA also included those appointments in this measure that were canceled by the patient and clinic, but VHA staff did not enter the cancellations into the VistA scheduling package until after the appointment times.

VHA established missed opportunity targets for ten performance measure clinics—audiology, cardiology, dermatology, eye care, gastroenterology, mental health, orthopedics, podiatry, primary care, and urology. VHA Directive 2006-028, "Process For Ensuring Timely Access to Outpatient Clinical Care" (May 8, 2006), charges VA medical facility directors with responsibility for ensuring that a process is in place for monitoring and decreasing missed opportunities.

The three primary groups of unused appointments are:

- *A patient does not show up for a scheduled appointment.* (VHA refers to these 3.1 million "no-shows" as missed opportunities.)
- *A patient cancels before their scheduled appointment, but facility personnel do not schedule a different patient into the available appointment.* (In FY 2008, we projected this resulted in an additional 1.8 million unused appointments.)
- *A medical facility never schedules a patient into an available appointment.* (In some cases, this is done intentionally to ensure providers have the ability to see

patients needing care that same day by leaving some appointments unscheduled. VHA does not have sufficient records to identify these appointments.)

## Scope and Methodology

We conducted our work from March to October 2008 and reviewed outpatient scheduling activities for the 1<sup>st</sup> Quarter FY 2008. We reviewed applicable laws, regulations, policies, procedures, and guidelines. We also interviewed employees at VA Central Office and at six medical facilities in six VISNs. We randomly selected the following six medical facilities for our review:

- VA Boston Healthcare System (HCS), Jamaica Plain Campus (Jamaica Plain, MA)—VISN 1
- Northport VA Medical Center (Northport, NY)—VISN 3
- Lexington VA Medical Center, Cooper Division (Lexington, KY)—VISN 9
- Jack C. Montgomery VA Medical Center (Muskogee, OK)—VISN 15
- Sheridan VA Medical Center (Sheridan, WY)—VISN 19
- VA San Diego Healthcare System (San Diego, CA)—VISN 22

To determine if VHA had an effective method to accurately measure and report unused outpatient appointments, we reviewed VHA's:

- Missed opportunities performance measure and interviewed VHA officials to understand the methodology used for calculating these missed opportunities.
- CUSS report from VistA and compared the report to clinic schedules.

To determine whether facility staff refilled canceled appointments, we reviewed a random statistical sample of 600 appointments canceled by patients prior to their appointment times from the 10 performance measure clinics for 1st Quarter FY 2008—100 appointments at each of the six medical facilities. Appendix A describes our sample design and results. In addition, we reviewed data in the VistA scheduling package to determine if facility staff filled the appointments when they were canceled.

To determine the average cost of an unused appointment, we obtained the total cost for specialty care and the cost for primary care from VHA's Decision Support System and divided that amount by the number of scheduled appointments. (See Appendix D, Table 1.)

To determine if facility staff implemented effective strategies to reduce the number of missed opportunities, we interviewed facility staff and analyzed the information to assess whether any particular strategy or combination of strategies were successful.

To determine if patients were waiting to be scheduled for appointments, we reviewed the electronic wait list and a random statistical sample of 600 consults for specialty care for the 1st Quarter FY 2008—100 consults at each of the six medical facilities—to evaluate whether the patients were scheduled in a timely manner. Appendix B details the results of this sample. We used data in the VistA scheduling package and the Computerized Patients Record System to determine how long the patients waited before facility staff took action on the patients' request for appointments. We also reviewed reports on patients waiting more than 30 days past their desired dates of care. Although our methodology provided us with a reasonable basis for identifying the overall financial impact of unused appointments, it did not allow us to match up available appointments to individual patients waiting for an appointment.

We assessed the reliability of automated data by comparing missed opportunity data to no-show and clinic canceled reports in VistA. We also compared the CUSS report to clinic schedules for the number of scheduled appointments and available appointments. We concluded that the missed opportunity data used to accomplish the audit objectives was sufficiently reliable. However, the CUSS report data was not reliable, and its data was not used to reach audit conclusions.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Results and Conclusions

### Issue: Reducing Unused Outpatient Appointments Could Improve Timeliness of Veterans Patient Care and Enable Better Use of Resources

#### Findings

VHA did not have an effective method to accurately measure and report unused outpatient appointments. VHA had not implemented effective processes for reducing the number of missed opportunities or ensuring that unused appointments were used for patients who were waiting for care.

#### 1. VHA Lacked an Effective Method to Accurately Track and Report Unused Appointments.

VHA's process to monitor and track the number of unused appointments focused entirely on missed opportunities. In addition to patients not showing up for scheduled appointments, a significant number of appointments went unused because patients canceled prior to their appointment times, and facility personnel did not refill the available appointment slots.

In FY 2008, we estimated that VHA reported about 3.1 million missed opportunities (12 percent of the scheduled appointments). However, this is not the total number of unused appointments. When clinic personnel canceled appointments before the appointment times, the appointments became unscheduled appointments and were not counted as missed opportunities. Based on our analysis of appointments, including those canceled by patients prior to the appointment times, we determined that in FY 2008, approximately 4.9 million (18 percent) of VHA's available outpatient appointments were unused as shown in Table 1.

**Table 1. OIG Calculation of Unused Appointments—FY 2008**

Description	Number (millions)
Missed Opportunities Per VHA's Measure	3.1
Canceled Prior To Appointment But Not Refilled	1.8
Total Unused Appointments	4.9
Total Completed Appointments per VHA	21.6
Total Scheduled Appointments	26.5
Total Unused Appointments/Total Scheduled Appointments	18%

### Canceled Prior to Appointment but Not Refilled

We reviewed canceled appointments for VHA's 10 performance measure clinics and projected that in FY 2008 about 4.5 million patients canceled appointments prior to their appointment times. VHA has not established procedures for facility personnel to follow to ensure that patients currently waiting for appointments were contacted first and offered the available slot. Facility personnel said that if an appointment became available, they would generally offer that appointment to the next patient requesting an appointment. Under this ad hoc system, facilities were able to refill about 2.7 million (60 percent) of the appointment slots canceled prior to the scheduled appointment. We agreed with facility personnel that appointments canceled by the patient with less than 3 days notice of the appointment would be hard to reschedule with a different patient. Our review of the remaining 1.8 million appointments (40 percent) found that patients canceled about 830,000 appointments (46 percent) at least 3 days in advance. During that same timeframe, we also projected that about 1.2 million patients were waiting to be scheduled for appointments or had appointments that were more than 30 days past their desired appointment dates.

The financial impact to VHA from not using the 830,000 canceled appointments, where the facility had at least 3 days notice to try and refill the appointment, could be as much as \$151 million annually. Our calculation is based on an average cost of an outpatient appointment of \$182. Although providers may be accomplishing other patient care duties during an unused appointment, ensuring all appointments are used allows VHA to work towards their goal of providing all patients with timely health care in the most cost effective manner.

VHA Central Office personnel agreed that procedures should be established but told us it was not reasonable to expect facility personnel to refill all 830,000 unused appointments. Because we do not have adequate information to determine how successful facilities will be in scheduling patients for the unused appointments, we believe that, with appropriate procedures and concerted efforts, VHA could realistically refill one half of the 830,000 appointments. This more conservative estimate equates to a better use of \$76 million annually and \$380 million over a 5-year period. Appendix D details the average cost of an outpatient appointment and Appendix E details our estimate of potential monetary benefits.

VHA personnel told us that we did not consider that facility personnel may have scheduled more than one person in an appointment (overbooking). However, VHA also confirmed to us that they had no reliable information to determine the number of overbooked appointments. During our site visits we asked facility personnel about their use of overbooking and found that although used, overbooking was not used frequently because of the risk that patients would have to wait for care.

Available Appointments

We also reviewed the facility CUSS report to determine how well each facility used their available appointments. Although this report showed the total number of available appointments, we found the CUSS report was often inaccurate. For the 1<sup>st</sup> Quarter FY 2008, the CUSS report showed that the six medical facilities we reviewed had about 1 million available appointments, of which they only used about 255,000 (26 percent). During our interviews with VHA personnel and reviews of the clinic schedules, we found that facility staff did not keep schedules current to show the true number of appointments available for use. For example, the provider covering Tuesdays in one clinic left, and the facility had not replaced that provider. As a result, all of the Tuesday appointment slots were reported as unused because the clinic schedule had not been modified to show the actual number of providers.

**2. VHA Had Not Implemented Effective Processes for Reducing Missed Opportunities.**

VHA’s efforts to reduce missed opportunities resulted in some improvements as shown in the table below, but VHA continued to have problems with the number of patients who did not show up for their scheduled appointments. In FY 2008, we estimated that about 3.1 million patients did not show up for their scheduled appointments. Although the 3.1 million patients represented a downward trend from past years (a reduction of 3 percent from FY 2007), VHA could not determine which strategies, if any, were responsible for the reduction. The number of unused appointments is significant and costly to the medical facility (about \$564 million annually). Reducing the number of missed opportunities by even one third could allow facilities to more efficiently use about \$188 million annually.

**Table 2. Nationwide Trend of VHA Reported Missed Opportunities**

<b>Fiscal Year</b>	<b>Total Missed Opportunities per VHA</b>	<b>Percent Change</b>
2005	4,164,456	
2006	3,704,514	-11%
2007	3,196,707	-14%
2008	3,100,223 <sup>1</sup>	-3%

VHA established missed opportunity targets for the ten performance measure clinics. For the 1<sup>st</sup> Quarter FY 2008, 894 (58 percent) of the 1,542 performance clinics nationwide

<sup>1</sup>OIG estimation for FY 2008 based on first 11 months.

met their targets. Of the six medical facilities reviewed, only 24 (44 percent) of the 55 performance clinics met their targets as shown in Table 3.

**Table 3. Missed Opportunity Percentages—FY 2008 1<sup>st</sup> Quarter**

<b>Performance Measure Clinic</b>	<b>FY 08 Target</b>	<b>Musko-gee</b>	<b>Lexing-ton</b>	<b>San Diego</b>	<b>Sheridan</b>	<b>Boston</b>	<b>North-port</b>
Audiology	7	8	5	7	10	6	6
Cardiology	12	6	14	13	6	8	12
Dermatology	12	*	9	18	*	16	14
Eye Care	13	16	8	19	12	18	13
Gastroenterology	17	26	8	17	*	26	19
Mental Health	17	15	32	19	21	19	18
Orthopedics	12	9	9	15	*	14	11
Podiatry	12	16	24	17	15	17	11
Primary Care	11	11	11	15	7	13	10
Urology	13	17	11	15	*	17	16

\*Care was not provided at this facility by VHA-employed providers.

### Task Force Study

To identify successful practices for reducing missed appointments, a task force chartered by VHA’s National Leadership Board in January 2006 reviewed strategies used by clinics with low missed opportunity rates. In its August 30, 2007, report—“Systems Approach to Reduce Missed Appointment Opportunities”—this team concluded that no single strategy worked as well as using multiple strategies to reduce missed appointments. They identified 18 strategies in use. The team recommended that facilities should assess their own processes and then design and implement solutions targeted to their unique needs. They also noted that a future study on clinics struggling with high missed opportunity rates would provide more insight. As of October 2008, VHA had not developed a national plan, issued guidance on using the various strategies discussed in the report, or conducted the subsequent study.

### Implementation of Strategies to Reduce Missed Opportunities

VHA had not assessed the effectiveness of strategies employed to reduce missed opportunities. With the assistance of National Leadership Board personnel, we identified six primary strategies used by facilities to reduce missed opportunities. During our site visits to six medical facilities, we interviewed key personnel and reviewed performance data to determine how many of the strategies were being used and resulted in positive outcomes. (Detailed results are in Appendix C.) Staff at the six medical facilities said that the missed opportunity strategies used by the clinics had minimal effect in reducing

missed opportunities. They cited various factors, including weather, lack of transportation, fuel costs, and patient preferences as contributing factors to the low effectiveness of the reduction strategies.

We did not find a correlation with the use of specific strategies and a reduction of missed opportunities as illustrated by the following examples:

- The clinics that used human reminder calls showed no statistically significant difference in terms of meeting missed opportunity targets compared to those clinics that did not use human reminder calls—45 percent of the clinics that used human reminder calls met targets while 47 percent of the clinics that did not use human reminder calls met targets.
- About 45 percent of clinics that used automated calls to remind patients of their appointments achieved their 1<sup>st</sup> Quarter FY 2008 targets. However, about 60 percent of clinics that did not provide automated calls to patients achieved their 1<sup>st</sup> Quarter FY 2008 targets.
- About 58 percent of clinics that used a recall system met their 1<sup>st</sup> Quarter FY 2008 targets compared to 40 percent of clinics that did not use a recall system. (In a recall system, facilities notify patients before their desired appointment date telling them to call in to make their appointments.)

### **3. VHA Needs to Ensure Unused Appointments are Used for Patients Waiting for Care.**

Facility personnel did not have procedures to ensure that patients currently waiting for appointments were contacted and offered available appointments. Facility personnel said that if an appointment became available, they would generally offer that appointment to the next patient requesting an appointment. Personnel told us that occasionally they would contact a patient, if they knew the patient was waiting for an appointment and could come in on short notice. However, it was usually easier just to fill the appointment with the next patient that called or walked in.

VHA Central Office personnel told us that when an appointment becomes available from a patient cancellation, schedulers should try to fill the available appointment with a patient on the electronic wait list, waiting for a consult with a specialist, or that currently has a scheduled appointment more than 30 days past the desired date of care. Based on VHA's data, we projected that in FY 2008, about 1.2 million patients nationwide were either waiting to be scheduled for appointments or had appointments more than 30 days past their desired dates of care.

- On January 1, 2008, about 7,000 patients were on the electronic wait list.

- In FY 2008, about 651,000 patients waited more than 7 days for facility personnel to take action on their requests for specialty care.
- In FY 2008, about 496,000 patients had outpatient appointments with wait times of more than 30 days beyond their desired dates of care.

Although our methodology did not allow us to match up available appointments for individual patients waiting for an appointment, we did identify some examples where patients were waiting for care even though there were available appointments. The following situations highlight the need to address this issue.

- A patient waited 50 days for an audiology assessment clinic visit after his provider had requested an audiology consult—it took 27 days for VHA to schedule the patient for a clinic appointment and 23 additional days until his appointment. Our review of the clinic schedule found unused appointments on nearly all of the days he waited for the visit.
- A patient at another facility waited 219 days for an ophthalmology exam after his provider requested the consult—it took 186 days for the exam to be scheduled and 33 more days from scheduling until his appointment date. We reviewed the clinic schedule and found four unused appointments within 30 days of the request date.

Although some facilities had strategies in place to reduce the number of unused appointments, facility personnel did not have corresponding procedures to ensure patients currently waiting for appointments were contacted and offered the available appointment.

## Conclusion

VHA had a high number of unused appointments—about 4.9 million (18 percent) of the scheduled 26.5 million annual outpatient appointments were unused in FY 2008. This number did not include the appointments that were never scheduled with patients because VHA did not have sufficient records to identify these appointments. Therefore, VHA was unable to track and measure the total number of available outpatient appointments. Using \$182 as the average cost of an outpatient appointment, we estimated that VHA could better use \$76 million annually and \$380 million over a 5-year period by refilling half of the 830,000 unused appointments that resulted from patient cancellations.

Missed opportunities for patient care impact VHA's ability to provide patients with timely health care. More accurate information on clinic utilization will help management ensure that resources are devoted to areas where they are most needed. This involves revising the missed opportunity performance measure to include all available appointments and/or ensuring the clinic schedules and the CUSS report are kept current

and accurate. In addition, emphasizing the need and establishing procedures to reduce the number of unused appointments will help ensure facilities see patients in a timely manner and use resources in the most cost-effective manner.

## Recommendations

1. We recommended the Under Secretary for Health establish procedures to ensure facilities measure and track all unused outpatient appointments, including those from no-shows, patient cancellations, and unscheduled appointment slots.

### Under Secretary Response

VHA will establish policy guidance to ensure facilities strengthen procedures to identify and schedule unused outpatient appointments and will conduct a study of the CUSS report for potential ways to improve its ability to report and track unused outpatient appointments within the current scheduling system. Ultimately, VHA will be able to measure and track unused appointments system-wide when the Replacement Scheduling Application is fully implemented. VHA has requested that deployment of the new system begin in FY 2009.

### OIG Response

The improvement plans are acceptable, and we will follow up on the planned actions until they are implemented.

2. We recommended the Under Secretary for Health establish a system to measure the effectiveness of processes employed to reduce the number of missed opportunities and then implement any best practices nationwide.

### Under Secretary Response

The Under Secretary for Health agreed and stated VHA would ascertain the feasibility and value of a study on the effectiveness of processes employed to reduce the number of patient no-shows. This would occur by December 31, 2008.

Additionally, VHA will survey medical facilities to gauge the range and effectiveness of the various no-show strategies currently in use. The Systems Redesign Steering Committee will review the results of this survey by July 31, 2009, and make recommendations concerning whether VHA may be able to implement any best practices nationwide.

OIG Response

The improvement plans are acceptable, and we will follow up on the planned actions until they are implemented.

3. We recommended the Under Secretary for Health establish procedures requiring facility directors ensure scheduling personnel offer appointments to patients who are either on the electronic wait list, waiting for appointments with specialists, or currently have appointments more than 30 days past the desired dates of care, when appointments become available and the facility has at least 3 days notice.

Under Secretary Response

The Under Secretary for Health agreed and stated that VHA will establish policy guidance, most likely in the currently pending revised scheduling policy, to make certain facilities establish procedures requiring facility directors ensure scheduling personnel offer appointments to waiting patients. The VHA System Redesign Office will have responsibility for writing the policy. Specifically, this policy guidance will establish and strengthen procedures so that appointments cancelled at least 3 days before their scheduled times are offered to other patients. In addition, the Scheduling Process Group will include training to implement these procedures in the new scheduler training package.

OIG Response

The improvement plans are acceptable, and we will follow up on the planned actions until they are implemented.

## Review of Unused Outpatient Appointments

### Universe

The universe for VHA reported missed opportunities came from VHA’s Quality and Performance Measures reports. The universe during the period of October 1 to December 31, 2007, consisted of 172 VA medical facilities and 44,342 clinics nationwide. These clinics had missed opportunities totaling 788,000 in the 1<sup>st</sup> Quarter FY 2008.

### Sample Design

To identify our audit scope, we used a three-stage random statistical sample. In the first stage, we randomly identified six sample VA medical facilities. For the second stage of the sample, we identified 615 random sample clinics out of a possible 1,811 performance measure clinics within those six sample VA medical facilities. Using VistA’s Canceled Clinic Report for the six sample facilities, we identified the universe of patient-canceled appointments prior to the appointment times within our sample clinics—a universe of 13,323 cancellations. For the third stage of our sample, random number generation software was used to select 100 canceled appointments for each of the six sample VA medical facilities. In total, we reviewed 600 canceled appointments.

---

**Table 1. Universe of Patient-Canceled Appointments—FY 2008 1<sup>st</sup> Quarter**

---

Facility	Universe	Sample
Boston HCS	3,670	100
Lexington	1,111	100
Muskogee	2,134	100
Northport	1,941	100
San Diego HCS	3,987	100
Sheridan	480	100
Total Universe	13,323	600

### Sample Results

We analyzed 600 random patient cancellations prior to the scheduled appointment times to determine if the appointments were refilled after the cancellations. In total, 253 of 600 canceled appointments were not refilled. Of the 244 patient cancellations that occurred less than 3 days prior to the appointment, 152 were not refilled. Of the 356 cancellations that occurred at least 3 days prior to the appointment, 101 were not refilled.

Based on the factors of our three-stage random sample, we projected nationwide that about 460,000 patient-canceled appointments were not refilled as shown in Table 2.

**Table 2. Canceled Appointments Not Refilled—FY 2008 1<sup>st</sup> Quarter**

<b>Days</b>	<b>Number of Canceled Appointments</b>	<b>Number of Canceled Appointments Not Refilled</b>	<b>Percent of Appointments Not Refilled</b>
Less Than 3 Days	413,737	252,994	61%
3 or More Days	710,956	207,450	29%
Total	1,124,693	460,444	41%

These projections were computed from a sample of appointment records. This was a complex, multi-stage sample with unequal weights. We used a replication-based method to compute the sampling errors for our estimates, which takes the complexity of the sample design into account. The margins of error in this report give the upper and lower bounds of a 90 percent confidence interval for each projection as shown below. This means that 90 percent of the possible samples we could have selected of the same size and design would have resulted in an estimate within these bounds.

**Table 3. Projection of Patient Cancellations Prior to the Appointment Times—FY 2008 1<sup>st</sup> Quarter**

<b>Value</b>	<b>Projection</b>	<b>Margin of Error</b>	<b>Lower 90%</b>	<b>Upper 90%</b>	<b>Sample</b>
Total Canceled Prior To The Appointment	1,124,693	577,733	546,960	1,702,426	600
Canceled and Refilled	664,249	378,459	285,790	1,042,708	347
Canceled and Not Refilled	460,444	215,276	245,168	675,720	253
Canceled Less Than 3 Days And Not Refilled	252,994	113,291	139,703	366,284	152
Canceled With At Least 3 Days Notice And Not Refilled	207,450	138,837	68,613	346,287	101

In order to project through FY 2008, we annualized the number of unused outpatient appointments for each category as shown below.

**Table 4. Projection of Patient Cancellations Prior to Appointment Times—FY 2008**

<b>Value</b>	<b>Projection</b>	<b>Margin of Error</b>	<b>Lower 90%</b>	<b>Upper 90%</b>	<b>Sample</b>
Total Canceled Prior To The Appointment	4,498,772	2,310,932	2,187,840	6,809,704	600
Canceled and Refilled	2,656,996	1,513,836	1,143,160	4,170,832	347
Canceled and Not Refilled	1,841,776	861,104	980,672	2,702,880	253
Canceled Less Than 3 Days And Not Refilled	1,011,976	453,164	558,812	1,465,140	152
Canceled With At Least 3 Days Notice And Not Refilled	829,800	555,348	274,452	1,385,148	101

## Review of Consults and Patients Waiting for Care

### Universe

The universe of consults was obtained from the VistA Consult Tracking Report for the period of October 1 to December 31, 2007. The universe consisted of 28,611 consults from the six sample facilities' performance measure clinics.

### Sample Design

The sample design used to project consults not acted on within 7 days consisted of two stages. In the first stage, we randomly identified six sample VA medical facilities. For the second stage of the sample, we identified a universe of 28,611 consults for the 1<sup>st</sup> Quarter FY 2008 within the six sample facilities using VistA's Consult Tracking Report. Random number generation software was used to select 100 consults from each of the six sample medical facilities. In total, we reviewed 600 consults to determine if facility personnel took action on the consults within 7 days.

**Table 1. Universe of Consults—FY 2008 1<sup>st</sup> Quarter**

Facility	Universe	Sample
Boston HCS	3,232	100
Lexington	6,747	100
Muskogee	7,164	100
Northport	2,237	100
San Diego HCS	7,292	100
Sheridan	1,939	100
Total Universe	28,611	600

### Sample Results

In total, 111 of 600 consults were not acted on in a timely manner. Based on the factors of our two-stage random sample, we projected nationwide that approximately 162,000 consults were not acted on within 7 days.

**Table 2. Consult Sample Projected Nationwide—FY 2008 1<sup>st</sup> Quarter**

	Number	Margin of Error	Lower 90%	Upper 90%
Not Acted on Within 7 Days	162,671	122,268	40,403	284,939

These projections were computed from a sample of the appointment records. This was a complex, multi-stage sample with unequal weights. We used a replication-based method to compute the sampling errors for our estimates, which takes the complexity of the sample design into account. The margins of error in this report give the upper and lower bounds of a 90 percent confidence interval for each projection. This means that 90 percent of the possible samples we could have selected of the same size and design would have resulted in an estimate within these bounds.

**Patients Waiting for Care**

In addition to the patients waiting for consults, there were about 7,000 patients on the electronic wait list as of January 1, 2008, and 123,939 patients seen in the 1<sup>st</sup> Quarter FY 2008 with wait times of more than 30 days. We projected that in FY 2008 about 1.2 million patients nationwide were either waiting to be scheduled for an appointment or had appointments more than 30 days past their desired dates of care as shown in Table 3.

**Table 3. Patients Waiting for Care Nationwide-- FY 2008**

	<b>1<sup>st</sup> Quarter</b>	<b>FY 2008</b>
Not Acted on Within 7 Days	162,671	650,684
On January 1, 2008 EWL	6,823	6,823
Wait Times > 30 days	123,939	495,756
<b>Total Patients Waiting for Care</b>	<b>293,433</b>	<b>1,153,263</b>

## Review of Missed Opportunity Strategies

During our audit we focused on six strategies shown in the table below. We determined how many strategies were used and whether they were successful based on our 615 sample clinics.

**Table 1. Review of Missed Opportunity Strategies**

Strategy Employed	Percent of Clinics Met FY 2008 Targets	Margin of Error	Number of Clinics in Sample
<b><u>Scheduling Procedure</u></b>			
Recall System	58%	6%	196
Traditional	40%	4%	419
<b><u>Automated Reminder Letter</u></b>			
Letter Sent	44%	4%	475
Letter Not Sent	53%	7%	140
<b><u>Automated Reminder Call</u></b>			
Call Made	45%	4%	585
Call Not Made	60%	15%	30
<b><u>Human Reminder Call</u></b>			
Call Made	*45%	4%	378
Call Not Made	*47%	6%	237
<b><u>Designated Phone Line For Cancellations</u></b>			
Designated Phone Line	41%	5%	314
No Designated Phone Line	50%	5%	301
<b><u>Allocated Appointments for "Drop Ins"</u></b>			
Allocated Appointments	56%	6%	181
No Allocated Appointments	41%	4%	434

\* Not a statistically significant difference

- Recall System – patient due for follow-up appointment is notified to call and schedule appointment.
- Traditional Scheduling – patient is scheduled for future appointment at time of current visit.
- Automated Reminder Letter – patient receives reminder letter through mail.
- Automated Reminder Call – patient receives recorded message prior to appointment.
- Human Reminder Call – patient receives human reminder call prior to appointment.
- Allocated Appointments for "Drop Ins" – open appointments available for patients to drop by or walk in as needed.

The following correlations existed between strategies in use and clinics meeting missed opportunity targets.

- Clinics using Recall System and/or allocating appointments for “drop ins” met targets more often.
- Clinics not using automated reminder calls, automated reminder letters, or cancellation lines met targets more often than those that did use the strategies.
- Clinics using human reminder calls showed no statistically significant difference in regards to meeting targets.

These projections were computed based on analysis and interviews at six sample medical facilities. This was a complex sample with unequal weights. We used a replication-based method to compute the sampling errors for our estimates, which takes the complexity of the sample design into account. The margins of error in this report give the upper and lower bounds of a 90 percent confidence interval for each projection. This means that 90 percent of the possible samples we could have selected of the same size and design would have resulted in an estimate within these bounds.

## Cost of Unused Appointments

To determine the average cost of an unused appointment, we obtained the total cost for specialty and primary care from VHA’s Decision Support System and divided that amount by the number of scheduled appointments as shown below.

**Table 1. Factors for Determining Cost of Unused Appointment—FY 2008**

Primary Care	Specialty Clinics	Total Clinic Costs Per DSS	Number of Scheduled Appts	Average Cost of Scheduled Appts
\$664,767,343	\$534,505,255	\$1,199,272,598	6,586,835	\$182

Appendix A, Table 4 shows that for FY 2008, the projected number of appointments canceled by the patient 3 or more days prior to the appointment time and not refilled with another patient was 830,000. Using \$182 as the average cost of an outpatient appointment, the financial impact to VHA from not using these 830,000 appointments could be as much as \$151 million annually. VHA Central Office personnel agreed that procedures should be established but told us it was not reasonable to expect facility personnel to refill all 830,000 unused appointments. Because we do not have adequate information to determine how successful facilities will be in refilling unused appointments, we believe that refilling one half is more realistic. This will allow VHA to better use \$76 million annually and \$380 million over a 5-year period.

**Table 2. Potential Monetary Benefits\***

Canceled With At Least 3 Days Notice and not Refilled	1 <sup>st</sup> Qtr FY08 (Projected Based on Sample) Unused Appts**	FY 2008 (1 <sup>st</sup> Qtr Projection X 4)		5-year (FY 2008 X 5)	
		Unused Apt**	Cost (Monetary Benefits)***	Unused Appts**	Cost (Monetary Benefits)***
All	207,450	829,800	\$151,023,600	4,149,000	\$755,118,000
One Half	103,725	414,900	\$75,511,800	2,074,500	\$377,559,000

\* Table reflects the actual amounts. Amounts shown in the report may be different to account for rounding and consistency.

\*\* Unused appointments from appointments canceled by patient at least 3 days prior to the appointment time.

\*\*\* Based on average outpatient appointment cost of \$182.

## Monetary Benefits in Accordance with IG Act Amendments

<u>Recommendation</u>	<u>Explanation of Benefit(s)</u>	<u>Better Use of Funds</u>
3.	Estimated \$76 million annually could have been used more efficiently to refill available appointments that were canceled prior to the appointment time. Over a 5-year period this amounts to \$380 million.	\$380,000,000
	Total	\$380,000,000

**Department of  
Veterans Affairs**

**Memorandum**

**Date:** November 12, 2008  
**From:** Under Secretary for Health (10)  
**Subject:** Audit of Veterans Health Administration's Efforts to Reduce Unused Outpatient Appointments  
**To:** Assistant Inspector General for Auditing (52)

1. I have reviewed the draft report, and I concur with the recommendations and estimate of monetary benefit. While I believe there are important limitations to your methodology, which raise questions about the reasonableness of some of your conclusions, you have identified potential areas that need improvement. As you recommend, I agree that the ability to systematically track unused outpatient appointments, detect and fill open appointment slots, and measure the effectiveness of local no-show interventions will enhance VHA's capability to improve access for the health care needs of our Nation's veterans.

2. I am encouraged that VHA has made extensive efforts in improving waiting times. A recent report by an outside consulting firm on VA's patient scheduling and waiting times measurement concluded that "despite the difficulty of measuring actual wait times, VA has made a significant effort to confront these challenges, and has used patient wait time data to manage the timeliness of outpatient care and report on system-wide performance."<sup>2</sup> VHA has also intensively targeted and monitored no-shows and clinic cancellations through its missed opportunity and new patient wait time performance measures. As a result, VHA is currently refilling 60 percent of all cancelled appointments.

3. As previously noted, while I concur with the report's recommendations, I am concerned that some of the findings and conclusions in your report could be misconstrued. For instance, in the initial paragraphs of the report's executive summary, you immediately highlight the national projections of the number of unused appointments and number of patients waiting for care in VHA. However, you do not introduce the important qualifier that these projections are derived from

---

<sup>2</sup>Booz Allen Hamilton, *Final Report on the Patient Scheduling and Waiting Times Measurement Improvement Study*, July 11, 2008.

a small sample taken from only six medical facilities until your discussion of scope and methodology well into the body of the report.

4. Furthermore, while the complex multi-stage sample with unequal weights methodology that you utilized to make these national projections may be statistically valid, the report does not inform the reader just how small the sample sizes that you based your conclusions on actually are.

For instance, to determine whether VHA refilled cancelled appointments, you reviewed a random statistical sample of 600 appointments canceled by patients prior to their appointment times from the 10 performance measure clinics at six medical facilities during first quarter FY 2008. You also state that in FY 2008, VHA had approximately 4.5 million cancelled appointments prior to appointment times. As such, you only reviewed 0.0133 percent (600 out of 4.5 million) of canceled appointments in FY 2008 to make national projections about whether VHA refilled cancelled appointments.

5. In another example, to determine whether patients were scheduled in a timely manner, you reviewed a random statistical sample of 600 consults for specialty care for the first quarter FY08. However, in FY 2008, VHA had a total of 3,640,807 Computerized Patient Record System consult requests. As such, you only reviewed 0.0165 percent (600 out of 3,640,807) of all VHA consults in FY 2008 to make national projections about whether VHA scheduled patients in a timely manner. As VHA staff has previously discussed, while these national projections may be statistically representative, one must be cautious in using such projections in estimating that an agency could have used millions of dollars more efficiently.

6. I am also concerned about your methodology in deriving the total number of patients waiting for care in VA. In order to determine if patients were waiting to be scheduled for appointments, you reviewed the VHA data and found that there were about 7,000 patients on the electronic wait list as of January 1, 2008, 496,000 patients seen in FY 2008 with wait times of more than 30 days, and 651,000 patients with consults not acted on within seven days. From these three figures, you projected that approximately 1.2 million patients were waiting for care in FY 2008. However, as VHA staff has previously discussed, labeling this grouping as "total patients waiting for care nationwide in FY 2008" is incorrect since: 1) patients with consults not acted on within seven days may have already received their care in FY 2008; 2) your count of those consults not acted on within seven days could also be on the electronic wait list and thus be double counted; and 3) your count of those consults not acted on within seven days could also have been double counted as patients seen in FY 2008 with a wait time of more than 30 days.

7. As written, your report implies that VHA should optimally attempt to fill every unused appointment slot. However, non-healthcare industry studies and systems redesign principles state that filling any system to 100 percent capacity will cause waiting times to increase exponentially. I realize there is a trade off between patient waiting times and appointment slot use. General guidance is that systems filled beyond about 85 percent of capacity cannot respond to variation in demand and result in causing patient delay.

Your report projects that about 4.9 million (18 percent) of the scheduled 26.5 million annual outpatient appointments in VHA's 10 performance measure clinics were unused in FY08. While I acknowledge there are improvements that can be made, the actual system performance that you calculated (18 percent open slots) and system redesign principles (15 percent open slots) is not very different. Lastly, your report should acknowledge that it is not reasonably possible for every unused appointment slot length to match the time needed for patients waiting. For example, a 15 minute slot may be open, but waiting patients may need 30 or more minutes for their care.

8. While I concur with your estimate of monetary benefit, I am concerned that the accuracy of your estimated better use of funds amounts is highly dependent upon many potentially uncontrollable variables. Specifically, actual realization of the better use of funds amount is dependent upon timely and effective communication from the clinic to the veteran about the availability of a cancelled appointment, the availability and willingness of the veteran to change her/his schedule to accept the cancelled appointment, and the success of the veteran actually completing the rescheduled appointment. If all of the above happened, then there would be a more effective use of the funds, but if those things did not occur, it is not correct to assume that there was an ineffective use of the funds.

9. Additionally, your estimate of monetary benefit calculation assumes that clinic staff is idle during the visit time of a "no-show". However, this has not been VHA's experience. Any open clinic time is almost always leveraged by staff to perform other important clinic-related activities. For the provider, this could entail: reviewing view alerts; calling patients to discuss next steps in care; preparing for the next patient by reviewing clinical notes, etc.; completing documentation on the previous patient; completing encounters; spending extra time with patients who are being seen; and, teaching activities. For non-providers, similar use of time occurs. Lastly, in calculating your estimate of monetary benefit, you do not consider the added cost of filling additional numbers of open slots and thus have not properly reduced projected costs savings accordingly.

10. To project the true costs of increasing the percentage of available slots to be filled, one would need to review tools, time, and contact information available to

schedulers to enable their increased success in filling open slots. In the end, while VHA concurs with the intent to offer open clinic slots to waiting patients, this is not so easy to do, given the limitations of the current scheduling system. With the current scheduling software, if a patient is being scheduled and desires an appointment and the desired date is today (as for new patients), schedulers would see the next open appointment (cancelled or not). For a scheduler to offer open clinic slots to waiting patients, schedulers would have to be able to sequester cancelled appointments from the system for rescheduling of patients who were waiting for appointments. This is not possible in the current system. In the current system, in order to offer appointments to waiting patients when appointments become available and the facility has at least a one day notice, schedulers are required to check the electronic wait list, Recall/Reminder System, New Patient Call List, AEG Mumps Routine, pending consults, and Veterans Integrated Service Network Support Service Center Pending Reports. In addition, the scheduler must check patient registration to obtain current contact information for such patients, successfully make the contact, offer the appointment, assist as needed with travel, and coordinate lab and diagnostic work-ups. This is a very difficult expectation to add to the already overburdened schedulers, and *effective* implementation of this process with the current tools is unrealistic. I believe that the new scheduling system, Replacement Scheduling Application (RSA), which is currently in the development and testing phase, will allow more flexibility in scheduling when it is implemented throughout the VA system. This is because RSA will have the capability to provide a VA-wide view of resource availability, which should facilitate real-time centralized scheduling and improve the timeliness of care.

11. As to your objective to determine if facility staff implemented effective strategies to reduce the number of missed opportunities, your review of six facilities identified six primary strategies used to reduce missed opportunities. In the end, you concluded that little correlation existed in the use of specific strategies to reduce missed opportunities, and VHA had not assessed the effectiveness of strategies employed to reduce missed opportunities. However, your report fails to provide the reader with a well-informed understanding because it does not: 1) fully define the six strategies you identified; 2) describe the extent that each strategy was implemented at each clinic to gauge whether they were effectively implemented; and 3) explain how and what standards you used to determine whether or not the strategy was effectively implemented. As such, your methodology of comparing your perceptions of no-show strategy implementation that staff conveyed to you during interviews and whether clinics met previously implemented no-show targets is not a reliable way to establish a cause and effect relationship between actual strategy use and results. I believe that in order to make informed conclusions in this area, we need to engage in a more focused short-term performance improvement initiative and potentially a formal long-term research study.

12. While I ultimately agree that VHA needs to become more knowledgeable about the connection between no-show strategy implementation and effectiveness, it is important to point out that there are no evidence-based standards for strategies that reduce no-shows. Nonetheless, VHA has championed and distributed to the extent possible a number of successful strategies (see attached).

13. Thank you for the opportunity to review the report and your willingness to work with us to refine its contents. Attached is VHA's complete plan of corrective action. I would be glad to discuss any of concerns or comments you may have about this response or the action plan. If you have any questions, please contact Margaret Seleski, Director, Management Review Service (10B5) at (202) 461-8470.

#### VHA No-show Strategies

- 1) "Closing the visit" – The provider and patient discuss the next step in care including reasons and timing of the next visit and agree upon the plan.
- 2) Reminder calls or letters – This strategy scripts the scheduling function to use the best words to be clear about the visit appears. Reports suggest this strategy to be extremely effective in some clinics, but not at all effective in others.
- 3) Support staff – The VHA Office of Provider Productivity found a significant association of no-show rates with support staff sufficient to make reminder calls.
- 4) Minimize transportation issues – Transportation failures or challenges can lead to cancellations and no-shows.
- 5) Make cancellations easy – Patients are less likely to no-show if the facility makes cancellation easy. VHA has established an expectation that facilities make cancellation options appear high on the phone tree.
- 6) Reduce the wait time – This strategy has been broadly and successfully implemented by VHA.
- 7) Improve continuity – This strategy emphasizes that the patient sees their own provider. VA has taken the lead in this area for many years by establishing panels in primary care.
- 8) Involve the patient in making the appointment – Involve the patient rather than sending the patient an appointment time and date. VA has prohibited auto-rebooking because it does not involve the patient, resulting in increased no-show, cancel, and reschedule rates.

## **Under Secretary for Health Comments to Office of Inspector General's Report**

The following comments are submitted in response to the recommendations in the OIG's Report:

### **OIG Recommendations**

**Recommendation 1.** We recommend the Under Secretary for Health establish procedures to ensure facilities measure and track all unused outpatient appointments, including those from no-shows, patient cancellations, and unscheduled appointment slots.

**Concur** **Target Completion Date: 07/31/2009**

VHA will establish policy guidance, most likely in the currently pending revised scheduling policy, to ensure facilities strengthen procedures to identify and schedule unused outpatient appointments as noted in the action plan to recommendation number 3 below. VHA System Redesign Office will have responsibility for writing the policy. In the near-term, VHA System Redesign Office will request that the VSSC conduct a study of the CUSS report for potential ways to improve its ability to report and track unused outpatient appointments within the current scheduling system. VHA System Redesign Office will submit this request to VSSC and request a response by July 31, 2009. Ultimately, VHA will be able to measure and track unused appointments system-wide when the new scheduling system, Replacement Scheduling Application, is fully implemented. The timeline for implementation of Replacement Scheduling Application depends on VA Office of Information and Technology's software development process but VHA has requested that deployment begin in FY 2009.

**Recommendation 2.** We recommend the Under Secretary for Health establish a system to measure the effectiveness of processes employed to reduce the number of missed opportunities and then implement any best practices nationwide.

**Concur** **Target Completion Date: 07/31/2009**

Deputy Under Secretary for Health for Operations and Management and VHA System Redesign Office will coordinate with VHA Office of Research and Development to ascertain the feasibility and value of an Office of Research and Development study on the effectiveness of processes employed to reduce the number of patient no shows. VHA System Redesign Office will coordinate this request by December 31, 2008.

Additionally, the Deputy Under Secretary for Health for Operations and Management will survey VHA medical facilities to gauge the range and effectiveness of the various no-show strategies currently in use. The Systems Redesign Steering Committee will review the results of this survey by July 31, 2009 and make recommendations concerning whether VHA may be able to implement any best practices nationwide.

**Recommendation 3.** We recommend the Under Secretary for Health establish procedures requiring facility directors ensure scheduling personnel offer appointments to patients who are either on the electronic wait list, waiting for appointments with specialists, or currently have appointments more than 30 days past the desired dates of care, when appointments become available and the facility has at least 3 days notice.

**Concur**

**Target Completion Date: 07/31/2009**

VHA will establish policy guidance, most likely in the currently pending revised scheduling policy, to ensure facilities establish procedures requiring facility directors ensure scheduling personnel offer appointments to waiting patients. The VHA System Redesign Office will have responsibility for writing the policy. Specifically, this policy guidance will establish and strengthen procedures to ensure that appointments cancelled within at least three days of its scheduled time are offered to other patients. In addition, the VHA System Redesign Office – sponsored Scheduling Process Group will include training to implement these procedures in the new scheduler training package.

## **OIG Contact and Staff Acknowledgments**

---

OIG Contact	Larry Reinkemeyer 816-997-6940
-------------	-----------------------------------

---

Acknowledgments	Madeline Cantu Robin Frazier Lee Giesbrecht Joe Janasz Lance Kramer Russ Lewis Mary Lopez Gilbert Melendez Henry Mendala Daniel Morris Carla Reid Jason Schuenemann Lynn Scheffner Oscar Williams
-----------------	--

## **Report Distribution**

### **VA Distribution**

Office of the Secretary  
Veterans Health Administration  
Veterans Benefits Administration  
National Cemetery Administration  
Assistant Secretaries  
Office of General Counsel

### **Non-VA Distribution**

House Committee on Veterans' Affairs  
House Committee on Appropriations, Subcommittee on Military Construction, Veterans Affairs, and Related Agencies  
House Committee on Oversight and Government Reform  
Senate Committee on Veterans' Affairs  
Senate Committee on Appropriations, Subcommittee on Military Construction, Veterans Affairs, and Related Agencies  
Senate Committee on Homeland Security and Governmental Affairs  
National Veterans Service Organizations  
Government Accountability Office  
Office of Management and Budget

This report will be available in the near future on the OIG's Web site at <http://www.va.gov/oig/publications/reports-list.asp>. This report will remain on the OIG Web site for at least 2 fiscal years after it is issued.