Veterans Health Administration

Audit of The Home Telehealth Program

March 9, 2015
13-00716-101
### ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDOC</td>
<td>Bed Days of Care</td>
</tr>
<tr>
<td>CCM</td>
<td>Chronic Care Management</td>
</tr>
<tr>
<td>FY</td>
<td>Fiscal Year</td>
</tr>
<tr>
<td>HPDP</td>
<td>Health Promotion and Disease Prevention</td>
</tr>
<tr>
<td>NIC</td>
<td>Non-Institutional Care</td>
</tr>
<tr>
<td>OIG</td>
<td>Office of Inspector General</td>
</tr>
<tr>
<td>PAID</td>
<td>Personnel and Accounting Integrated Data</td>
</tr>
<tr>
<td>VA</td>
<td>Department of Veterans Affairs</td>
</tr>
<tr>
<td>VHA</td>
<td>Veterans Health Administration</td>
</tr>
<tr>
<td>VISN</td>
<td>Veterans Integrated Service Network</td>
</tr>
</tbody>
</table>

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- **Email:** vaoighotline@va.gov

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Why We Did This Audit

The goal of the Home Telehealth Program is to improve veterans’ access to care while reducing patient treatment costs. The program does this by remotely monitoring patients’ vital signs in the home and intervening early when adverse trends are detected. We determined how effectively the Veterans Health Administration (VHA) is managing its Home Telehealth Program.

What We Found

VHA missed opportunities to expand enrollment for Non-Institutional Care (NIC) patients in the Home Telehealth Program. NIC telehealth patients showed the best outcomes, in terms of reduced inpatient admissions and bed days of care (BDOC). However, in fiscal year (FY) 2012, the number of NIC patients-served grew by only about 13 percent. In FY 2013, the number of NIC patients-served declined by 4 percent, while the number of Chronic Care Management (CCM) and Health Promotion/Disease Prevention (HPDP) patients-served grew 51 and 37 percent, respectively.

The significant change in the mix of patients receiving care in this program occurred due to a change in the performance methodology. VHA began to measure program performance by the total number of patients-enrolled, rather than focusing on the increase in enrollment for NIC patients. This change in performance metrics encouraged VHA to enroll more HPDP participants. These participants would likely need less intervention from Primary Care physicians, because their health care needs would be less complex. VHA was successful in reaching its new performance metric. However, obtaining this goal did not result in more patients with the greatest medical needs receiving care under the program.

As a result, VA missed opportunities to serve additional NIC patients that could have benefited from the Home Telehealth Program. VA could have potentially delayed the need for long-term institutional care for approximately 59,000 additional veterans in FY 2013.

What We Recommended

We recommended the Interim Under Secretary for Health implement mechanisms to identify demand for NIC patients and develop specific performance measures to promote enrollment of NIC patients.

Agency Comments

The Interim Under Secretary for Health concurred with our recommendations and provided an acceptable action plan. We will follow up on the implementation of the corrective actions.

LINDA A. HALLIDAY
Assistant Inspector General for Audits and Evaluations
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INTRODUCTION

We conducted this audit to determine whether the Veterans Health Administration (VHA) effectively managed its Home Telehealth Program.

According to VHA Support Services Center reports, the number of veterans eligible for long-term institutional care, who were 65 or older, has grown by about 728,000 veterans (20 percent), in the last 5 years.

The goal of the program was to improve clinical outcomes and expand access to care while reducing treatment costs, complications, hospitalizations, and clinic or emergency room visits, for veterans in post-acute care settings and patients with chronic diseases. Home Telehealth was an emerging modality for providing care to veterans, through the use of monitoring devices placed in veterans’ homes. These devices measured veterans’ vital signs, such as blood pressure, pulse, and blood glucose. The devices periodically transmitted data to VA medical facility staff, who monitored the data and intervened when they detect adverse trends.

The program has proven to be a low cost alternative (at less than $2,400 per patient annually) to providing home-based primary care, which includes case management and in-home nursing care (about $22,200 annually), or placing a veteran in a contract nursing home facility (about $92,300 annually). The VA’s Chief Consultant for Telehealth estimated that approximately 29 percent of Home Telehealth patients avoided long-term institutional care, by participating in the program in fiscal year (FY) 2013.

From FY 2009 through FY 2013, the program’s budget increased by 124 percent from $85.2 million to $190.3 million. During that same period, patient enrollment in the program increased by about 115 percent, from a little over 37,200 patients to about 80,200 patients.

• Appendix A provides pertinent background information.
• Appendix B provides details on our scope and methodology.
• Appendix C provides details on our sampling methodology.
RESULTS AND RECOMMENDATIONS

Finding: VHA Can Increase Non-Institutional Care Participation in the Home Telehealth Program

VHA can expand Home Telehealth Program enrollment opportunities for Non-Institutional Care (NIC) patients. The program was successful in reducing both admissions for inpatient stays and bed days of care (BDOC) in all three patient categories—NIC, Chronic Care Management (CCM), and Health Promotion/Disease Prevention (HPDP). NIC telehealth patients reduced inpatient admissions by double that of CCM patients and four times the rate of HPDP patients. NIC patients also reduced their BDOC an average of 1.4 days over a 6 month period, while CCM and HPDP reduced their BDOC by 0.3 days and 0.4 days, respectively.

Although NIC telehealth patients showed the best outcomes, NIC enrollment in the program has declined. The decline in NIC patient enrollment was driven by a performance metric that did not ensure patients with the greatest medical needs were served. We determined that clinical providers referred more veterans into the CCM and HPDP telehealth program after VHA moved from focusing on increasing enrollment of NIC patients to a more generalized performance goal that did not specify program enrollment targets for serving NIC, CCM, or HPDP patients.

When VHA shifted focus in FY 2011 from targeting NIC categories for enrollment to all categories, by FY 2012 the mix of NIC patients served grew by about 5,000 (13 percent) in comparison with the total CCM patients served of 5,682 (62 percent). HPDP experienced the largest growth adding 6,293 (100 percent) patients in FY 2012. This trend continued in FY 2013 as NIC patient enrollment declined by 1,677 (4 percent), while the number of CCM and HPDP patients served grew an additional 7,492 (51 percent) and 4,617 (37 percent), respectively.

This occurred because Primary Care physicians only needed to enroll a sufficient number of patients from their Patient Aligned Care Team’s panel in the Home Telehealth Program to meet their performance targets. Previously performance goals focused on increasing NIC enrollment, but under the new metric there was a greater incentive to enroll more HPDP participants who have less complex healthcare needs. According to Telehealth Coordinators, HPDP patients typically need less intervention by nurses.

VHA’s Allocation Resource Center stated there were approximately 205,000 veterans who met the NIC criteria that were eligible to participate in the Home Telehealth Program in FY 2013. Furthermore, VHA’s Chief Consultant for Telehealth estimated approximately 29 percent may have
Avoided long-term institutional care in FY 2013 using this program. Based on these estimates, VA missed opportunities to serve additional NIC patients that could have benefited from the Home Telehealth Program. VA could have potentially delayed the need for long-term institutional care for approximately 59,000 additional veterans in FY 2013.

A veteran is approved to enroll in the program when he or she is referred by a medical provider (typically a Primary Care Provider), and the veteran agrees to participate. Following this initial referral, VA Care Coordinators assess the veteran’s behavior and symptoms, cognitive status, living situation, caregiver presence, functional ability to handle activities of daily living, and prognosis.

Based on the VA Care Coordinators assessment, most veterans are placed into one of three patient categories.\(^1\) The following three home telehealth categories are listed in descending order of the complexity of health care need:

- **NIC:** Patient meets one or more of the following criteria:
  - One or more behavior or cognitive problems
  - Life expectancy of 6 months or less
  - Difficulty with three or more Activities of Daily Living, such as bathing, dressing, and eating
  - Or a combination of two or more of the following Activities of Daily Living dependencies:
    - Difficulty with three or more Instrumental Activities of Daily Living, such as preparing meals, shopping, and managing medications
    - 75 years or older
    - Living alone in the community
    - 12 or more clinic stops in the last 12 months

- **CCM:** Patient does not meet NIC criteria but has one or more chronic diseases, such as diabetes, congestive heart failure, or chronic obstructive pulmonary disease that requires ongoing case management, monitoring, and interventions.

- **HPDP:** Patient must meet one or more of six conditions, which includes being at risk for developing a chronic care disease, or needs assistance in choosing and maintaining healthy behaviors.

\(^1\) The program also monitors patients in a category called Acute Care Management. This category represented about 0.3 percent of enrolled patients in FY 2012, and was too small to provide a reliable analysis for this report.
Patients are discharged from the program due to several criteria, including the following:

- Admitted to a nursing home
- No longer desire to participate in the program
- Permanently relocated outside local VA catchment areas
- Achieved their clinical goals
- Ceased participating in daily monitoring
- Needs exceed program services

We analyzed outcomes for about 15,600 patients from all three patient categories that participated in the Home Telehealth Program in FY 2012. We compared inpatient admissions 6 months prior to enrolling in the program to 6 months following enrollment. Our analysis concluded the program was successful in reducing inpatient admissions for all three patient categories.

NIC patients showed the largest reduction in patient admissions when compared with other categories of home telehealth patients. Of the outcomes of 7,211 NIC patients we tracked, NIC patients had 2,365 hospital admissions for the 6 months prior to enrolling in the program. After being monitored under the program in their home by VA medical staff, the 7,211 NIC patients had 1,773 hospital admissions for the 6-month period after enrolling in the program, a reduction of 592 admissions. This equates to about 8 fewer hospital admissions for every 100 NIC patients participating in the program.

In comparison, the CCM group of patients reduced inpatient admission by about 4 hospital admissions for every 100 patients enrolled, while the HPDP group of patients reduced admissions by about 2 for every 100 patients enrolled. The NIC group hospital admission reductions were twice that of the CCM group and four times the amount of HPDP group. Table I summarizes inpatient admissions prior to and after enrollment for NIC, CCM, and HPDP patients.
Table 1. Admissions Outcomes in FY 2012

<table>
<thead>
<tr>
<th>Patient Category</th>
<th>Patients Tracked</th>
<th>Admissions 6 Months Prior to Enrollment</th>
<th>Admissions 6 Months After Enrollment</th>
<th>Admissions Reduction</th>
<th>Admission Reduction per 100 Patients (Rounded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIC</td>
<td>7,211</td>
<td>2,365</td>
<td>1,773</td>
<td>592</td>
<td>8</td>
</tr>
<tr>
<td>CCM</td>
<td>3,127</td>
<td>526</td>
<td>396</td>
<td>130</td>
<td>4</td>
</tr>
<tr>
<td>HPDP</td>
<td>5,275</td>
<td>595</td>
<td>482</td>
<td>113</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>15,613</td>
<td>3,486</td>
<td>2,651</td>
<td>835</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: VHA Support Service Center, Home Telehealth Outcomes Cube, FY 2012 Utilization Monitors

Additionally, NIC patients had the largest reductions in BDOC when compared with CCM and HPDP patients. NIC patients reduced their BDOC an average of 1.4 days over a 6-month period, while CCM and HPDP patients reduced their BDOC by 0.3 days and 0.4 days, respectively. Table 2 summarizes BDOC reductions after 6 months of program enrollment for each patient category.

Table 2. BDOC Outcomes in FY 2012

<table>
<thead>
<tr>
<th>Patient Category</th>
<th>Average BDOC 6 Months Prior to Enrollment</th>
<th>Average BDOC 6 Months After Enrollment</th>
<th>Average 6 Month Reduction in BDOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIC</td>
<td>2.8</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>CCM</td>
<td>0.9</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>HPDP</td>
<td>0.9</td>
<td>0.5</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Source: VHA Support Service Center, Home Telehealth Outcomes Cube, FY 2012 Utilization Monitors.

NIC telehealth patients showed the best outcomes by reducing their inpatient stays and BDOC. Yet, NIC enrollment was the only patient category that declined in FY 2013. VHA needs to assess the changes in home telehealth enrollment patterns, especially since about 50 percent of veterans enrolled and receiving VA healthcare services were 65 years or older in 2013. Additionally, VA actuary models project there will be about 9.5 million veterans 65 years or older, which includes approximately 4.4 million veterans 75 years or older in FY 2015. This latter age group has the highest risk of needing long-term care.
From FY 2008 through FY 2011, VHA established performance measures to increase the average daily census of NIC patients in the Home Telehealth Program. In FY 2008 the goal was to have 15,000 NIC patients participating in the program, steadily increasing to 50,000 participants in FY 2011. This was part of an overall VHA strategy to increase participation of NIC patients in the program. NIC enrollment grew by almost 128 percent for the 4-year period from FY 2008 through FY 2011. NIC patients made up about 71 percent of all patients in the Telehealth Program in FY 2011.

However, in FY 2012, VHA changed focus from increasing enrollment of NIC patients in the program to using a more generalized performance target that did not specify patient enrollment targets for NIC, CCM, or HPDP. VHA’s new performance metric required 1.5 percent of patients in a Primary Care’s Patient Aligned Care Team be enrolled in the Home Telehealth Program. This performance measure increased to 1.6 percent of the Patient Aligned Care Team panels in FY 2013. With this change, Primary Care physicians only needed to enroll a sufficient number of patients from their panel in the program to meet their performance targets. There was no longer a need to achieve specific enrollment targets for NIC patients who have shown the most potential to benefit from receiving home telehealth services.

Several Telehealth Coordinators we interviewed explained that the program performance measures can be met more easily by enrolling HPDP participants. They said HPDP patients do not require intensive clinical management because they have less complex medical needs. Conversely, NIC patients require more intensive clinical management from Primary Care physicians because of the complexity of patients’ health needs.

We determined that more veterans referred into the Home Telehealth Program were in the CCM and HPDP category after VHA changed the program’s performance goal in FY 2012:

- NIC grew by only about 5,000 (13 percent) patients.
- CCM grew by 5,682 (62 percent) patients.
- HPDP saw the largest growth, adding 6,293 (100 percent) patients.

This trend continued in FY 2013 with NIC declining by 1,677 (4 percent), while the number of CCM and HPDP patients served grew an additional 7,492 (51 percent) and 4,617 (37 percent), respectively. The following figure shows growth by enrollment category for NIC, CCM and HPDP.
We were not able to determine the number of additional veterans who could have participated in the Home Telehealth Program, as NIC patients, had they been provided the opportunity. This is because VHA lacks a mechanism to identify the demand for these services. The current enrollment process does not identify veterans who can benefit from the program until after the veteran is referred and agrees to participate. Without a mechanism to identify potential NIC patients prior to referral, VHA cannot ensure that those who may benefit the most are referred for enrollment.

In the absence of a mechanism to determine patient demand for NIC telehealth services, we spoke with VHA’s Allocation Resource Center. They estimated there were approximately 205,000 veterans who met the NIC criteria to participate in the Home Telehealth Program in FY 2013. Furthermore, VA’s Chief Consultant for Telehealth estimated approximately 29 percent may have avoided long-term institutional care in FY 2013 using this program. Based on these estimates, VA missed opportunities to serve additional NIC patients that could have benefited from the Home Telehealth Program. VA could have potentially delayed the need for long-term institutional care for approximately 59,000 additional veterans in FY 2013.

The Home Telehealth Program is a transformational modality for delivering quality health care that is convenient and accessible to veterans who cannot
travel or who live hours away from a medical facility. VHA must develop a strategy to identify Home Telehealth Program access needs, especially NIC patients who can potentially benefit the most. VHA needs to expand the Home Telehealth Program to better meet the projected health care needs for an aging veteran population and reduce the need to place veterans in more costly, long-term institutional care.

**Recommendations**

1. We recommended that the Interim Under Secretary for Health implement mechanisms that effectively identify demand for Non-Institutional Care services to ensure that veterans who need these services are provided the opportunity to participate in the Home Telehealth Program.

2. We recommended that the Interim Under Secretary for Health develop specific performance measures to promote enrollment of Non-Institutional Care patients into the Home Telehealth Program.

**Management Comments**

The Interim Under Secretary of Health concurred with our recommendations and reported that VHA will use the Enrollee Projection Model and VHA Care Assessment Need Score tool to identify NIC patients who could benefit from the Home Telehealth Program. Primary Care Services, Geriatrics and Extended Care Services, and Telehealth Services will work together to develop guidance and training to support clinical staff in the use of the Care Assessment Need Score tool and other appropriate tools and strategies to identify high risk patient that could benefit from the program.

In addition, Primary Care Services, Geriatrics and Extended Care Services, and Telehealth Services will work with the VHA Support Service Center, Office of Analytics and Business Intelligence, and the Office of Enrollment and Forecasting to develop specific tools, indicators, and management reports that will help assess and monitor the effectiveness of home telehealth.

**OIG Response**

VHA’s planned corrective actions are responsive. We will monitor VHA’s progress and follow up on the implementation of our recommendations until all proposed actions are completed. Appendix D provides the full text of the Interim Under Secretary for Health’s comments.
Appendix A  Background

Program History

In July 2003, VHA first introduced the Home Telehealth Program in five Veterans Integrated Service Networks (VISNs) nationwide. The program began as a pilot called Care Coordination/Home Telehealth to coordinate care for patients with chronic conditions and help avoid or delay admission into long-term institutional care. By FY 2006, the program had expanded to serve patients in all 21 VISNs. In 2007, the program categorized patients into four categories of care—NIC, CCM, Acute Care Management, and HPDP. Then in 2010, the program added weight management as a subset of HPDP, and in 2011, the program changed its name to Home Telehealth.

Organizational Structure

Telehealth Services, the office responsible for implementing the program, is aligned under VHA’s Office of Patient Care Services, but closely coordinates with other VHA offices, such as Primary Care Operations and Geriatrics and Extended Care Operations, and VISNs.

Telehealth Services implements the program primarily through its network of VISN Telehealth Program Managers. The managers oversee the VISN Telehealth Program and develop policies and procedures for facilities within their VISNs. Facility Telehealth Coordinators oversee the program at the facility level and coordinate the development of telehealth programming with specific service lines. Care Coordinators are registered nurses or licensed clinical social workers who provide day-to-day monitoring and case management of patients. The Care Coordinators are managed by each VA medical facility. VISNs and VA medical facilities also determine how many Care Coordinators to hire and where they are aligned within the VA medical facilities’ organizational structures.

Increase in Veterans Who Are Eligible for Long-Term Institutional Care

The Veterans Millennium Health Care and Benefits Act (Public Law 106-117) requires the VA to provide nursing home services to veterans with a service-connected disability rated at 70 percent or more who need the care, and those who have a service-connected disability who need the care. The VA may meet these requirements by providing non-institutional care, long-term nursing care, respite, adult day care, domiciliary, and hospice care.

In FY 2013, VHA had about 4.3 million enrolled veterans who were age 65 or older or about 48 percent of VHA’s total enrollees. This population of veterans is most at risk for long-term care and benefits under Public Law 106-117. In the same year, VA spent approximately $6.5 billion (12 percent) of its $55.4 billion medical care program budget on programs to provide long-term care.
Appendix B  Scope and Methodology

Audit Scope

We conducted our audit work from February 2013 through December 2014. The audit included a review of home telehealth funds and management controls over the program during FY 2012 at six randomly sampled VISNs.

Methodology

The audit focused on VHA’s effective management of the Home Telehealth Program and its mission to improve access to care and to reduce patient treatment costs. We used FY 2012 data because it was the most current data available at the time. This report was delayed for several months as a result of the October 2013 Government furlough and OIG decisions to redirect its staff and efforts to address patient wait time allegations at the Phoenix VA Health Care System and at VA health care facilities nationwide.

We determined whether access to care could be improved by expanding the enrollment to patient groups who had the greatest reduction in high-cost medical services, such as inpatient admissions. Home Telehealth programs that achieved significant utilization reductions had the added benefit of increasing access opportunities for veterans waiting for care outside of the program.

We calculated Home Telehealth Program office costs based on financial data collected from the program and the VHA Support Service Center. We corroborated these costs with overall expenditure costs extracted from VA’s Decision Support System. Program office costs were based on estimates provided by the Office of Telehealth Services. Total salary cost was estimated from our sample of six VISNs using salaries identified in VA’s Personnel and Accounting Integrated Data (PAID) system.

Total cost for the program was determined by adding total equipment cost, total salary cost, and program office costs. Total equipment cost was determined using data from the National Prosthetics Patient Database for home telehealth equipment. We calculated the total program costs to be about $167.5 million in FY 2012. This includes $48.6 million in actual equipment costs, $1.9 million of shared program office costs, and $117.0 million in salary costs. Appendix C provides details on the statistical methodology for estimating the total salary cost.

To determine the average cost per veteran, we divided the total cost for the program by the average weekly enrollment of 69,704 patients in FY 2012. We calculated the average program cost was about $2,403 per veteran.

Fraud Assessment

The audit team assessed the risk that fraud, violations of legal and regulatory requirements, and abuse could occur during this audit. The audit team exercised due diligence in staying alert to any fraud indicators. We did not identify any instances of fraud during this audit.
**Data Reliability**

We relied on computer-processed data in PAID, the National Prosthetics Patient Database (NPPD), the VHA Support Service Center, and limited data from the Decision Support System. We assessed the reliability of PAID data by comparing salary costs of 30 randomly selected PAID records to the most recent FY 2012 personnel actions on file for the employees. We assessed the reliability of NPPD data by comparing records from 30 randomly selected records with documents collected from each of the 39 medical facilities in our sample.

We assessed the reliability of the Veterans Support Service Center by comparing 30 veterans’ data elements (including enrollment, inpatient admissions, and inpatient discharges) with those veterans’ medical records. We corroborated data obtained from the VHA Support Service Center, the Decision Support System, program office, and Chief Financial Officer funding data to determine program office costs for FY 2012. We conducted specific testing of these data to determine reliability of overall costs of program. Based on these tests, we concluded the data were sufficiently reliable to meet the audit’s objectives.

**Government Standards**

Our assessment of internal controls focused on those controls relating to our audit objectives. We conducted this performance audit in accordance with generally accepted government auditing standards. These 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 objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.
Appendix C  Statistical Sampling Methodology

Sampling Design

We used a simple random sample to conduct this audit. We selected a sample of 6 VISNs from the population of 21 VISNs nationwide. For each VISN in our sample, we reviewed salary costs for employees directly supporting the program at each of the VA medical facilities in our sampled VISNs. Table 3 lists the six selected VISNs and the number of medical facilities we reviewed from each VISN.

Table 3. VA Medical Facilities Selected

<table>
<thead>
<tr>
<th>VISN</th>
<th>VISN Location</th>
<th>Medical Facilities Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Albany, NY</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Pittsburgh, PA</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>St. Petersburg, FL</td>
<td>7</td>
</tr>
<tr>
<td>12</td>
<td>Westchester, IL</td>
<td>7</td>
</tr>
<tr>
<td>17</td>
<td>Arlington, TX</td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>Glendale, CO</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

Source: VA OIG random sample

Population

The population consisted of all 21 VISNs nationwide.

Methodology

To get an accurate list of employees supporting the program, we extracted a list of Home Telehealth Program employees who directly monitored patients in the program on a monthly basis from the Corporate Data Warehouse using Stop Code 683 for FY 2012. From this list, we extracted PA ID salary costs for each employee on that list. Additionally, to validate the data, we took the following steps:

- Compared the stop code data with a list of employees actually providing support to the program at the station
- Estimated what percent of all employees’ time was spent supporting the program
- Determined the proportion of each employee’s total cumulative salary (including bonuses and benefits) that was paid toward supporting the program

We then used WesVar software to calculate population estimates and associated sampling errors at a 90 percent confidence interval.
We calculated estimates in this report using weighted sample data. Sampling weights are computed by taking the product of the inverse of the probabilities of selection at each stage of sampling.

The margin of error and confidence intervals are indicators of the precision of the estimates. If we repeated this audit with multiple samples, the confidence intervals would differ for each sample, but would include the true population value 90 percent of the time. Table 4 shows the estimated FY 2012 total salary costs based on a 90 percent confidence interval.

Table 4. Summary of FY 2012 Program Salary Costs
(in millions)

<table>
<thead>
<tr>
<th>Estimate Type</th>
<th>Estimate</th>
<th>Margin of Error</th>
<th>90 Percent Confidence Interval Lower Limit</th>
<th>90 Percent Confidence Interval Upper Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Salary Cost</td>
<td>$117</td>
<td>$34</td>
<td>$83</td>
<td>$151</td>
</tr>
</tbody>
</table>

Source: VA OIG Analysis

We used the midpoint of the 90 percent confidence interval for the estimate of total salary cost associated with the program.
Appendix D  Interim Under Secretary for Health Comments

Department of Veterans Affairs

Memorandum

Date: January 12, 2015
From: Interim Under Secretary for Health (10)
Subj: OIG Draft Report, Veterans Health Administration: Audit of Home Telehealth Program (VAIQ 7564172)
To: Assistant Inspector General for Audits and Evaluations (52)

1. I have reviewed the draft report and concur with the report's recommendations. Attached is the Veterans Health Administration's corrective action plan for recommendations 1 and 2.

2. Thank you for the opportunity to review the draft report. If you have any questions, please contact Karen Rasmussen, M.D., Director, Management Review Service (1OAR) at VHA1OARMRS2@va.gov.

Carolyn M. Clancy, MD

Attachment
VETERANS HEALTH ADMINISTRATION (VHA)
Action Plan

OIG Draft Report: Audit of Home Telehealth Program

Date of Draft Report: December 11, 2014

Recommendations/ Status Completion Date
Actions

OIG recommends that the Interim Under Secretary for Health:

**Recommendation 1.** Implement mechanisms that effectively identify demand for Non-Institutional Care services to ensure that veterans who need these services are provided the opportunity to participate in the Home Telehealth Program.

VHA Comments: Concur. The Office of Inspector General (OIG) found that VA missed opportunities to serve additional Non-Institutional Care (NIC) patients that could have benefited from the Home Telehealth (HT) Program. The Program is successful in reducing both admissions for inpatient stays and bed days of care (BDOC), but there is absence of a mechanism to determine patient demand for NIC HT services. The current enrollment process does not identify Veterans who can benefit from the program until after the Veteran is referred and agrees to participate. Without a mechanism to identify potential NIC patients prior to HT referral, VHA cannot ensure that those who may benefit the most are referred for enrollment.

To address this recommendation,

1. VHA will use the Enrollee Projection Model provided by the Office of Enrollment and Forecasting to identify Veteran demand for NIC services and the VHA Care Assessment Need (CAN) Score tool, that identifies patients at high risk of hospitalization or death, as a potential way to identify specific patients who may be appropriate for NIC services. The CAN score tool is currently available to all Patient Aligned Care Teams (PACTs) and will be made available to other appropriate health care providers. Some of those Veterans identified at high risk based on their CAN score may benefit from proactive, longitudinal care/case management and remote monitoring for which HT could be a useful adjunct in addition to other services that address the behavioral, cognitive, or physical dependencies of such patients;

2. Primary Care Services, Geriatrics and Extended Care Services, and Telehealth Services will work collaboratively with the VHA Support Service Center (VSSC) and the Office of Analytics and Business Intelligence to evaluate the appropriateness and effectiveness of using the CAN Score as a tool for identifying Veterans who may benefit from HT. The CAN
tool will be modified and will likely be used in combination with other assessments to be most useful in targeting appropriate Veterans for HT Services;

3. VHA’s reminder dialog template for assessing patients for enrollment in HT NIC services will be released as part of a national patch in FY 2015. This template will be used by HT Care Coordinators to assess patients for NIC services. It will enable standardized documentation and national collection and aggregation of health factor data for analysis; and

4. Primary Care Services, Geriatrics and Extended Care Services and Telehealth Services will work collaboratively to develop guidance and training to support PACT teams and other services/providers in using the CAN score and other appropriate tools and strategies to identify and refer high risk patients to appropriate programs and resources within the facility and community. This will include referring patients that meet the NIC criteria to H

To complete this action, VHA will provide documentation of:

1. Certification that CAN Score report has been modified to automatically identify patients that may benefit from enrollment in HT;

2. Communications, including guidance and training, to support VHA PACT teams and other appropriate services/providers on how to use the CAN score and other appropriate tools to identify and refer patients to HT that meet NIC criteria; and

3. Release of the reminder dialog template for assessing patients for enrollment in HT NIC services.

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**Recommendation 2. Develop specific performance measures to promote enrollment of Non-Institutional Care patients into the Home Telehealth Program.**

**VHA Comments:** Concur. OIG found that the decline in NIC patient enrollment in the HT program was driven by a performance metric that did not ensure patients with the greatest medical needs were served. In fiscal year (FY) 2012, VHA changed focus from increasing enrollment specifically of NIC patients in the HT program, to using a more generalized performance target that did not specify patient enrollment targets. NIC Telehealth patients showed the best outcomes by reducing their inpatient stays and bed days of care. Yet, NIC
enrollment was the only patient category that declined in FY 2013. VHA needs to assess the changes in HT enrollment patterns, especially since about 50 percent of Veterans enrolled and receiving services through VHA were 65 years or older in 2013.

To address this recommendation, Primary Care Services, Geriatrics and Extended Care Services, and Telehealth Services will work collaboratively with the VSSC, Office of Analytics and Business Intelligence and the Office of Enrollment and Forecasting to develop specific tools, indicators, and management reports that will help guide the assessment of the appropriateness of NIC services provided for Veterans. Ongoing monitoring of the appropriateness and effectiveness of HT will be included with those reports and shared with VHA, Veterans Integrated Service Network (VISN), and facility leadership to promote enrollment of NIC patients into the HT Program.

Furthermore, the HT Performance measures that prove to be reliable, valid, and helpful in monitoring program effectiveness will be provided to VHA leadership for approval and decision for inclusion into appropriate reports, communication of expectations to VISNs, and ongoing monitoring.

To complete this action, VHA will provide documentation of:

1. The specific performance measure(s) developed to promote enrollment of NIC patients enrolled in HT Programs; and

2. VHA communications to appropriate VHA staff regarding the measure(s) and how they will be reported and monitored.

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Veterans Health Administration
January 2014
# Appendix E  
Office of Inspector General Contact and Staff

## Acknowledgments

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<tr>
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