DEPARTMENT OF VETERANS AFFAIRS

OFFICE OF INSPECTOR GENERAL

Office of Audits and Evaluations

VETERANS HEALTH ADMINISTRATION

Expendable Inventory Management System: Oversight of Migration from Catamaran to the Generic Inventory Package

AUDIT	REPORT #17-05246-98	MAY 1, 2019

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Executive Summary

The VA Office of Inspector General (OIG) conducted this audit to assess Veterans Health Administration (VHA) oversight of the VA medical centers' migration from the Catamaran inventory management system to the Generic Inventory Package (GIP) and to determine if the medical centers accurately managed expendable supply inventories.[1]

In March 2017, the OIG received a confidential complaint that the Washington DC VA Medical Center (VAMC) had equipment and supply issues. The OIG conducted an inspection and issued its *Interim Summary Report* in April 2017 and a final report, *Critical Deficiencies at the Washington DC VA Medical Center,* in March 2018. The reports found the DC VAMC had serious issues with its inventory management and also failed to use Catamaran. The VAMC later migrated to GIP as part of VHA's change in inventory management system. The DC VA Medical Center inspection and reports motivated the OIG to look into inventory management at other VAMCs and ultimately conduct this audit.

The first finding of this report focuses directly on the migration from Catamaran to GIP. The second finding focuses on basic issues of inventory management—although all VAMCs are now using the GIP inventory management system, VAMCs failed to adequately use GIP to distribute, document, secure, and maintain expendable supplies.

What the Audit Found

The OIG audit found that (1) VAMCs encountered challenges as part of the inventory management system migration to GIP, (2) significant discrepancies existed in GIP inventory data for expendable medical supplies, and (3) proper inventory monitoring and management was lacking at many VAMCs. While some of the issues stemmed from VHA and Veterans Integrated Service Network (VISN) failure to provide adequate oversight of the migration, the OIG also identified other factors that caused inventory data inaccuracies, including general inventory management practices ranging from inaccurate to nonexistent. Although the VAMCs reported data issues during and after the migration, the audit team could not directly attribute the issues solely to the migration from Catamaran to GIP.

In September 2013, VA awarded a $275 million, five-year contract to Shipcom Wireless Inc. to provide VHA with Catamaran, a point of use inventory system. However, the Catamaran contract was allowed to expire in February 2017 because Shipcom failed to meet VHA's needs for managing the medical supply inventory. Only 22 VAMCs had installed Catamaran when the

[1] Expendable medical supplies are disposable items that are typically used one time. Recording and tracking the number of expendable supplies and their expiration dates is critical to ensuring patients receive necessary medical care in a timely manner

contract expired, including the Washington DC VAMC. When the contract expired, all the VAMCs migrated back to GIP.

The OIG team visited 11 randomly selected VAMCs that migrated their inventories from Catamaran to GIP. The team tested the accuracy of inventory system data by selecting 30 expendable supply items located in primary storage locations at each site visited. The audit team observed and physically inspected expendable inventory management operations in conjunction with a review of expendable inventory data from GIP, excluding sterile and prosthetic items. The team also distributed a survey to 21 VAMCs to capture their perspectives of the inventory system transition and their current inventory management system and processes.[2]

The OIG found that the VHA Procurement and Logistics Office (P&LO) sent teams to VAMCs to help with data migration, but failed to identify specific tasks or responsibilities that the VISNs would perform during the migration. VISN chief logistics officers (CLOs) also said they were not actively involved in the transition from Catamaran back to GIP. The transition was supposed to be automated through a data transfer tool, but multiple VAMCs had to manually update GIP information following the transfer to correct data errors and discrepancies. VAMCs also did not consistently conduct physical inventories after the migration to reconcile reported numbers in the system with actual expendable supply stock levels. While a physical inventory was not required after migration, without it there was no way to be sure that information migrated correctly or that VAMCs were starting with accurate inventories in GIP.

To compound the problem, the OIG found that all 11 VAMCs visited between November 2017 and February 2018 had inaccurate supply-level information caused by inconsistent or incorrect inventory monitoring and management across the VAMCs. This issue is independent of the migration from Catamaran to GIP because inventory management is not limited to monitoring and addressing supply levels. Inventory management also requires that VAMC staff distribute supplies to the correct location, document the results of required wall-to-wall inventories, properly secure inventory, and apply appropriate barcodes for tracking. The OIG found that these practices were not applied in many VAMCs, which resulted in pallets of medical supplies left in unsecured areas and distribution of supplies to invalid locations. Furthermore, the lack of inventory management often made it difficult to ensure stock levels were accurate and expendable and that supply levels didn't get under- or overstocked. Understocking creates a risk that supplies will be unavailable when needed, while overstocking results in excess supplies that might expire before use.

[2] The universe consisted of 22 VAMCs that previously installed the Catamaran inventory system. However, the scope for this audit only included 21 VAMCs. The Washington DC VA Medical Center was excluded from the scope because the VAMC was the subject of the OIG report issued in March 2018, *Critical Deficiencies at the Washington DC VA Medical Center*.

VAMCs undergo an annual quality control review (QCR) process to ensure that they comply with VHA and VA guidance, including guidance for inventory management. The QCRs address practices like understocking and overstocking, inventory documentation, and weekly storeroom verifications. Issues stemming from the GIP migration should have been noted during this process, but the 2017 QCRs did not consistently identify and correct inventory management issues for the 11 sites the OIG team visited. The QCRs conducted did not evaluate the logistics program in its entirety and did not include questions to assess inventory management practices, like security and access to expendable supplies, as well as improper distribution to fake secondary locations in GIP to reconcile discrepancies. Furthermore, the team found the QCRs evaluated inventory processes, such as understocking and overstocking and inadequate documentation of inventories, but were ineffective at identifying other process issues.

What the OIG Recommended

The OIG made six recommendations to the VISNs and VAMCs that migrated from Catamaran to GIP. Specifically, the OIG recommended the Executive in Charge for the Office of the Under Secretary for Health implement controls to show supply item distribution in GIP; strengthen physical inventory documentation procedures; implement controls to ensure access procedures are posted and supply item logs are complete; ensure barcode labels are affixed at item storage locations; strengthen procedures for the QCR process; and update QCR documentation.

Management Comments

The Executive in Charge, Office of the Under Secretary for Health, concurred with the findings and all six recommendations. VHA's Policy, Training and Assessment Directorate will revise the VISN fiscal year 2020 QCR checklist to address the issues identified in this report. In addition, Field Support Branches of the Policy, Training, and Assessment Directorate will conduct random on-site audits to ensure the accuracy of the QCR results and report the results to the Chief Executive for Supply Chain and Logistics, as well as VISN and medical center leaders. VHA will conduct weekly conference calls and quarterly face-to-face meetings with the VISN chief supply chain officers. All action plans are scheduled to be completed by April 2020.

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Contents

Abbreviations

CLO	chief logistics officer
FY	fiscal year
GIP	Generic Inventory Package
OIG	Office of Inspector General
P&LO	Procurement and Logistics Office
QCR	Quality Control Review
VA	Department of Veterans Affairs
VAMC	Veterans Affairs Medical Center
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network
VistA	Veterans Health Information Systems and Technology Architecture

Introduction

Objective

The OIG conducted this audit to assess the Veterans Health Administration (VHA) oversight of VA medical centers' migration from the Catamaran inventory system to the Generic Inventory Package (GIP) and determine if the medical centers accurately managed expendable supply inventories.

Critical Deficiencies at the Washington DC VA Medical Center

In March 2017, the OIG received a confidential complaint that the Washington DC VA Medical Center (VAMC) had equipment and supply issues. The OIG conducted an inspection and issued its *Interim Summary Report* in April 2017 and its final report in March 2018, *Critical Deficiencies at the Washington DC VA Medical Center*. The reports found DC VAMC had serious issues with its inventory management and failed to use Catamaran. However, the VAMC subsequently migrated to GIP as part of VHA's change in inventory management system. Among other findings, the OIG revealed inadequacies in the VAMC's ability to consistently provide supplies when needed. Clinical staff had difficulty finding needed supplies because there was no reliable method to locate items in storage areas and the VAMC did not enter most of the items it managed into GIP. The DC Medical Center was one of the 22 VAMCs that installed the Catamaran inventory system, but never relied on it. After the OIG issued its *Interim Summary Report,* the medical center took steps to implement GIP; however, the OIG found in the final report that they continued to underutilize GIP and could not rely on the system to identify when supplies were running low or out of stock.

The OIG conducted this audit to determine if other VAMCs that installed the Catamaran inventory system experienced issues when they migrated back to GIP. The audit also considered whether these VAMCs inventoried expendable supplies after they migrated to GIP from Catamaran.

Catamaran Inventory System

In September 2013, VA awarded a $275 million contract to Shipcom Wireless Inc. to provide Catamaran, a point of use inventory system, to VHA.[3] Shipcom Wireless Inc. is a provider of integrated supply chain execution software solutions. VA planned for Catamaran to replace GIP, the supply chain management system in use at the time. According to the solicitation, GIP was outdated and underutilized.

[3] There was a $55 million base year contract with four option years.

The Catamaran technology was intended to be a total integrated point of use solution for the management of supply chain data. The contract was allowed to expire at the end of February 2017 because Shipcom failed to meet VHA's medical supply inventory management needs. VHA required the VAMCs that had installed the Catamaran inventory management system to transition to GIP before the Catamaran contract expired.

Generic Inventory Package

GIP is the authorized system used by VAMCs to manage the receipt, distribution, and maintenance of expendable supplies—disposable, commodity supply items that are typically used one time. GIP uses an item master file number for each supply item, which helps track its movement from the receiving area to a primary inventory location and then to a secondary inventory location. Secondary locations are generally storage rooms within the clinical areas that use the item. These primary and secondary inventory locations in GIP, if properly and consistently recorded, identify the quantity and location of specific supply items in stock.

VHA's Procurement and Logistics Office

The Procurement and Logistics Office (P&LO) is a healthcare support organization within the Administrative Operations branch of VHA that provides contracting support, including supplies, construction, medical services, and leasing for the 18 Veterans Integrated System Networks (VISNs). P&LO establishes a supply chain management program within VHA; provides operational oversight of VHA's supply chain operations; and serves as the primary agent for designing, developing, and deploying logistics and program management activities. It also provides policies and procedures, collects and manages data, performs quality assurance, and implements tools for corrective action for VHA's supply chain management program.

P&LO provides a full range of supply chain management services to VHA customers, which includes inventory management. The P&LO Logistics Operations Field Support Branch is responsible for planning, coordinating, and enabling the external support for VISNs and medical centers needed to conduct operations. The Field Support Branch provides supply chain support as requested or directed and developed a tool to transfer data from Catamaran to GIP.

Veterans Integrated Service Networks

VISNs assess inventory management programs at VAMCs. Ultimately, the VISN chief logistics officer (CLO) reports to the VISN network director and works with VAMCs to effectively implement supply chain management policy, reporting, training, and operational requirements. Part of the VISN CLO responsibility is conducting a quality control review (QCR) once per fiscal year to ensure VAMC compliance with established VA and VHA guidance. The QCRs address various inventory management practices, such as whether VAMCs review and adjust stock levels appropriately to avoid understocking and overstocking, whether inventory

documentation is maintained and available for a minimum of two years, and whether weekly storeroom verifications are conducted.

VA Medical Centers

The VAMC CLO establishes a local supply chain management program that meets policy and operational requirements, as well as a supply support program that uses a VHA-approved inventory management system to maintain automated inventories. The VAMC CLO also ensures that logistics program staff complete an annual physical inventory of all items in the VAMC's primary inventory location. VHA mandates VAMCs use GIP for the management of expendable supplies throughout the VAMC.

Results and Recommendations

Finding 1: Migration from Catamaran to the GIP Inventory Management System Compounded Challenges at VA Medical Centers

The migration to GIP compounded inventory issues at VAMCs that previously installed Catamaran. VAMCs used the inventory management system without assurance that information was accurate or complete. This occurred because VHA failed to provide adequate assistance and oversight of the inventory management system migration. The VISNs also were not actively involved in the transition from Catamaran back to the GIP, and the VAMCs failed to monitor and reconcile inventories as required by policy. As a result, VAMCs moved to a new inventory system to manage expendable supplies without ensuring the inventory baseline was accurate or complete.

What the OIG Did

The audit team reviewed 21 of the 22 VAMCs that previously installed the Catamaran inventory system, and visited 11 randomly selected VAMCs from VISNs 4, 5, and 6.[4] The team distributed a survey to each of the 21 medical center CLOs and/or deputy CLOs to capture the VAMC's perspective of the inventory system transition and to build an understanding of the current inventory management system and processes. The audit team also tested the accuracy of inventory system data by selecting 30 expendable supply items in primary storage locations at each site visited. The 30 items were selected from expendable supply items on hand. The team performed physical counts for these items and compared them to inventory system on-hand inventory levels.

This finding discusses how

- VHA did not provide adequate assistance to the VAMCs for the migration back to GIP, and
- VAMCs did not verify inventory information after the migration.

VHA Did Not Provide Adequate Assistance to the VAMCs for the Migration Back To GIP

On January 3, 2017, VHA's P&LO Field Support Branch sent an email notifying the 22 VAMCs that deployed Catamaran that the contract would expire on February 28, 2017. The notification

[4] The universe consisted of 22 VAMCs that previously installed the Catamaran inventory system. However, the scope for this audit only included 21 VAMCs. The Washington DC VA Medical Center was excluded from the scope because the VAMC was the subject of the OIG report issued in March 2018, *Critical Deficiencies at the Washington DC VA Medical Center*.

referenced "an extremely tight timeframe to complete the transition" from Catamaran back to GIP before the contract expired. In addition, the email noted that P&LO had developed a tool to transfer data from the Catamaran system to GIP. The tool, a Microsoft Excel spreadsheet, was used to populate data from Catamaran and allow an electronic transfer of that data into GIP. According to the P&LO director, the tool's effectiveness was based on the level VAMCs used Catamaran and maintained the inventory data—in other words, the effectiveness of the tool was dependent on the extent to which the input data was correct, or as is sometimes expressed – garbage in, garbage out. The notification email also outlined tasks and responsibilities for VAMCs to complete before the Field Support Branch team arrived on-site, such as providing a list of inventory locations in GIP and verifying the accuracy of the data in Catamaran. However, the email did not include specific requirements for VAMCs to verify the GIP data after the migration and did not address specific tasks or responsibilities that the VISNs would perform during the migration. While VAMCs are primarily responsible for inventory data accuracy, VHA and VISNs are the responsible oversight bodies for supply chain management. VHA uses GIP data to present VAMC-, VISN-, and national-level reporting on the inventory system use and expenditures. For example, VHA collects information populated from GIP, including inventory items with blank fields, items with quantities on hand greater than normal stock levels, and inactive supply items for one year or greater. As such, they share a vested interest in the accuracy of inventory data.

VHA Assistance to the VAMCs

The automated Excel tool created by VHA was intended to assist VAMCs in transferring data to GIP, along with support from a P&LO team. P&LO's Field Support Branch project manager stated a team went to VAMCs for two or three days per visit to assist in the transition during January and February 2017. P&LO also stated it assisted VAMCs that needed help virtually after the transition, like working with VAMCs to provide reports and refresher training on GIP.

P&LO provided the tool to automate the data transfer from Catamaran to GIP, but was aware that VAMCs would need to adjust records with missing data fields or where data were incorrect. The Field Support Branch project manager stated they informed the VAMCs on numerous occasions, with virtual demonstrations and while on-site, that during the data transfer the migration tool could not fix incorrect, corrupt, incomplete, or missing data fields.
The project manager did not provide documentation to show they informed the VAMCs of the problems connected with incorrect or incomplete data fields, and the audit team could not confirm the VAMCs were informed. Furthermore, the project manager stated they did not stress that the VAMCs would need to validate data after migration because it was assumed that they were previously validated. However, based on testimony from the VAMCs, it appears they were unaware of the extent of the issues or the verification that would be required after the migration. Based on the P&LO's knowledge, it was imperative that the office provide VAMCs with a plan for verifying the inventory data after the migration or formally communicate to them that the

verification process could require staffing and time to complete. This would have ensured that the VAMCs were aware of the complexity of using the migration tool.

While all 11 VAMCs visited installed and were using GIP, some were not adequately supported in their transition back to GIP. Staff at nine VAMCs the audit team visited stated they experienced issues after transitioning back to GIP. VAMC logistics management at different VAMCs told the audit team of the many issues they encountered with the migration:

- One VAMC deputy CLO stated the move was supposed to be automated, but the VAMC performed "a great deal of manual validation" to ensure the data migrated correctly.
- According to one VAMC CLO, the P&LO team "messed up" the conversion from Catamaran and VAMC logistics staff had to correct the data in GIP. The CLO told OIG that two project managers from P&LO came to assist the VAMC and worked approximately 12 hours over three days on the transfer. When the P&LO project managers left the VAMC there were a number of discrepancies, including data that were omitted, incomplete, or incorrect. For example, stock levels, quantity-on-hand information, and item master file information were missing. The CLO stated that when the VAMC asked the P&LO project managers about the discrepancies that occurred after the transfer, one of the project managers responded by saying that "the data tool was not 100 percent and still required some data validation."
- The deputy CLO at one VAMC said the P&LO team left the VAMC without reviewing data reliability and told the VAMC that "everything was good to go." However, in contrast, the VAMC Deputy CLO determined that information from Catamaran was transferred into the wrong GIP data fields for unit of issue and vendor name, which took several months for the VAMC to correct.

VISN Assistance to the VAMCs

In addition to VHA's P&LO, the VISNs also provide oversight of the VAMC supply chain management programs. VHA Directive 1761(1) provides policies, procedures, and guidance for implementing the program effectively. The directive instructs inventory managers to conduct quarterly reviews of inventory locations to ensure the correct items and levels are maintained. It also requires that medical centers review recurring reports to ensure appropriate inventory data levels and conduct routine physical inventories to increase inventory accountability. The VISN director is responsible for effectively implementing these supply chain management operational requirements. The directive also designates the VISN CLO as responsible for establishing communication with VAMCs to effectively implement supply chain management policy, reporting, training, and operational requirements, as well as managing supply chain data in coordination with the VAMC CLO. Therefore, the VISN should have been actively involved in the migration to ensure the VAMCs had accurate inventory data. When asked if they were involved in the transition from Catamaran to GIP, CLOs from VISNs 2 and 4 acknowledged to

the audit team that they were not actively involved.[5] They stated this was because VHA's P&LO was handling the migration and should have helped the VAMCs with issues. The VISN 5 CLO stated he assisted the VAMCs, but only one of the logistics officers from VAMCs within VISN 5 reported receiving assistance.

In addition, the audit team distributed a survey to logistics officers at 21 VAMCs involved in the system migration to assess key elements like the timeline of the migration and oversight of the inventory system. The team received responses from logistics officers at 20 VAMCs:

- Logistics officers from 13 VAMCs reported they did not receive assistance from the VISNs during the migration.
- CLOs from the remaining 7 VAMCs reported receiving some assistance. Two logistics officers provided clarification: One stated that although the VISN was available, he preferred to manage the migration himself. The other logistics officer reported the support received was nominal.

VAMCs Did Not Verify Inventory Information After the Migration Back to GIP

In addition to the inadequate assistance provided by VHA and the lack of active involvement from the VISNs, the VAMCs experienced issues with inventory information after the migration to GIP:

- One deputy CLO said that some data fields populated incorrectly during the transition and, because no one knew about the issue, it took months following the migration to fix the data.
- A former VAMC deputy CLO said the VAMC had to build GIP from the beginning, it took months to get it up to date, and the VAMC was still working on it.
- One VAMC deputy CLO told the audit team that the migration from Catamaran to GIP was abrupt and they lost data accuracy in the process.
- An acting VAMC CLO said the VAMC experienced issues with incorrect data following the migration. Furthermore, they said that there was not enough time for the transition to occur, so the VAMC did not have a chance to clean up the data before entering more and they had to fix GIP as they went along. At the time of the audit team visit, the individual stated the VAMC continued to fix issues every day.

As a result, some VAMCs reported taking action immediately following the migration, including conducting informal inventories, reviewing GIP reports, or performing spot checks of inventory. In November 2018, one VAMC CLO stated the data accuracy verification was still ongoing.

[5] The VISN 6 CLO was not in the position during the Catamaran migration to GIP timeframe.

However, the OIG team could not confirm these actions were taken. Furthermore, in the January 2017 email regarding the migration, the P&LO Field Support Branch did not provide a plan for VAMCs to ensure the GIP information was complete and accurate once it was migrated and the VAMCs were expected to begin using GIP. Had P&LO provided a comprehensive plan, the VAMCs could have consistently monitored inventory in the months following the migration and subsequently identified and corrected some of the data issues experienced during and after.

The audit team found that seven of 11 VAMCs did not conduct, nor were they required or instructed to conduct, an inventory in the 90 days following the migration from Catamaran to GIP. The other four VAMCs provided documentation showing a physical inventory was completed. A member of the Field Support Branch team noted that during the provided data migration training, his team would suggest VAMCs conduct a physical inventory. He could not provide support for this and the January 2017 email from the P&LO Field Support Branch did not include any requirement or suggestion for VAMCs to conduct an inventory.

The P&LO Field Support Branch project manager did not know if any VAMCs conducted wall-to-wall inventories because inventory completion results were not communicated to the Field Support Branch. Without conducting a physical inventory immediately following the migration, there is no assurance information completely migrated from Catamaran to GIP or that VAMCs were beginning the use of GIP with accurate inventory information.

Conclusion

VHA provided inadequate assistance and the VISNs were not actively involved in the inventory management system migration for VAMCs that used Catamaran. VHA provided an automated tool to transfer inventory data but did not provide oversight to ensure VAMC inventory data accuracy, and the VISNs had limited involvement in the transition process. In addition, seven of the 11 VAMCs visited that implemented GIP did not verify the accuracy of the inventory information by conducting a physical inventory immediately following the migration. As a result, VAMCs began use of the inventory management system without assurance that the data were accurate or complete. Because the transition from Catamaran to GIP has concluded, the OIG will not make a recommendation specific to the migration. However, VHA should use the lessons learned during this migration to help ensure similar issues do not occur if GIP is eventually replaced.

Finding 2: VA Medical Centers Did Not Properly Manage Inventory Supplies to Ensure Proper Accountability

The OIG team found discrepancies between the on-hand quantities listed in GIP and the physical counts for 208 of 330 expendable items reviewed (63 percent) at the 11 VAMCs visited between November 2017 and February 2018. While VHA logistics managers and staff attributed inventory discrepancies to the GIP inventory system migration, the OIG team identified improper management practices independent of the migration that led to inventory deficiencies. The issues experienced during the migration to GIP had some impact on these discrepancies, but the root cause was VAMCs' failure to follow required inventory management practices. Specifically, VAMCs failed to properly distribute, document, secure, and label expendable supplies.[6] In addition, the VISN QCR process did not ensure VAMCs corrected identified deficiencies. In fact, the VHA P&LO branch manager stated his office began shadowing the VISN CLOs during QCRs after realizing the results were unreliable.

As a result of improper management of expendable supplies, the team found that 63 of the 330 items were below the reorder point (19 percent) and 148 items were above the normal stock level (45 percent). The VAMC CLO is responsible for ensuring proper items and levels are set within inventory points, and the VISN CLO is responsible for assessing inventory programs and managing supply chain data in coordination with the VAMC CLO. Failing to maintain accurate inventory information increases the risk that needed supplies will not be available, which could potentially affect patient care, and maintaining excess supplies can lead to supply expiration prior to use.

What the OIG Did

The OIG team visited 11 randomly selected VAMCs that migrated from Catamaran to GIP. The team tested the accuracy of inventory system data by judgmentally selecting 30 expendable supply items located in primary storage locations at each site visited, for a total of 330 items. The audit team conducted observations and physical inspections of expendable inventory management operations in conjunction with a review of expendable inventory data from GIP, excluding sterile and prosthetic items, and analyzed the VISN QCR process. The audit team also distributed a survey to each of the 21 medical center CLOs and/or deputy CLOs to gather an understanding of their current inventory management system and processes.

This finding discusses how

- GIP information was inaccurate,

[6] VHA Directive 1761(1) requires VAMCs to establish, operate, and maintain an effective supply chain management program by implementing and following all policies and procedures and continually identifying ways to improve performance in support of veteran care.

- Inventory management practices were improper, and
- The Quality Control Review process was inadequate.

Inaccurate Inventory Information

When VAMCs migrated to the GIP inventory management system there was no physical inventory conducted to verify system information at seven of the 11 VAMCs visited. Furthermore, the OIG team found that approximately one year after the inventory system migration, GIP on-hand data were inaccurate for the 11 VAMCs visited. VA Handbook 7002/1 states the CLO will monitor logistics performance measures and initiate corrective action to address out-of-line situations. The CLO position description outlines the operational responsibility to analyze supply status, monitor GIP, and conduct program effectiveness and efficiency reviews for all logistics activities to ensure they provide satisfactory levels of service. When these reviews reveal performance improvement opportunities or deficiencies, the CLO develops and executes remediation actions.

VAMCs migrated back to GIP between January and February 2017, but the OIG team still identified discrepancies between November 2017 and February 2018. During site visits, the team reviewed on-hand quantities listed in GIP, compared them to the physical counts of items, and found that 208 of 330 expendable inventory items reviewed (63 percent) had inventory errors. The quantity of discrepancies the audit team identified ranged from one to 2,703 units.[7] The VAMCs reported data issues during and after the migration, but the audit team could not attribute the issues to the migration from Catamaran to GIP. Rather, the inventory discrepancies were because of poor inventory management practices, as VAMCs were unable to obtain and maintain reliable inventory management information. Figure 1 outlines discrepancies between the on-hand inventory information listed in GIP and the physical inventory counts resulting from improper inventory management practices, as identified during site visits.

[7] The discrepancy range represents individual units within the 330 judgmentally-selected supply item types the audit team reviewed.

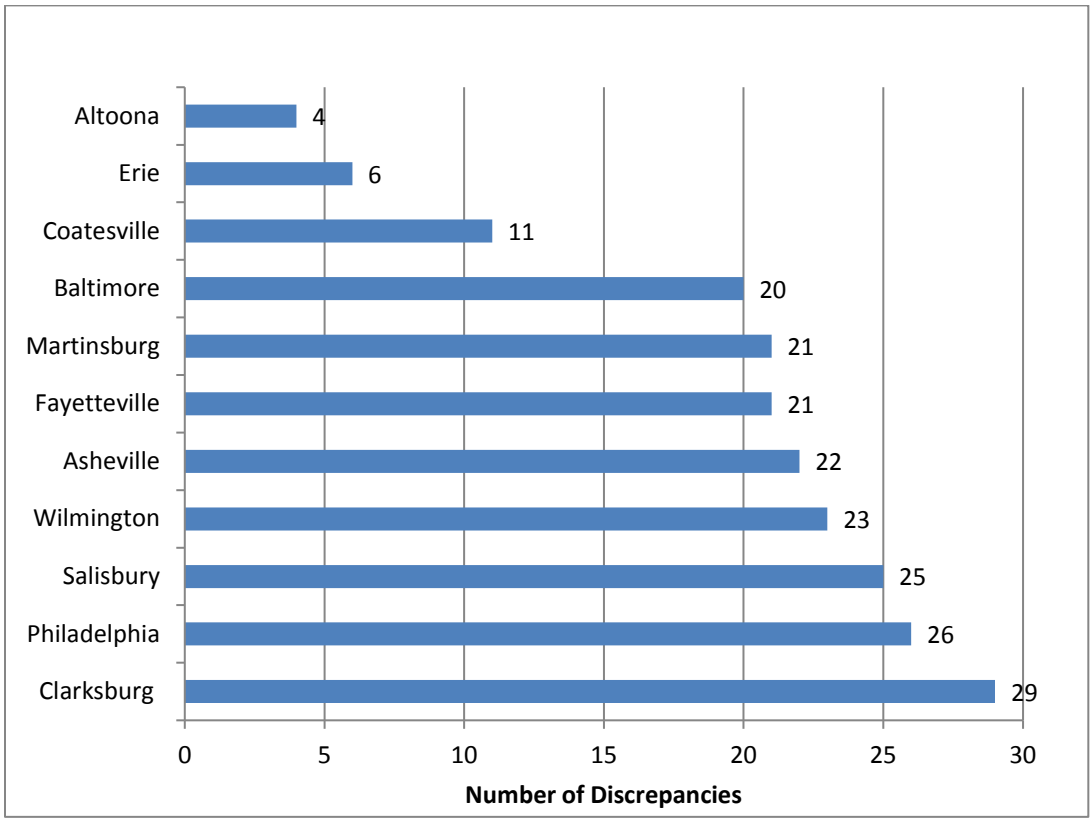

Figure 1. *Discrepancies Found at VAMCs Visited*
(Source: OIG analysis of judgmentally selected items.)

Specific examples of data discrepancies included the following:

- At the Clarksburg VAMC, the audit team identified 93 disposable pulse oximeters, sensors for monitoring the amount of oxygen in the blood, while GIP listed an on-hand quantity of 737—a difference of 644 items. The acting CLO said the additional items were located in the warehouse. However, the inventory manager only found 360 items, leaving 284 unaccounted for at a total cost of $2,854. The inventory manager attributed the discrepancies to a new clinic requesting the items without appropriate reconciliation.
- At the Philadelphia VAMC the audit team physically identified 1,225 wipes, compared to an on-hand quantity of 2,398 reported in GIP—a difference of 1,173 and valued at $950.13. A VAMC inventory management specialist attributed the excess quantity in GIP to vendor backlog orders, improper number of items distributed by staff, and/or improperly set stock levels.

VAMCs rely on the on-hand inventory level information and inventory management system reports found in GIP to determine availability of supplies needed to provide care to veterans.

The GIP User Training Guide states the supply order process begins with auto-generation to reorder items. This auto-generation process identifies the required quantities necessary to bring

stock up to the established normal stock level, reviews preset inventory levels against quantities on hand, and identifies those items below the preset levels so they can be ordered. As such, supply levels must be set to ensure adequate supply quantities are on hand when required and not under- or overstocked. The OIG team attributed the inaccurate data to weak inventory management control practices.

Weak Inventory Control Practices Contribute to Inaccurate Inventory

The audit team found instances at 11 VAMCs where logistics staff improperly distributed expendable supplies, left items unsecured outside of the logistics area, or failed to put barcode labels on shelves for all expendable items. These incorrect inventory practices led to inaccurate information, which then led to the shortages of supplies that put patients at risk of not receiving care. The inaccuracies also created an excess of supplies that were at risk of expiring prior to use. When on-hand inventory level information is inaccurate, it negatively affects the reliability of the information in the reports and increases the risk related to expendable supply management replenishment and the delivery of health care.

Supplies Improperly Distributed

The audit team found logistics staff improperly distributed expendable supply items at VAMCs visited by either failing to use picking tickets, failing to provide or update inventory log sheets, and in some cases, distributing items to "ghost" inventory locations.[8,9]

Logistics staff at nine of 11 VAMCs distributed items to VAMC services without proper use of a picking ticket and failed to appropriately update the information in GIP to adjust the on-hand levels. According to the *GIP User Training Guide*, VAMC logistics staff create picking tickets to distribute the items to the requesting service. When this does not occur, logistics staff lose the ability to adequately track distribution of items and could also fail to update the information in GIP.

Example 1

At the Salisbury VAMC, a staff member from a clinic came to the primary inventory location requesting a specific supply item. The audit team observed a distribution technician take items off the shelf in the inventory room and document the distribution on a sticky note. The audit team reviewed GIP and found that the supply items were not updated as distributed in the system.

[8] A picking ticket is used for items requested on the distribution order and provides item information, location, and spaces for indicating items and quantities pulled for distribution.
[9] Ghost inventory locations are set up in GIP as inventory points but not actual locations holding physical inventory.

In addition, staff at 10 of the 11 VAMCs failed to provide or sufficiently update inventory log sheets used to account for expendable item distribution when logistics staff are not present.[10] VHA Directive 1761(1) states plans for establishing an inventory storeroom must include careful consideration of space, climate control, availability of shelving, and frequency of users accessing inventory. Furthermore, the policy outlines that a detailed procedure should be posted, including the use of a log sheet, in inventory storerooms that are not staffed 24 hours a day, seven days a week. The procedure would instruct staff on how to properly obtain and record supplies that are taken when inventory management staff is not present. The audit team found that staff at 10 VAMCs did not have inventory log sheets or did not consistently document key items on the log sheets, such as item identifiers, destination, time and date when the item(s) were distributed, and the name of the staff obtaining the items.

These logs are imperative to ensuring that items are distributed correctly in the inventory management system and reflect accurate on-hand stock-level information. Because logs did not include complete information or were not available, items could have been taken or distributed with no accountability, which would result in inaccurate GIP inventory information.

Three of 11 VAMCs established "ghost" GIP secondary inventory locations to improperly distribute supply items they could not account for. The audit team found that when discrepancies were identified between physical counts and on-hand levels in GIP, or when items were found to be expired, some VAMC staff would inappropriately distribute the items to a ghost secondary location established solely to reconcile unaccounted-for inventory.

An inventory manager at one VAMC acknowledged distributing items to a ghost secondary location to resolve discrepancies. A supply technician at another VAMC stated that VAMC logistics staff distribute expired supplies to a ghost secondary location to reconcile physical quantities in GIP because their management disliked manual adjustments. The supply technician further stated this ghost secondary location is not an actual secondary location that distributes items to a service, but was used exclusively in GIP to hold expired or misplaced items. According to the *GIP User Training Guide*, the VAMC logistics staff should have made an adjustment in GIP. Performing manual adjustments and documenting the reason for the discrepancy allows Logistics management to identify ongoing issues with supply management. In contrast, distributing items to ghost accounts hides the actual use of items without altering the physical inventory.

These instances underscore the need to follow inventory practices, use picking tickets, and enter information in GIP to update on-hand inventory levels. Inappropriate distribution could lead to

[10] The OIG observed that the entrance to the Coatesville VAMC inventory area was secured by a manual lock and only accessible by the VAMC logistics staff. All other VAMC personnel seeking access to this area were escorted by logistics staff. In addition, the CLO told the OIG that the VAMC conducts only outpatient services and minor surgeries, therefore, the area was not accessible 24 hours. Based on this information, the OIG concluded a log sheet was not required.

understocking because VHA cannot rely on GIP information or be assured supplies are available, which could result in patient care delays.

Inventories Not Properly Documented for Two VAMCs

VHA Handbook 1761.02 states that annual wall-to-wall inventory audits are required to maintain ongoing accuracy and appropriateness of stocked items. In addition, according to VHA Directive 1761(1), physical count documentation must be maintained by the logistics program for a minimum of 24 calendar months. The logistics program must send a memo to the VISN CLO identifying the inventory's accuracy rate, listing any discrepancies, and identifying corrective actions. The audit team requested inventory memos from the 11 VAMCs visited, but two VAMCs did not provide adequate documentation:

- The Acting CLO at one VAMC stated a wall-to-wall inventory was not required in fiscal year (FY) 2017 based on VISN guidance, but could not provide support of that statement. When the audit team requested further clarification, the VISN CLO denied instructing staff that the inventory was not required.
- Another VAMC provided an inventory memo, but the information did not include an accuracy rate, number of identified discrepancies, or any needed corrective actions.

Documentation showing the results of annual inventory levels is essential. The documentation verifies the required inventories are conducted and corrections to supply levels in the inventory management system were made. VAMCs cannot rely on the expendable supply data in the inventory management system if it is not periodically reviewed and updated accordingly.

Supplies Not Properly Secured

VAMC logistics staff did not properly secure expendable supplies before distribution to the services at five of the 11 VAMCs visited. This increased the potential for loss and theft, as well as the risk of inaccurate information in GIP. VHA Directive 1761(1) states supplies must not be stored where they could become compromised. The audit team found that logistics staff at the five VAMCs permitted unrestricted access to medical supplies and storage areas.

For example, the audit team identified a pallet of boxes containing medical supplies left in an unsecured area near the entrance of a breakout room at the Baltimore VAMC.[11] The pallet remained unsecured for two days after the audit team's initial observation. On its second visit, the team identified some of the items had been removed. The VAMC CLO stated the items were being moved into the primary inventory location.

[11] A temporary supply room where bulk medical supplies are broken out prior to being moved into the primary inventory storage location.

During observation at the same VAMC, the OIG team also found a box containing seven bottles of sterile water situated by the entrance to the on-site warehouse. The items were comingled with random maintenance tools. When asked about the box's location, a material handler stated he was not aware it was there.

During observation at the Altoona VAMC, the OIG team observed medical supplies, including socks, surgical masks, and adult briefs, stored in an unsecured warehouse located in an off-site VAMC annex building. Although the building itself was secure, the entrance to the warehouse was not. Anyone working within the building had access to the warehouse and the supplies. The VAMC CLO stated he was not aware the items were in the off-site location. Failure to secure storage locations potentially compromises the medical supplies and increases the risk for potential loss or theft.

Inventory Missing Barcode Labels

VHA Directive 1761(1), requires barcode labels on the storage shelves or containers for all expendable items within primary locations to help identify the items. Barcodes are important because they allow for the identification of both the normal stock level and reorder point, and assist in ensuring the on-hand quantities of inventory are accurate. Storage shelves and containers are used to store supply items in the primary inventory locations. The *GIP User Training Guide* states the VAMC inventory management specialist is responsible for ensuring the barcodes are present. During observations of the primary inventory locations at the VAMCs, the audit team identified storage shelves and containers at five of 11 VAMCs without the required barcode labels.

For example, the audit team found expendable items were stored in two locations at the Altoona VAMC—items in one location were properly labeled, but items in the second location were not. When items in a primary inventory location do not have barcode labels, logistics staff are unable to easily identify expendable supplies or determine the correct unit of issue.

Poor Inventory Control Practices Affect On-Hand Availability Measures

VAMCs rely on the inventory data and reports found in the inventory management system to determine availability of supplies needed to provide care to veterans. The audit team found that inaccurate inventory data ultimately led to supply understocking and overstocking.

Understocking Supplies Creates Risk of Patient Care Delays

The OIG found 63 of the 330 items reviewed (19 percent) were understocked or below the reorder point. The reorder point is the level at which the item needs to be replenished, and supply shortages can occur when items are not replenished after falling below this level. In addition to creating the risk that supplies will be unavailable when needed, understocking supplies can also

adversely affect the quality of patient care and the trust users have in the supply chain management staff. Similar to the conditions found during the OIG's review at the Washington DC VAMC, the audit team found that some VAMCs experienced delays in patient care because of unavailable expendable supplies.[12]

The audit team reviewed the patient event reports at four of the 11 VAMCs to identify any incidents related to expendable supply management that possibly affected patient care. VA employees submit patient event reports to document patient incidents that include adverse events and close calls at VAMCs.[13] The audit team identified 4,233 patient incident reports for the four VAMCs. Through key word searches, the team identified that eight of the incidents affecting patient care were related to inventory supply. The patient event reports reviewed may not be inclusive of all possible incidents that affected patient care because they are primarily reliant on VA staff reporting.

Example 2

At the Baltimore VAMC, a patient was prepped for a procedure in the cardiac catheterization lab. A "time out" was initiated when staff realized that the necessary supplies for the procedure were not available in the hospital.[14] The patient's procedure was ultimately aborted.

Overstocked Supplies Expired or at Risk of Expiring

VAMCs maintained excess inventory for several medical supply items that expired or had the potential to expire prior to use. The OIG found 148 of 330 items reviewed (45 percent) exceeded normal stock levels.[15] GIP on-hand levels are not to exceed the normal stock level, which represents the average use of an item for a set amount of time. When VAMCs maintain supplies above the normal stock level, it increases the risk that the items will expire before use.

Example 3

At the Philadelphia VAMC, the OIG team performed a physical count of intravenous tubing and identified an inventory level of 71 items in the primary inventory location. During a walk-through of the warehouse, the team found an additional inventory of 500 intravenous tubing items that VAMC staff were

[12] OIG report issued in March 2018, *Critical Deficiencies at the Washington DC VA Medical Center*.

[13] A "close call" is defined as an event or situation that could have resulted in an adverse event, but did not, either by chance or through intervention. Such events have also been referred to as "near miss" incidents.

[14] A "time out" must be facilitated by a checklist and occur immediately prior to the start of the procedure. The time out must be documented in the patient's health record and the checklist should include relevant information such as the patient's identity, procedure, and availability of special equipment.

[15] VHA Directive 1761(1) defines the normal stock level as the largest quantity of an item to be maintained in the inventory point.

unaware of, bringing the total count to 571. An inventory management specialist said the boxes of tubing may have been brought back from clinics and mixed in with supplies still in the primary inventory location. The data in GIP showed the quantity on hand was 75 and normal stock level for this item was 200. Therefore, a physical inventory level of 571 would represent a nearly three-month supply of intravenous tubing. The audit team could not determine the cost of the items because there was no cost assigned in GIP.

At five of 11 VAMCs, the audit team found expired supply items during its physical counts and observations of storage locations. From the 330 judgmentally selected items, the audit team identified seven different items with a total of 92 units that had expired. Furthermore, the OIG identified additional expired items outside of its judgmental selection during observations of primary storage locations. These consisted of eight different items with a total of 197 units. All the items identified had expiration dates ranging from about two months to nearly three years past at the time of observation.

Example 4

The Altoona VAMC maintained microlaryngeal tracheal tubes, an airway management device, in the primary inventory location. However, 10 of 12 devices expired in July 2016. A lead supply specialist stated they were unaware that the expired supplies were mixed in with unexpired supplies.

Inadequate Quality Control Review Process

The OIG team reviewed the FY 2017 VISN QCRs for the 11 VAMCs visited and found the QCR process failed to assess and identify VAMC inventory management issues. VISN CLOs are required to conduct a QCR once per fiscal year to ensure compliance with established VA and VHA guidance. The QCRs address various inventory management practices, such as whether VAMCs review and adjust stock levels appropriately to avoid understocking and overstocking, whether inventory documentation is maintained and available for a minimum of two years, and whether weekly storeroom verifications are conducted. However, the QCRs conducted did not evaluate the logistics programs in their entireties and did not include questions to assess inventory management practices, such as improper distribution to ghost secondary locations in GIP and security and access to expendable supplies.

The audit team also found that although QCRs included questions to assess certain inventory management processes, they were ineffective at identifying critical issues such as

- Understocking and overstocking expendable supplies,
- Inadequate documentation of inventories,
- Failure to conduct weekly verification of storerooms, and

- Missing barcode labels.

After the transition to GIP, CLOs from VISNs 2, 4, 5, and 6 stated they monitored the use of GIP by conducting QCRs as a periodic quality control of the VAMCs. However, the OIG team found deficiencies that should have been identified and addressed through the QCR.

The audit team found logistics staff improperly distributed items to ghost secondary locations in GIP, permitted unrestricted access to expendable supplies, and failed to consistently document key items on log sheets required for item distribution. However, the QCR checklist does not include questions to address the security and access to expendable supplies within a VAMC or assess if logistics staff improperly distribute items in GIP.

Even when inventory practices were included as part of the QCR, the reviews conducted did not always adequately identify and correct inventory management issues. The QCR addressed whether VAMCs review and adjust stock levels appropriately to avoid understocking and overstocking. The QCR responses for three of the 11 VAMCs stated they did review and adjust stock levels appropriately. However, the OIG found all 11 VAMCs overstocked or understocked expendable items. For example, the audit team found 19 of 30 items in the Erie VAMC judgmental selection (63 percent) had supplies that were either overstocked or understocked, even though the QCR stated the VAMC reviewed and adjusted stock levels.

A QCR also addresses whether inventory documentation, including a memo identifying discrepancies and corrective action steps, is maintained and available for a minimum of two years. The audit team found two VAMCs did not provide the required memo. The Asheville VAMC QCR noted that the VAMC maintained appropriate inventory documentation; however, the audit team found that the memo did not identify discrepancies. The Clarksburg VAMC QCR reported the VAMC did not maintain the documentation.

Furthermore, the QCRs did not identify noncompliance with required weekly storeroom verifications. VHA Directive 1761(1) requires that shelves, storage bins, and items are checked on a weekly basis for expirations. This weekly verification requirement is in addition to the required annual wall-to-wall or cycle inventories. The audit team identified five VAMCs with expired supplies. The QCRs for two of the VAMCs showed that weekly verifications of storerooms were not being conducted. The QCRs for the remaining three VAMCs stated that the verifications were being done as required, but the team found them to be inadequate. For example, the QCR performed at the Fayetteville VAMC stated that the VAMC checked on a weekly basis for expired items. However, the audit team identified expired items at the VAMC, such as 92 surgical gloves that had been expired for seven months and 31 stabilizers that had been expired for three months. If the VAMCs conducted the required weekly storeroom verifications, logistics staff would identify expired items that need to be removed from the shelves closer to their expiration dates. The expired supplies identified at the three VAMCs were

an indication that the QCR conducted for the weekly storeroom verification requirement was inadequate.

Another part of the QCR addressed whether VAMCs used computerized barcode labels to identify each item within the inventory. The OIG identified five VAMCs with several storage bins containing inventory that lacked barcode labels. However, the QCRs for all five of those VAMCs reported they used barcode labels to identify items within the inventory.

The issues surrounding the adequacy of the VISN QCRs are known. The VHA P&LO branch manager stated their office began shadowing the VISN CLOs during QCRs after realizing the results were unreliable. The manager added that VAMCs "reporting 80 percent compliance are really at around 50 to 60 percent because they are just checking the box."

According to the former P&LO director of Logistics Operations, the QCR is the only assessment of VHA's inventory management. However, the QCR does not fully measure compliance with VHA Directive 1761(1) and did not identify inventory management issues that resulted in expired supplies at VAMCs or could have resulted in patient care delays. Furthermore, when deficiencies were identified, VISNs did not ensure VAMCs always corrected the issues. As a result, VISNs cannot ensure the VAMCs adequately managed expendable supplies.

Conclusion

VAMCs did not properly manage expendable supplies because they did not follow required inventory management practices. In addition, the VISN QCR process was inadequate at assessing and identifying noncompliance with inventory management procedures. Inventory management is not limited to supply levels—without proper management of expendable supplies VHA cannot ensure the availability of supplies that are necessary to provide patient care at VAMCs.

VHA missed opportunities to be good stewards of VA funds by ordering expendable supplies in excess quantities and, in some cases, allowing supplies to expire before use. VHA continued to put government resources at risk for theft and waste instead of properly storing, accounting for, and disposing of the items in accordance with VA policy.

Recommendations 1–6

The OIG made six recommendations specific to the VISNs and VAMCs that migrated from Catamaran to GIP:

1. The Executive in Charge, Office of the Under Secretary for Health, implements controls to ensure VA medical centers comply with policy to accurately annotate distribution of supply items.

2. The Executive in Charge, Office of the Under Secretary for Health, implements controls to ensure VA medical centers comply with policy to make supply logs available, include all required elements, and are used by VA medical center staff.
3. The Executive in Charge, Office of the Under Secretary for Health, strengthens procedures for VA medical centers to sufficiently conduct and document physical inventory results and retain documentation as required by VHA policy.
4. The Executive in Charge, Office of the Under Secretary for Health, strengthens controls at VA medical centers to ensure supplies are consistently secured.
5. The Executive in Charge, Office of the Under Secretary for Health, ensures VA medical centers affix barcode labels for all expendable supplies at the locations where the inventory items are stored.
6. The Executive in Charge, Office of the Under Secretary for Health, strengthens procedures for the Veteran Integrated Service Network Quality Control Review process, ensuring a thorough review is conducted and action plans are developed and executed to address identified deficiencies at the VAMCs. In addition, update the Quality Control Review document regarding VA medical center security, access requirements, and improper distribution of supplies.

Management Comments

The Executive in Charge, Office of the Under Secretary for Health, concurred with all six recommendations. The action plan for each of the recommendations includes a revision of the FY 2020 VISN QCR checklist. The revised checklist will include queries that address accuracy in supply distribution documentation; compliance with supply log availability, required elements, and VAMC staff usage; affixed barcodes; and security and access requirement for supplies. In addition, VHA's Policy, Assessment and Quality, Education, and Field Support Branches of Policy, Training, and Assessment Directorate will conduct random on-site audits to ensure the accuracy of the QCR results and report the results to the Chief Executive of Supply Chain and Logistics, as well as VISN and medical center leaders. VHA will conduct weekly conference calls and quarterly face-to-face meetings with VISN chief supply chain officers.

OIG Response

The Executive in Charge's corrective action plans are responsive to the recommendations. The OIG will monitor progress and follow up on the implementation of these recommendations until the proposed actions are completed.

Appendix A: Scope and Methodology

Scope

The OIG team conducted its audit work from November 2017 through February 2019. The universe consisted of 22 VAMCs that previously installed the Catamaran inventory system from VISNs 2, 4, 5, and 6. However, the scope only included 21 VAMCs. The Washington DC VA Medical Center was excluded from the scope because the VAMC was the subject of the OIG report issued in March 2018, *Critical Deficiencies at the Washington DC VA Medical Center*.

Methodology

The audit team distributed a survey to each of the 21 medical center CLOs or deputy CLOs to capture the VAMC's perspective of the inventory system transition and to gather an understanding of their current inventory management system and processes. The team conducted unannounced site visits at 11 of the 21 VAMCs for on-site interviews with management and staff. Table 2 displays the list of 11 VAMCs visited.

Table 1.A. VAMCs Visited

VISN	VAMC	Location
4	Altoona VAMC	Altoona, PA
4	Coatesville VAMC	Coatesville, PA
4	Erie VAMC	Erie, PA
4	Philadelphia VAMC	Philadelphia, PA
4	Wilmington VAMC	Wilmington, DE
5	Baltimore VAMC	Baltimore, MD
5	Clarksburg VAMC	Clarksburg, WV
5	Martinsburg VAMC	Martinsburg, WV
6	Asheville VAMC	Asheville, NC
6	Fayetteville VAMC	Fayetteville, NC
6	Salisbury VAMC	Salisbury, NC

Source: VA Website

The team also conducted observations and physical inspections of expendable inventory management operations in conjunction with a review of expendable inventory data, excluding sterile and prosthetic items, from GIP. The audit team tested the accuracy of inventory system data by judgmentally selecting 30 expendable supply items in primary storage locations at each site visited. The team performed physical counts for these items and compared them to inventory system on-hand inventory levels. In addition, it conducted telephone interviews with staff

members from VA's Office of Internal Controls, VISN CLOs, and VHA's P&LO management and staff involved in providing oversight and quality assurance of the inventory management system.

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 by taking actions such as

- Soliciting the OIG's Office of Investigations for indicators;
- Developing a fraud indicator checklist;
- Asking VAMC CLOs what controls they have in place to prevent fraud, waste, and abuse;
- Analyzing judgmentally selected medical supply inventory system data for anything out of the ordinary or not satisfactorily explained;
- Reviewing for altered or missing inventory data and documentation; and
- Reviewing for appropriate Quality Control Reviews.

The audit team identified a potential instance of fraud and referred the instance to the OIG Investigations Division.

Data Reliability

The audit team used computer-processed data obtained in the form of screenshots from VAMC Logistics staff to determine the inventory information within GIP. The OIG team determined the inventory information within GIP was unreliable and instead relied on a physical count of quantities on hand for 30 judgmentally selected items at each VAMC. A limitation of physically counting the inventory items is the possibility of miscounting items. However, the team mitigated this by requiring two auditors to count all 30 items and verifying the count with the partner auditor. The team used both the GIP information and physical counts to develop findings, conclusions, and recommendations.

In addition, the team used computer-processed data from VAMC Quality Management staff to determine how supply inventory management can affect patient risk at VAMCs. Quality Management staff provided the patient incidents from three different systems: Electronic Patient Event Report, WebSPOT, and Joint Patient Safety Reporting. The team could not determine the reliability of the information in each system. The team used the patient event reports to identify potential examples that validated the findings and conclusions that were developed.

Furthermore, the team created a customer survey and released the survey to VAMC CLOs and deputy CLOs, or individuals acting in these positions, to complete in SurveyPro. The team used the survey to assess key elements such as the migration, oversight, and inventory system usage. The team did not verify the accuracy of the self-reported information from VHA, but took steps from the survey design through data analysis and interpretation to minimize potential errors and problems. The audit team concluded the obtained data were sufficiently reliable for the purposes of this audit.

Government Standards

The assessment of internal controls focused on those controls relating to the audit objective. The OIG conducted this performance audit in accordance with generally accepted government auditing standards. These standards require that the OIG plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for its findings and conclusions based on the audit objective. The OIG believes that the evidence obtained provides a reasonable basis for its findings and conclusions based on the audit objective.

Appendix B: Management Comments from Executive in Charge, Office of the Under Secretary for Health

Department of Veterans Affairs Memorandum

Date: March 8, 2019

From: Executive in Charge, Office of the Under Secretary for Health (10)

Subj: OIG Draft Report, VHA's Expendable Inventory Management System, Oversight of Migration from Catamaran to the Generic Inventory Package, Project Number 2017-05246-R3-0180 (VIEWS 00181581)

To: Assistant Inspector General for Audits and Evaluations (52)

1. Thank you for the opportunity to review the OIG draft report, VHA's Expendable Inventory Management System, Oversight of Migration from Catamaran to the Generic Inventory Package.

2. I have reviewed the draft report and understand the findings, investigative results and recommendations. The plan of action has been established for recommendations 1- 6.

Recommendation 1: The Executive in Charge, Office of the Under Secretary for Health, implements controls to ensure VA medical centers comply with policy to accurately annotate distribution of supply items.

VHA Comments: Concur. The Veterans Integrated Services Network (VISN) Chief Supply Chain Officers (CSCO) are responsible for conducting annual reviews of their facility Logistics programs. The Quality Control Review (QCR) checklist is an annual review conducted by the VISN CSCOs to ensure each facility Logistics program is compliant with all applicable policies to ensure operational efficiency. The fiscal year (FY)2019 QCR checklist consist of 158 questions assessing policy compliance and the current operational state of the logistics program at each facility. Once the VISN CSCO completes the annual QCR, the facility Chief Logistics Officer develops and implements an action plan to address any deficiencies identified during the review. The FY2019 QCR checklist does address the issue of eliminating "ghost" secondary locations, and if a deficiency is identified on the QSR, the facility Chief Logistic Officer will develop an action plan to eliminate the use of "ghost" locations. The Policy, Assessment and Quality Branch of the Veterans Health Administration (VHA) Policy, Training and Assessment Directorate has initiated an Integrated Product Team Workgroup to assess and revise a new FY2020 QSR checklist that will reflect changes in quality and scoring to address policy deficiencies. This review will help CSCOs to reconcile their inventories and eliminate the improper use of "ghost" secondary locations.

Additionally, this area will be addressed during weekly calls and in quarterly VISN face to face meetings with the VISN CSCOs to ensure that the facility consistently comply with policy to accurately annotate distribution of supply items.

VHA will provide the following documentation at the completion of this action:

- A copy of the FY2020 QCR checklist.

Status: in process Target Completion Date: January 31, 2020

Recommendation 2: The Executive in Charge, Office of the Under Secretary for Health, implements controls to ensure VA medical centers comply with policy to make supply logs available, include all required elements, and are used by VA medical center staff.

VHA Comments: Concur. The Veterans Integrated Services Network Chief Supply Chain Officers (CSCO) are responsible for conducting annual reviews of their facility logistics programs. As noted in Recommendation 1, an Integrated Product Team workgroup will develop new quality review questions on the fiscal year (FY) 20 Quality Control Review (QSR) checklist to address supply log deficiencies to ensure facilities follow policy to make supply logs available, include all required elements, and are used by all VA medical center staff. If deficiencies are identified, the facility Chief Logistics Officer will develop an action plan to include training for facility staff.

Veterans Health Administration will provide the following documentation at the completion of this action:

- A copy of the FY2020 QCR checklist tool reflecting a new series of questions, appropriately weighted, addressing the requirement to make supply logs available, include all required elements, and ensure they are used by all VA medical center staff.

Status: in process Target Completion Date: January 31, 2020

Recommendation 3: The Executive in Charge, Office of the Under Secretary for Health, strengthens procedures for VA Medical Centers to sufficiently conduct and document physical inventory results and retain documentation as required by VHA policy.

VHA Comments: Concur. As noted in the response to recommendation 1, the Veterans Integrated Systems Network (VISN) Chief Supply Chain Officers (CSCO) are responsible for conducting annual reviews of their facility logistics programs. This review process is known as the Quality Control Review (QCR). The FY2019 QCR checklist used for annual reviews, addresses the topic or facilities being required to conduct physical inventories and the Chief Logistics Officer documents and retain the results. The Integrated Product Teams will review the scoring value of questions and make modifications to address the criticality of this issue. An audit of the responses will be completed for FY2019 QCRs to determine if facilities are compliant, and if not, the facilities will develop an action plan to address the deficiencies in a timely manner. During FY2020, members of the Policy, Assessment Quality, Education, and Field Support Branches of Policy, Training and Assessment (PTA) Team will conduct random onsite audits after the QCR is complete. These random audits will validate the QCR findings to ensure accuracy and reliability of the QCR checklist. The findings of the random audits will be shared with the Chief Executive of Supply Chain Logistics Officer, VISN Executive and Medical Center Leadership. From this review, the PTA will be able to identify strengths and/or deficiencies in the review process and provide additional training or support as needed for the Quality Review Process, which will be tracked through monthly action plan tracking reports.

Veterans Health Administration will provide the following documentation at completion of this action:

- A copy of the FY2020 QCR checklist reflecting any scoring value changes on the checklist to reflect the criticality of conducting physical inventories and retaining the documentation as required by policy.
- Copies of the monthly Action Plan Tracking Reports.
- Copies of the random audit report findings when that program commences in FY2020.

Status: in process Target Completion Date: April 30, 2020

Recommendation 4: The Executive in Charge, Office of the Under Secretary for Health, strengthens controls at VA Medical Centers to ensure supplies are consistently secured.

VHA Comments: Concur. The Policy, Assessment and Quality Branch of the Veterans Health Administration's (VHA) Policy, Training and Assessment Directorate has initiated an Integrated Product Team workgroup to develop questions on the FY2020 Quality Control Review (QCR) Checklist to ensure

facilities are consistently securing supplies. Additionally, this is an item that will be part of the on-site "random audit" evaluation that will be developed and implemented starting in FY2020. Additionally, this area will be addressed during weekly calls and in quarterly VISN face to face meetings with the VISN Chief Supply Chain Officers to ensure that the facility consistently secures supplies to ensure compliance with VHA policy.

VHA will provide the following documentation at the completion of this action:

- A copy of the new FY2020 QCR checklist reflecting a new series of questions, appropriately weighted, ensuring that all VA medical centers are consistently securing supplies.
- Copies of the random audit report findings when that program commences in FY2020

Status: in process Target Completion Date: April 30, 2020

Recommendation 5: The Executive in Charge, Office of the Under Secretary for Health, ensures VA Medical Centers affix barcode labels for all expendable supplies at the locations where the inventory items are stored.

VHA Comments: Concur. As noted in response to Recommendation 1 the Veterans Integrated Services Network Chief Supply Chain Officers (CSCO)s use the Quality Control Review (QCR) checklist to annually assess facility Logistics programs compliance with applicable policies. The Fiscal Year 2019 QCR checklist addresses the requirement that Medical Centers affix barcode labels for all expendable supplies at the locations where the inventory items are stored. The Integrated Product Team will review the scoring value of those questions and make modifications to address the criticality of this issue. In addition, an audit of the responses to these questions will be done for FY2019 QCRs to ensure facilities have either indicated compliance or, if not, an action plan will be developed to address the deficiency.

Moving forward, monthly reports (i.e. an Action Plan Tracking Report) of action plan compliance and closure of items will be compiled and reported to the Chief Executive of Supply Chain and Logistics, VISN Executive and Medical Center Leadership. During FY2020, members of the Policy, Assessment and Quality, Education, and Field Support Branches of Policy, Training and Assessment Team will conduct on-site random audits after the QCR is complete. These random audits will review the QCR checklist to ensure accuracy and reliability of the QCR checklist. The issue raised in this recommendation will be reviewed during the random audit process. The results of the random audits will be reported directly to the Chief Executive of Supply Chain and Logistics, VISN Executive and Medical Center Leadership.

Additionally, this area will be addressed during weekly calls and in quarterly VISN face to face meetings with the VISN CSCO's to ensure that facility staff consistently affix barcode labels for all expendable supplies at the locations where the inventory items are stored.

VHA will provide the following documentation at completion of this action:

- A copy of the FY2020 QCR checklist ensuring VA Medical Centers affix barcode labels for all expendable supplies at the locations where the inventoried items are stored.
- Copies of the monthly Action Plan Tracking Reports.
- Copies of the "random audit" report findings when that program commences in FY2020.

Status: in process Target Completion Date: April 30, 2020

Recommendation 6: The Executive in Charge, Office of the Under Secretary for Health, strengthens procedures for the Veterans Integrated Service Network Quality Control Review process, ensuring a thorough review is conducted and action plans are developed and executed to address identified

deficiencies at the VAMCs. Additionally, update the Quality Control Review document regarding VA Medical Center security access requirements and improper distribution of supplies.

VHA Comments: Concur. The Quality Control Review (QCR) checklist will be updated to address the issues of VA medical centers' security, access requirements and improper distribution of supplies as indicated in responses to the previous recommendations. The Policy, Assessment and Quality Branch of Veterans Health Administration (VHA) Policy, Training and Assessment Directorate has initiated an Integrated Product Team Workgroup

to make those necessary changes for the FY2020 QCR checklist. In addition, ensuring that thorough and accurate reviews are conducted through the development and implementation of the "random audit" process which will launch in FY2020. These random audits will look at element in the QCR checklist to ensure accuracy and reliability of the QCR checklist. The results of the random audits will be reported directly to the Chief Executive of Supply Chain and Logistics as well as VISN Executive Leadership and Medical Center Leadership. The compliance and closure of items will be compiled and reported monthly to the Chief Executive of Supply Chain and Logistics Officer, VISN Executive and Medical Center Leadership.

VHA will provide the following documentation at completion of this action:

- A copy of the FY2020 QCR checklist.
- Copies of the monthly Action Plan Tracking Reports.
- Copies of the random audit report findings when that program commences in FY2020.

Status: in process Target Completion Date: April 30, 2020

3. Thank you for the opportunity to review the draft report. If you have any questions, please email Karen Rasmussen, M.D., Director, GAO OIG Accountability Liaison (GOAL) Office at VHA10EGGOALAction@va.gov.

(Original Signed)

Richard A. Stone, M.D.

For accessibility, the original format of this appendix has been modified to comply with Section 508 of the Rehabilitation Act of 1973, as amended.

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