G A O

Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, DC 20548

April 30, 2007

The Honorable Ike Skelton
Chairman
The Honorable Duncan Hunter
Ranking Member
Committee on Armed Services
House of Representatives

The Honorable Vic Snyder
Chairman
The Honorable John M. McHugh
Ranking Member
Subcommittee on Military Personnel
Committee on Armed Services
House of Representatives

Subject: *DOD and VA Outpatient Pharmacy Data: Computable Data Are Exchanged for Some Shared Patients, but Additional Steps Could Facilitate Exchanging These Data for All Shared Patients*

Since 1998, the Department of Defense (DOD) and the Department of Veterans Affairs (VA) have been working to electronically exchange patient health data, including outpatient pharmacy data,[1] across their electronic health information systems. Exchanging outpatient pharmacy data is important for DOD and VA because certain DOD and VA patients, known as shared patients, receive health care from both agencies. Clinicians' access to complete health information from both agencies' health information systems could assist clinicians in making more informed medical decisions and help prevent adverse medication reactions—which include detrimental or unintended reactions when multiple medications are taken together and allergic reactions to a medication. In March 2004, DOD and VA began collaborating on a long-term initiative to make their outpatient pharmacy data computable. Computable data refer to data that are in a format that a computer application can act on: for example, to provide automatic checks for adverse medication reactions or to plot graphs of changes in vital signs such as blood pressure.

---

[1] Patient health data also include demographic, radiology, laboratory, and allergy data. Outpatient pharmacy data refer to information on medications dispensed and medication allergies.

In reporting on this initiative in the past, we have noted that the agencies have experienced delays in their efforts to begin exchanging computable outpatient pharmacy data.[2] Concerned about DOD's and VA's progress in this effort, you asked us to examine the initiative that the agencies have under way to make their outpatient pharmacy data computable. In this report, we provide information on

- DOD's and VA's expectations of what the exchange of computable outpatient pharmacy data will provide in safeguards against adverse medication reactions for shared patients.

- The status of DOD's and VA's initiative for attaining computable outpatient pharmacy data.

To address the objectives, we analyzed documents and interviewed officials from DOD and VA about the agencies' efforts to exchange computable outpatient pharmacy data for shared patients. We also viewed a demonstration of DOD's and VA's exchange of computable outpatient pharmacy data in El Paso, Texas, where DOD and VA first exchanged these data for shared patients. We conducted our work from July 2006 through April 2007 in accordance with generally accepted government auditing standards.

On April 3, 2007, we provided a briefing to your offices on the results of this work. The briefing slides, included as enclosure I, have been updated to include more current information. This report summarizes the information presented in the briefing and officially transmits our recommendations to the Secretary of Defense and the Secretary of Veterans Affairs.

Results in Brief

DOD and VA expect the exchange of computable outpatient pharmacy data to provide each agency with seamless access to shared patients' medication histories and more complete electronic checks for adverse medication reactions. Officials expect information on outpatient medications dispensed by either agency's health care system to be stored in each agency's repository in the standardized vocabulary each agency uses, following translation from a standardized set of terms, which will allow either agency's electronic health information system to include the other agency's data in its automatic checks. According to DOD and VA officials, having pharmacy data from both DOD and VA, rather than data from a single agency, could reduce adverse medication reactions by providing more complete checks for shared patients.

DOD and VA are exchanging computable outpatient pharmacy data for some shared patients, but have not completed steps important for exchanging these data for all shared patients. DOD and VA developed an electronic interface—Clinical Data Repository/Health Data Repository (CHDR)—that links DOD's and VA's health data repositories and allows for the exchange of computable data between them. Before

---

[2]GAO, *Information Technology: VA and DOD Face Challenges in Completing Key Efforts*, GAO-06-905T (Washington, D.C.: June 22, 2006).

computable data can be exchanged, patients who use both DOD's and VA's health care systems must be identified as shared patients and then activated, which refers to shared patients being matched on certain identifiers—first name, last name, date of birth, Social Security Number—in both agencies' health information systems and established as "active" shared patients. DOD and VA have begun exchanging computable outpatient pharmacy data through CHDR for patients activated at seven locations as of March 2007.[3] In addition, DOD officials indicated that all 117[4] DOD sites in the continental United States, Alaska, and Hawaii will be able to activate shared patients by the end of June 2007; VA indicated that all 128 VA sites will be able to activate shared patients by mid-September 2007. DOD and VA have been addressing three issues that hinder their ability to exchange computable outpatient pharmacy data for all shared patients.

- DOD and VA officials have identified two problems that prevent them from activating some shared patients. In some cases, patient information does not match exactly on all identifiers. In addition, VA patients who were discharged from active duty before 1997 may not have a unique identification number that DOD assigns to its beneficiaries, and without this number, these patients cannot be activated. According to DOD and VA, the agencies are working to resolve these problems. DOD stated that in February 2007 it completed a software upgrade to help resolve problems with matching patients' identifying information. Similarly, VA officials told us that VA is developing a software upgrade, but could not provide a date for when its upgrade would be operational. In addition, DOD reported that it is working with a VA-provided list of patients who are receiving care from VA and were discharged from active duty before 1997. DOD reported that it will create unique identification numbers for these patients and anticipates this effort will be completed by the end of September 2007.

- VA must expand to all its 128 sites the capability to automatically check DOD data that are exchanged through CHDR. VA officials said this capability was in place at 10 sites as of March 2007 and expect it to be in place at all VA sites by the end of July 2007.

- While DOD and VA officials told us that guidelines for identifying shared patients would help sites determine which patients should be activated, the agencies have not established written guidelines, including criteria to define shared patients and procedures to identify shared patients, for all sites to use. DOD expects the guidelines to be completed by the end of June 2007.

---

[3]Each location includes one DOD site and one VA site at the same location or in close proximity. A site represents one or more facilities—medical centers, hospitals, or outpatient clinics—that store their electronic health data in a single database.

[4]According to DOD officials, there are a total of 138 sites, 21 of which are located outside the United States and will likely not activate patients.

GAO-07-554R DOD and VA Exchange of Computable Pharmacy Data

Until DOD and VA take additional steps to ensure all shared patients benefit from the exchange of computable pharmacy data, many shared patients will not receive the benefit of more complete automatic electronic checks for adverse medication reactions. To meet the timelines for resolving the three issues identified, it will be important for the agencies to make these efforts a priority, given previous delays in developing the capability to exchange computable data.

To help ensure that all shared patients benefit from the exchange of computable outpatient pharmacy data, the Secretary of Defense and the Secretary of Veterans Affairs should expedite certain ongoing efforts. Specifically, we recommend that (1) the Secretary of Defense and the Secretary of Veterans Affairs expedite efforts to develop a solution for activating shared patients when patients' identifying information does not match exactly, (2) the Secretary of Defense expedite efforts to assign a unique DOD identification number to VA patients who were discharged from active duty before 1997, (3) the Secretary of Veterans Affairs expedite efforts to expand to all VA sites the capability to automatically check DOD data that are exchanged through CHDR, and (4) the Secretary of Defense and the Secretary of Veterans Affairs expedite the development of written guidelines for all sites to use for defining and identifying shared patients.

Agency Comments

In commenting on a draft of this report, DOD and VA concurred with our findings and recommendations. (DOD's and VA's comments are reprinted in enclosures II and III, respectively.) DOD stated that it will expedite efforts for the identified recommendations to be completed by the specified time frames. VA stated that the two agencies are taking the necessary steps to overcome issues that have hindered their ability to exchange computable outpatient pharmacy data for all shared patients. DOD and VA provided updated information on their efforts and DOD provided technical comments. We incorporated updated information and technical comments where appropriate.

- - - - -

We are sending copies of this report to the Secretary of Defense, the Secretary of Veterans Affairs, and appropriate congressional committees. We will also provide copies to others upon request. In addition, the report is available at no charge on GAO's Web site at http://www.gao.gov.

If you and your staff have any questions or need additional information, please contact Laurie Ekstrand at (202) 512-7101 or ekstrandl@gao.gov or Valerie Melvin at (202) 512-6304 or melvinv@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Major

contributors to this report were James Musselwhite, Assistant Director; Barbara Oliver, Assistant Director; Janina Austin; Jacqueline Bauer; Manuel Buentello; Christina C. Serna; and Eric Trout.

Laurie E. Ekstrand
Director, Health Care

Valerie C. Melvin
Acting Director, Information Technology
 Human Capital and Management Issues

Enclosures – 3

G A O
Accountability * Integrity * Reliability

DOD and VA Outpatient Pharmacy Data: Computable Data Are Exchanged for Some Shared Patients, but Agencies Have Not Completed Steps Important for Exchanging These Data for All Shared Patients

Briefing to Congressional Staff

Updated

1

GAO
Accountability * Integrity * Reliability

DOD and VA Outpatient Pharmacy Data: Computable Data Are Exchanged for Some Shared Patients, but Agencies Have Not Completed Steps Important for Exchanging These Data for All Shared Patients

Congressional Requesters:

Chairman, Honorable Ike Skelton
Ranking Member, Honorable Duncan Hunter
House Committee on Armed Services

Chairman, Honorable Vic Snyder
Ranking Member, Honorable John M. McHugh
Subcommittee on Military Personnel
House Committee on Armed Services

2

Overview

- **Introduction**
- **Objectives**
- **Scope and Methodology**
- **Background**
- **Findings**

3

GAO
Accountability * Integrity * Reliability

Introduction

- For decades, Congress has encouraged the Department of Defense (DOD) and the Department of Veterans Affairs (VA) to increase their resource-sharing activities to help clinicians—physicians and pharmacists—deliver health care services more efficiently and increase the quality of care provided to those who receive care from both DOD and VA.

- Since 1998, DOD and VA have been working to electronically exchange patient health data, including outpatient pharmacy data,[1] for active duty military personnel and veterans.

- Exchanging outpatient pharmacy data is important for DOD and VA because certain DOD and VA patients, known as shared patients, receive health care from both agencies.

[1]Patient health data also include demographic, radiology, laboratory, and allergy data. Outpatient pharmacy data refer to information on medications dispensed and medication allergies.

4

Introduction

- There are two ways shared patients may receive care from both DOD and VA health care systems.

  1. Through local agreements between DOD and VA, some patients may be referred from one agency's facility to the other's for care that the referring facility does not provide.

  2. Based on DOD's and VA's respective criteria for health care eligibility, some patients may be eligible for care under both systems (for example, many military retirees are eligible for both DOD and VA health care).

- Clinicians' access to complete health information from both agencies' health information systems could assist clinicians in making more informed medical decisions.

- Exchange of pharmacy data for shared patients could help prevent adverse medication reactions—including detrimental or unintended reactions when multiple medications are taken together and allergic reactions to a medication.

5

Introduction

- The Bob Stump National Defense Authorization Act for Fiscal Year 2003 required DOD and VA to develop outpatient pharmacy data systems that provide a real-time interface, data exchange, and checking of prescription drug data using national standards by October 1, 2004.[2]

- In March 2004, DOD and VA began collaborating on a long-term initiative to make their patient health data, including outpatient pharmacy data, computable. Computable data refer to data that are in a format that a computer application can act on: for example, to provide automatic checks for adverse medication reactions or to plot graphs of changes in vital signs such as blood pressure.

- In reporting on this long-term initiative in the past, we have noted that the agencies have experienced delays in their efforts to begin exchanging computable outpatient pharmacy data.[3] We reported that DOD and VA originally planned to begin exchanging computable outpatient pharmacy data by October 2005.

[2]Pub. L. No. 107-314, § 724, 116 Stat. 2458, 2598 (2002). In September 2004, the agencies completed testing of a prototype that allowed their systems to demonstrate these capabilities.
[3]GAO, *Information Technology: VA and DOD Face Challenges in Completing Key Efforts*, GAO-06-905T (Washington, D.C.: June 22, 2006).

6

Introduction

- In 2004, DOD and VA also began a separate initiative to electronically exchange read-only health data in near real-time for shared patients, which would allow DOD and VA clinicians to view data from each other's health information system. As of March 2007, all 128 VA sites and 22 of 138 DOD sites had the capability to electronically view data.[4]

- While DOD and VA officials said the capability to electronically view patients' health data from both agencies' systems has improved the quality of the health care they provide, agency officials expect computable data to further enhance the quality of health care provided.

- The capability of electronic health information systems to check and provide alerts for adverse medication reactions supplements, but does not replace, clinicians' standard practices of medical care, which include asking patients about their medication and medication-allergy histories and reviewing patients' medical files for their medication histories.

[4]A site represents one or more facilities—medical centers, hospitals, or outpatient clinics—that store their electronic health data in a single database.

7

Objectives

1. To describe DOD's and VA's expectations of what the exchange of computable outpatient pharmacy data will provide in safeguards against adverse medication reactions for shared patients.

2. To provide the status of DOD's and VA's initiative for attaining computable outpatient pharmacy data.

8

Scope and Methodology

GAO
Accountability * Integrity * Reliability

- Analyzed documents and interviewed officials from DOD and VA about the agencies' efforts to exchange computable outpatient pharmacy data for shared patients.

- Viewed demonstrations at medical facilities in the Washington, D.C. area of the capabilities of DOD's and VA's electronic health information systems. These demonstrations included how clinicians view a patient's medication history and are alerted to adverse medication reactions, but did not involve computable data.

- Viewed a demonstration in El Paso, Texas of DOD's and VA's initiative to exchange computable pharmacy data for shared patients at two co-located sites—William Beaumont Army Medical Center and the El Paso VA Health Care System—where DOD and VA first exchanged computable pharmacy data for shared patients.

- Conducted our work from July 2006 through April 2007 in accordance with generally accepted government auditing standards.

9

Background

GAO
Accountability * Integrity * Reliability

DOD patients may receive health care and get medications from several points of service.

- DOD patients can receive health care from
  - DOD military treatment facilities (MTF) at 138 sites, which include over 70 hospitals and 400 clinics
  - Private physicians (network and nonnetwork).[5]

- DOD patients can get medications from
  - MTF pharmacies
  - DOD's mail order pharmacy
  - Private pharmacies (network and nonnetwork).

[5]Network refers to TRICARE's network—a regionally structured program that uses civilian contractors to maintain provider and pharmacy networks to complement health care services provided at MTFs.

10

GAO
Accountability * Integrity * Reliability

Background

VA patients may receive health care and get medications from the VA health care system.

- VA patients can receive health care from facilities at 128 VA sites, which include 155 hospitals and 881 clinics.

- VA patients can obtain medications from VA-facility pharmacies and VA's seven mail order pharmacies.

- In some cases, VA uses private physicians to provide care to patients who are in need of a service that VA is unable to provide. If one of these private physicians prescribes a medication, the medication is filled at a VA pharmacy.

11

GAO
Accountability * Integrity * Reliability

Background

DOD and VA have each developed a repository—centralized electronic storage—for health data, including data on medications dispensed and patients' allergies to medications.

- Patient health data from DOD's and VA's health care facilities and pharmacies are aggregated in local databases maintained at DOD and VA sites, respectively.

- Patient data are transferred from DOD sites' local databases to DOD's Clinical Data Repository (CDR)[6] and from VA sites' local databases to VA's Health Data Repository (HDR).

- For example, the El Paso, Texas location has one DOD site and one VA site. Patient health data from the DOD site, composed of one medical center and two clinics, and the VA site, composed of three clinics, are aggregated in each site's database and then transferred to the corresponding agency's data repository.

[6]Information on medications dispensed is aggregated and transferred to CDR by DOD's Pharmacy Data Transaction Service (PDTS). DOD also uses PDTS for pharmacy billing and for verifying whether patients are eligible for DOD pharmacy benefits.

12

Background

DOD and VA clinicians can electronically view the medications dispensed to patients at any facility in their respective health care systems and, in certain cases, view medications dispensed to shared patients in the other agency's system.

- MTF physicians and MTF pharmacists can view information identifying medications dispensed at all MTF pharmacies, DOD's mail order pharmacy, private network pharmacies, and at private nonnetwork pharmacies if a claim for reimbursement is submitted.

- However, private physicians and private pharmacists (network and nonnetwork) and DOD's mail order pharmacy are unable to electronically view information identifying DOD patients' medications.

13

GAO
Accountability * Integrity * Reliability

Background

DOD and VA clinicians can electronically view the medications dispensed to patients at any facility in their respective health care systems and, in certain cases, view medications dispensed to shared patients in the other agency's system (cont.).

- In addition, DOD physicians at the facilities associated with the 22 DOD sites capable of exchanging shared patient data can view medications dispensed to shared patients at all VA facility pharmacies. These data are not computable.

- VA physicians and pharmacists at all VA facilities can electronically view medications dispensed from all VA facility pharmacies, VA's mail order pharmacies, and those MTF pharmacies that exchange shared patient data.

14

GAO
Accountability * Integrity * Reliability

Background

DOD and VA have developed automatic checks and alerts for their respective health information systems.

- DOD can perform automatic checks and provide alerts to MTF clinicians if a new medication order will have an adverse medication reaction with medications previously dispensed within DOD's health care system[7]— global checks—and medication allergies recorded at all MTFs.

- VA can perform automatic checks and provide alerts to VA clinicians if a new medication order will have an adverse medication reaction with medications ordered and dispensed and medication allergies recorded at facilities associated with the same VA site—local checks.

- As of March 2007, health care facilities at 10 VA sites could perform global checks on medications ordered and dispensed and medication allergies recorded at all VA facilities.

[7]Medications previously dispensed within DOD's health care system include medications dispensed at MTFs, DOD's mail order pharmacy, private network pharmacies, and at private nonnetwork pharmacies if a claim for reimbursement is submitted.

15

GAO
Accountability * Integrity * Reliability

Background

Exchanging computable data between agencies' health information systems requires that the agencies adopt common standards for clinical terminologies and for the transmission of information across systems.

- In 2001, the Office of Management and Budget began the Consolidated Health Informatics (CHI) initiative, which was a collaborative agreement among federal agencies, including DOD and VA, to adopt a common set of health information standards for the electronic exchange of clinical health information.[8]

- As part of the CHI initiative, DOD and VA began to adopt standard medication terminologies.

- CHI did not identify common standards for medication allergies.

[8]According to DOD and VA officials, on September 30, 2006, the CHI initiative was dissolved and will be integrated with the Health Information Technology Standards Panel, a public-private collaborative effort.

16

Findings

DOD and VA Expect Computable Outpatient Pharmacy Data to Allow Seamless Access to Shared Patients' Medication Histories and More Complete Electronic Checks for Adverse Medication Reactions

DOD and VA Are Exchanging Computable Outpatient Pharmacy Data for Some Shared Patients, but Have Not Completed Steps Important for Exchanging These Data for All Shared Patients

17

GAO
Accountability * Integrity * Reliability

DOD and VA Expect Computable Outpatient Pharmacy Data to Allow Seamless Access to Shared Patients' Medication Histories and More Complete Electronic Checks for Adverse Medication Reactions

DOD and VA officials expect information on outpatient medications dispensed to shared patients by either agency's health care system to be stored in both agencies' health data repositories, which would expand the data included in agencies' electronic checks for adverse medication reactions.

- Shared patients' health data, including medication and medication-allergy data, are to be stored in each agency's repository in the standardized vocabulary each agency uses, following translation from a standardized set of terms, thus allowing either agency's electronic health information system to process the other agency's data as if the data had originated in its own system.

- According to DOD and VA officials, this capability is expected to enable automatic checks for adverse medication reactions and to enable clinicians to receive automatic alerts for any adverse medication reactions that have been identified, regardless of which agency's facility dispensed the medication or recorded the medication-allergy information.

18

G A O
Accountability * Integrity * Reliability

DOD and VA officials expect information on outpatient medications dispensed to shared patients by either agency's health care system to be stored in both agencies' health data repositories, which would expand the data included in agencies' electronic checks for adverse medication reactions (cont.).

- Automated alerts are intended to inform physicians and pharmacists when a newly prescribed medication is potentially adversely reactant to a medication previously dispensed or whether a patient has an identified allergy to the newly prescribed medication.

- According to DOD and VA officials, using pharmacy data from both DOD and VA, rather than data from a single agency, could reduce adverse medication reactions by providing more complete checks for shared patients.

19

GAO
Accountability * Integrity * Reliability

DOD officials also expect computable outpatient pharmacy data to increase the checking capabilities of private pharmacists in DOD's network.

- According to DOD officials, the medications that private pharmacists in DOD's network dispense are expected to be checked for detrimental or unintended reactions to medications previously dispensed within VA's system; the pharmacist is to receive an alert if a potential adverse reaction is found.

20

G A O
Accountability * Integrity * Reliability

DOD and VA Are Exchanging Computable Outpatient Pharmacy Data for Some Shared Patients, but Have Not Completed Steps Important for Exchanging These Data for All Shared Patients

DOD and VA have developed the capability to exchange computable outpatient pharmacy data.[9]

- DOD and VA have developed an electronic interface—Clinical Data Repository/Health Data Repository (CHDR)—that links DOD's CDR and VA's HDR and allows for the exchange of computable data between the two data repositories.

- Before computable data can be exchanged, patients who use both DOD's and VA's health care systems must be identified as shared patients and then activated, which refers to shared patients being matched on certain identifiers—first name, last name, date of birth, Social Security Number—in both agencies' health information systems and established as "active" shared patients.

[9]DOD and VA envision exchanging other computable patient health data through CHDR. Agency officials indicated that they also have efforts underway to develop the capability to exchange computable clinical laboratory data.

21

GAO
Accountability * Integrity * Reliability

DOD and VA are currently exchanging computable outpatient pharmacy data through CHDR for patients activated at seven locations.[10]

- DOD and VA officials said that, as of March 2007, the agencies had exchanged computable outpatient pharmacy data for about 4,000 patients activated at the seven locations.

- We viewed a successful demonstration of the exchange of computable outpatient pharmacy data at one location in El Paso, Texas—the William Beaumont Army Medical Center and the El Paso VA Health Care System.

[10]Each location represents one DOD site and one VA site in the same location or in close proximity.

22

G A O
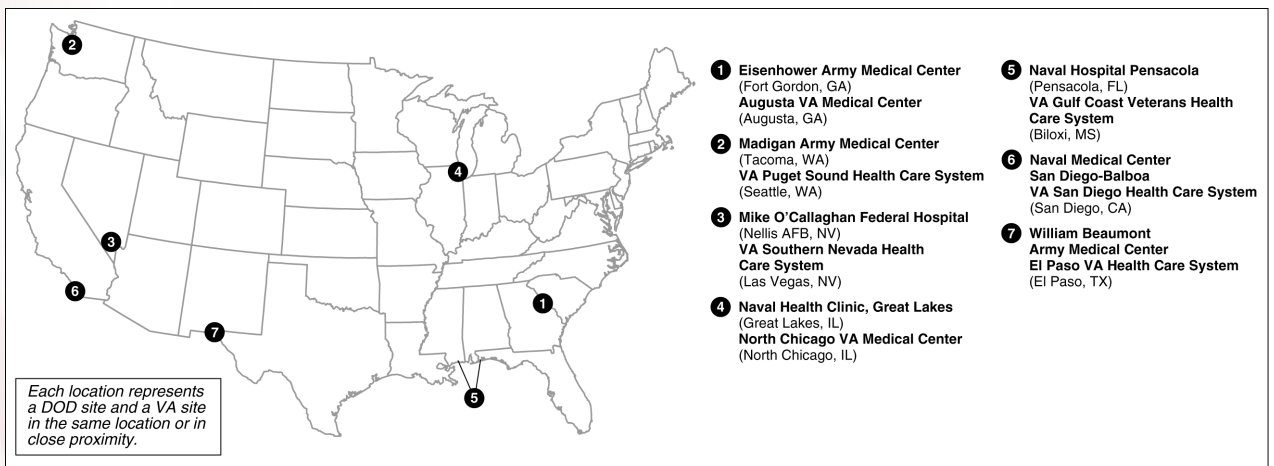Accountability * Integrity * Reliability

DOD and VA are currently exchanging computable outpatient pharmacy data through CHDR for patients activated at seven locations (cont.).

- In addition to El Paso, DOD and VA have begun exchanging computable outpatient pharmacy data for patients activated at six other locations:
  - Eisenhower Army Medical Center and Augusta VA Medical Center
  - Madigan Army Medical Center and VA Puget Sound Health Care System
  - Mike O'Callaghan Federal Hospital and VA Southern Nevada Health Care System
  - Naval Health Clinic, Great Lakes and North Chicago VA Medical Center
  - Naval Hospital Pensacola and VA Gulf Coast Veterans Health Care System
  - Naval Medical Center San Diego-Balboa and VA San Diego Health Care System

23

GAO
Accountability * Integrity * Reliability

Locations of Sites Activating Shared Patients, March 2007

① **Eisenhower Army Medical Center**
(Fort Gordon, GA)
Augusta VA Medical Center
(Augusta, GA)

② **Madigan Army Medical Center**
(Tacoma, WA)
VA Puget Sound Health Care System
(Seattle, WA)

③ **Mike O'Callaghan Federal Hospital**
(Nellis AFB, NV)
**VA Southern Nevada Health
Care System**
(Las Vegas, NV)

④ **Naval Health Clinic, Great Lakes**
(Great Lakes, IL)
North Chicago VA Medical Center
(North Chicago, IL)

⑤ **Naval Hospital Pensacola**
(Pensacola, FL)
**VA Gulf Coast Veterans Health
Care System**
(Biloxi, MS)

⑥ **Naval Medical Center
San Diego-Balboa**
VA San Diego Health Care System
(San Diego, CA)

⑦ **William Beaumont
Army Medical Center**
El Paso VA Health Care System
(El Paso, TX)

Each location represents a DOD site and a VA site in the same location or in close proximity.

Sources: GAO analysis of DOD and VA information; Map Resources (map).

24

G A O
Accountability * Integrity * Reliability

DOD and VA officials anticipate that all sites in the continental United States, Alaska, and Hawaii will activate shared patients.

- DOD officials expect that all 117[11] DOD sites in the continental United States, Alaska, and Hawaii will be able to activate shared patients by the end of June 2007.

- VA officials expect that all 128[12] VA sites will be able to activate shared patients by mid-September 2007.

- Although all sites are not currently activating shared patients, officials indicated that all DOD and VA sites can exchange computable pharmacy data for patients previously activated at other sites.

[11]According to DOD officials, 21 of the agency's 138 sites are outside the United States and will likely not activate patients.
[12]According to VA officials, all of the agency's 128 sites are within the United States.

25

GAO
Accountability * Integrity * Reliability

DOD and VA have been addressing issues that the agencies acknowledge have hindered their ability to exchange all computable outpatient pharmacy data for activated shared patients.

- Because a national standard does not exist for medication-allergy data, DOD and VA have agreed on and adopted a standard for exchanging these data.

- Adopted standard medication terminologies do not include terminologies for all medications.

- Standard medication terminologies must be continuously updated as new medications become available.

- DOD and VA have developed a team to review data that cannot be exchanged[13] and to work toward improving the percentage of data that can be exchanged.

[13]Data may not be exchanged for reasons other than lack of standards, including formatting errors.

26

GAO
Accountability * Integrity * Reliability

DOD and VA have been exchanging computable outpatient pharmacy data.

Percentage of Data Exchanged on Medications Dispensed and on Medication-allergies for Shared Patients Activated as of December 2006

Data	Medications dispensed	Medication allergies
VA to DOD	90	78
DOD to VA	93	65

Source: DOD and VA officials.

Note: According to DOD and VA officials, approximately 3,500 shared patients were activated as of December 2006. Data may not exchange for several reasons, including lack of standard terminologies and formatting errors.

27

GAO
Accountability * Integrity * Reliability

DOD and VA have been addressing issues that the agencies acknowledged have hindered their ability to activate all shared patients.

- According to DOD and VA officials, in some cases, patient information does not match exactly on all identifiers.

- For example, patients may present themselves using a nickname for one system and a full name for the other system. In these instances, DOD and VA cannot activate these patients.

- DOD assigns a unique number to DOD beneficiaries, which is needed to activate shared patients. However, VA patients who were discharged from active duty before 1997 may not have this unique number.

- Without this unique number, patients cannot be recognized by DOD's PDTS and therefore cannot be activated as shared patients.

28

GAO
Accountability * Integrity * Reliability

DOD and VA have been addressing issues that the agencies acknowledged have hindered their ability to activate all shared patients (cont.).

- To help resolve problems with matching patients' identifying information, DOD reported that in February 2007 it completed a software upgrade that officials expect will reduce DOD's error rate for activating shared patients to less than 5 percent. Similarly, VA officials told us that VA is developing a software upgrade, but could not provide a date for when the upgrade would be operational.

- For VA patients lacking a unique DOD number, DOD reported that it is working with a VA-provided list of patients who are receiving care from VA and were discharged from active duty before 1997. DOD reported that it will create unique identification numbers for these patients and anticipates this effort will be completed by the end of September 2007.

29

G A O
Accountability * Integrity * Reliability

VA must expand its current capability to conduct global automatic checks to all VA sites before all sites can benefit from automatic checks allowed by computable outpatient pharmacy data.[14]

- The capability for VA sites to conduct global automatic checks of medications ordered and dispensed and medication allergies recorded at all VA facilities is needed for all VA sites to conduct more comprehensive checks across all VA sites and to automatically check DOD data that are exchanged through CHDR.

- The capability allows VA's health information system to process data originating from DOD as though the data originated from another VA site.

[14]All DOD sites currently have the capability to conduct global automatic checks.

30

G A O
Accountability * Integrity * Reliability

VA must expand its current capability to conduct global automatic checks to all VA sites before all sites can benefit from automatic checks allowed by computable outpatient pharmacy data (cont.).

- VA officials told us that until the capability for global automatic checks is in place at a VA site, the VA site will likely not activate shared patients.

- VA officials said that as of March 2007 this capability is in place at 10 sites and expect it to be in place at all VA sites by the end of July 2007.

31

GAO
Accountability * Integrity * Reliability

According to DOD and VA officials, the agencies have not established written guidelines for all sites to use for identifying shared patients.

- DOD and VA officials told us they instructed the seven locations that are currently activating patients to identify shared patients as those who have previously received care from both agencies.

- DOD and VA officials told us that guidelines for all sites to use for identifying shared patients, including criteria defining a shared patient and procedures for identifying shared patients, would help sites determine which patients should be activated. However, the agencies have not established written guidelines for all sites.

- Agency officials stated that the development of guidelines for all sites to use are under way and DOD expects the guidelines to be completed by the end of June 2007. Officials said that customization of the guidelines may be necessary because of site-specific situations, such as local agreements.

32

Comments from the Department of Defense

THE ASSISTANT SECRETARY OF DEFENSE
1200 DEFENSE PENTAGON
WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

APR **1 3** 2007

Ms. Laurie E. Ekstrand
Director, Health Care
U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20548

Dear Ms. Ekstrand:

This is the Department of Defense (DoD) response to the U.S. Government
Accountability Office (GAO) draft report, "DoD and Veterans Affairs Outpatient
Pharmacy Data: Computable Data Are Exchanged for Some Shared Patients, but
Additional Steps Could Facilitate Exchanging These Data for All Shared Patients," dated
April 4, 2007 (GAO Code 290552/GAO-07-554-R).

The DoD acknowledges receipt of the GAO draft report and concurs with the
overall findings and recommendations. Specifically, DoD will expedite efforts for the
identified recommendations to be completed by the specified timeframes.

Enclosed are specific responses and two technical comments to GAO's draft
report recommendations. Please feel free to direct any questions on this matter to our
Project Officer, Ms. Pamela Schmidt, at (703) 681-8830, or Mr. Gunther Zimmerman
(GAO Liaison), at (703) 681-3492.

Sincerely,

William Winkenwerder, Jr., MD

Enclosures:
As stated

GAO DRAFT REPORT – DATED APRIL 4, 2007
GAO CODE 290552/GAO-07-554R

"DoD and VA Outpatient Pharmacy Data: Computable Data Are Exchanged for Some
Shared Patients, but Additional Steps Could Facilitate Exchanging These Data for All
Shared Patients"

DEPARTMENT OF DEFENSE COMMENTS
TO THE RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommends that the Secretary of Defense and
the Secretary of Veterans Affairs expedite efforts to develop a solution for activating
shared patients when patients' identifying information does not match exactly. (pgs. 3-
4/GAO Draft Report)

DoD RESPONSE: Concur. The DoD and VA are working collaboratively to resolve
this issue. A DoD system upgrade completed Feb 2007 is expected to reduce the error
rate for activating shared patients to less than 5 percent.

RECOMMENDATION 2: The GAO recommends that the Secretary of Defense and
the Secretary of Veterans Affairs expedite efforts to assign a unique DOD identification
number to VA patients who were discharged from active duty before 1997. (pg. 4/GAO
Draft Report)

DoD RESPONSE: Concur. In the Common Population project, the VA is working with
Defense Manpower Data Center (DMDC) to add the VA patients who were discharged
from active duty prior to 1997 and are receiving health care in VA. Once the listing of
VA patients is received by DMDC, it will take approximately 30 days to create the
unique identification numbers. We anticipate this work will be completed in 4Q FY
2007.

RECOMMENDATION 4: The GAO recommends that the Secretary of Defense and
the Secretary of Veterans Affairs expedite the development of written guidelines for all
sites to use for defining and identifying shared patients. (pg. 4/ GAO Draft Report)

DoD RESPONSE: Concur. The DoD currently has guidelines under development and
in coordination with the Services. We expect to complete this task in 3Q FY 2007.

Comments from the Department of Veterans Affairs

THE SECRETARY OF VETERANS AFFAIRS
WASHINGTON

April 18, 2007

Ms. Laurie Ekstrand
Director, Health Care
          and
Ms. Valerie C. Melvin
Acting Director,
Information Technology Human Capital and Management Issues
U. S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Ekstrand and Ms Melvin:

    The Department of Veterans Affairs (VA) has reviewed your draft report,
*DOD and VA Outpatient Pharmacy Data: Computable Data Are Exchanged
for Some Shared Patients, but Additional Steps Could Facilitate
Exchanging These Data for All Shared Patients* (GAO-07-554R) and agrees
with your conclusions and concurs in your recommendations directed to VA.

    While VA and DoD have encountered certain obstacles that have hindered
our ability to exchange computable outpatient pharmacy data for all active dual
consumers, both agencies are taking the necessary steps to overcome these
issues. VA and DoD are well on the path to accomplishing a critical milestone in
our ability to electronically exchange multiple types of patient health data
between our health information systems. By September 14, 2007, all 128 VA
sites will be able to activate shared patients. Considering that VA and DoD, in
many respects, are at the forefront of facilitating electronic health data exchange
across disparate information systems, this will be a notable accomplishment in
our continuing efforts to provide high quality care for both active duty service
members and veterans.

    The enclosure details VA steps to implement your recommendations
directed to the Department of Veterans Affairs. VA appreciates the opportunity to
comment on your draft report.

                                        Sincerely yours,

                                        R. James Nicholson

Enclosure

Enclosure

Department of Veterans Affairs (VA) comments to
Government Accountability Office (GAO) draft report
DOD and VA Outpatient Pharmacy Data: Computable Data Are Exchanged
for Some Shared Patients, but Additional Steps Could Facilitate
Exchanging These Data for All Shared Patients
(GAO-07-554R)

To help ensure that all shared patients benefit from the exchange of computable outpatient pharmacy data, the Secretary of Defense and the Secretary of Veterans Affairs should expedite certain ongoing efforts. Specifically, GAO recommends that

- **the Secretary of Defense and the Secretary of Veterans Affairs expedite efforts to develop a solution for activating shared patients when patients' identifying information does not match exactly.**

Concur - The Veterans Health Administration (VHA) acknowledges the necessity to improve the rate of matching between DoD and VA patients for whom computable pharmacy data are shared when their identifying information does not exactly match. VHA is working with DoD to provide a VA file that will permit DoD to match patients and issue Defense Enrollment Eligibility Reporting System (DEERS) ID numbers for those veterans who do not have already have one and are reasonably expected to receive care from both systems (i.e., registered in the VA Master Patient Index). This work includes activities to ensure that the proposed solution meets all applicable security and privacy requirements.

- **the Secretary of Veterans Affairs expedite efforts to expand to all VA sites the capability to automatically check DOD data that are exchanged through CHDR.**

Concur - VHA acknowledges the necessity to expand Clinical Data Repository/Health Data Repository (CHDR) capability for automatic drug and allergy checks to all 128 VA (Veterans Health Information Systems and Technology Architecture [VistA]) sites. In order to expand capability to all VA sites, VHA is currently working to complete testing on the Remote Data Interoperability (RDI) application and to approve RDI for national release. RDI is the application that supports the ability of VA to conduct the checks against data in the Health Data Repository (remote VA data and DoD data).

Enclosure

Department of Veterans Affairs (VA) comments to
Government Accountability Office (GAO) draft report
*DOD and VA Outpatient Pharmacy Data: Computable Data Are Exchanged
for Some Shared Patients, but Additional Steps Could Facilitate
Exchanging These Data for All Shared Patients*
(GAO-07-554R)
(Continued)

- **the Secretary of Defense and the Secretary of Veterans Affairs
  expedite the development of written guidelines for all sites to use
  for defining and identifying shared patients.**

Concur - VA and DoD have completed the written guidelines and are currently
planning to jointly present them to the Health Executive Council (HEC)
Information Management/Information Technology (IMIT) workgroup on April 26,
2007, for approval.

2

(290552)

GAO's Mission	The Government Accountability Office, the audit, evaluation and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.
Obtaining Copies of GAO Reports and Testimony	The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday, GAO posts newly released reports, testimony, and correspondence on its Web site. To have GAO e-mail you a list of newly posted products every afternoon, go to www.gao.gov and select "Subscribe to Updates."
Order by Mail or Phone	The first copy of each printed report is free. Additional copies are $2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to: U.S. Government Accountability Office 441 G Street NW, Room LM Washington, D.C. 20548 To order by Phone: Voice: (202) 512-6000 TDD: (202) 512-2537 Fax: (202) 512-6061
To Report Fraud, Waste, and Abuse in Federal Programs	Contact: Web site: www.gao.gov/fraudnet/fraudnet.htm E-mail: fraudnet@gao.gov Automated answering system: (800) 424-5454 or (202) 512-7470
Congressional Relations	Gloria Jarmon, Managing Director, JarmonG@gao.gov (202) 512-4400 U.S. Government Accountability Office, 441 G Street NW, Room 7125 Washington, D.C. 20548
Public Affairs	Paul Anderson, Managing Director, AndersonP1@gao.gov (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, D.C. 20548