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United States General Accounting Office
Washington, DC 20548

May 14, 2004

The Honorable Steve Buyer
Chairman, Subcommittee on Oversight and Investigations
Committee on Veterans' Affairs
House of Representatives

Subject: *Computer-Based Patient Records: Subcommittee Questions Concerning VA and DOD Efforts to Achieve a Two-Way Exchange of Health Data*

Dear Mr. Chairman:

This letter responds to your April 7, 2004, request that we provide answers to questions relating to our March 17, 2004, testimony.[1] At that hearing, we discussed the Department of Veterans Affairs' (VA) and Department of Defense's (DOD) progress toward defining a detailed strategy and developing the capability for a two-way exchange of patient health information. Your questions, along with our responses, follow.

> 1. *How many times has the GAO testified on VA-DOD sharing of medical information in the last 10 years?*

In the last 10 years we have testified seven times on matters pertaining to VA's and DOD's efforts toward achieving the capability to electronically exchange patient health information. VA and DOD have been working to achieve this capability since 1998. Our testimony was delivered between October 2001 and March of this year, and is summarized in enclosure I.

Our statements at these hearings have highlighted significant challenges that VA and DOD have faced in pursuing ways to share data in their health information systems and create electronic medical records. Although noting the departments' ultimate success in sharing data through the one-way transfer of health information from DOD to VA health care facilities, as part of the Federal Health Information Exchange,[2] we

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[1]U.S. General Accounting Office, *Computer-Based Patient Records: Sound Planning and Project Management Are Needed to Achieve a Two-Way Exchange of VA and DOD Health Data*, GAO-04-402T (Washington, D.C.: Mar. 17, 2004).

[2]When undertaken in 1998, the initiative to share patient health care information was called the Government Computer-Based Patient Record project. The project was renamed the Federal Health Information Exchange in 2002.

also detailed persistent weaknesses in the departments' actions toward achieving a two-way health data exchange—the focus of the Health*e*People (Federal) initiative. For example, our most recent testimony highlighted the limited progress that the departments had made toward establishing sound project management and defining a specific architecture and technological solution for developing the electronic interface that is fundamental to exchanging data between the individual health information systems that VA and DOD are developing.

2. *What recommendations have either VA or DOD implemented independently or cooperatively?*

VA and DOD have taken action on several recommendations that we have made over the past 3 years. These recommendations were aimed at improving the coordination and management of the departments' initial efforts to achieve electronic information sharing via the Government Computer-Based Patient Record (GCPR) project, and furthering DOD's development of its new health information system, the Composite Health Care System II. Our recommendations, along with the departments' actions to implement them, are summarized in enclosure II.

In particular, our prior reviews of the project to develop a government computer-based patient record determined that the lack of a lead entity, clear mission, and detailed planning to achieve that mission had made it difficult to monitor progress, identify project risks, and develop appropriate contingency plans. As a result, in reporting on GCPR in April 2001[3] and again in June 2002,[4] we made several recommendations to help strengthen the management and oversight of this project. VA and DOD agreed with and took actions that addressed all of these recommendations, including designating VA as the lead entity for the initiative, reevaluating and revising its original goals and objectives, and assigning a full-time project manager and supporting staff to oversee its implementation.

In addition, in September 2002 we reported on DOD's acquisition of the Composite Health Care System II.[5] DOD envisioned achieving a state-of-the-art automated medical information system that would lead to improved health-care decisions and lower medical and system costs through creating computer-based patient records that doctors and other health service providers would be able to access from any military treatment facility, irrespective of location. However, our review of the initiative noted, among other concerns, DOD's limited progress during early stages of

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[3]U.S. General Accounting Office, *Computer-Based Patient Records: Better Planning and Oversight by VA, DOD, and IHS Would Enhance Health Data Sharing*, GAO-01-459 (Washington, D.C.: Apr. 30, 2001).

[4]U.S. General Accounting Office, *Veterans Affairs: Sustained Management Attention Is Key to Achieving Information Technology Results*, GAO-02-703 (Washington, D.C.: June 12, 2002).

[5]U.S. General Accounting Office, *Information Technology: Greater Use of Best Practices Can Reduce Risks in Acquiring Defense Health Care System*, GAO-02-345 (Washington, D.C.: Sept. 26, 2002).

the system's development that led to a change in its redesign and development/deployment schedule. We recommended five actions aimed at increasing the project's likelihood of success, three of which have been implemented. DOD is in various stages of implementing the remaining two recommendations.

3. *What is the total dollars spent by DOD and VA on their individual or collective efforts on the development of an interoperable medical record?*

From fiscal year 1998, when VA and DOD began pursuing ways to share data in their health information systems and create electronic records for active duty personnel and veterans, through fiscal year 2003, the departments reported spending a total of about $670 million on their individual and collective efforts. As shown in table 1, this amount is attributable to the departments' joint actions on the Government Computer-Based Patient Record (GCPR) project and subsequently the Federal Health Information Exchange (FHIE) initiative, which have resulted in the one-way transfer of data from DOD's existing health information system (the Composite Health Care System) to a separate database that VA hospitals can access. The amount also includes the departments' reported expenditures for individual health information systems—VA's Health*e*Vet (VistA) and DOD's Composite Health Care System II—that each is currently developing and anticipates using to support the two-way exchange of health data as part of the Health*e*People (Federal) initiative.[6] However, through fiscal year 2003, VA and DOD did not report any costs associated with the critical tasks of defining and developing the electronic interface that is essential to achieving the two-way exchange of patient health information between these systems.

Table 1: Dollars (in millions) Spent by VA and DOD to Develop Electronic Health Information Systems and Sharing Capabilities through Fiscal Year 2003

| Agency | GCPR | FHIE | Health*e*People (Federal) | | Total |
			Health*e*Vet VistA[a]	Composite Health Care System II	
VA	$27.8	$20.4	$120.0	0.0	$168.2
DOD	17.7	18.8	0.0	$464.0	500.5
Total	**$45.5**	**$39.2**	**$120.0**	**$464.0**	**$668.7**

Source: VA and DOD data.

[a] Veterans Health Information Systems and Technology Architecture

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[6] DOD began developing CHCS II in 1997 and has completed its associated clinical data repository that is key to achieving the electronic interface. DOD expects to complete deployment of all of its major system capabilities by September 2008. VA began work on Health*e*Vet (VistA) and its associated health data repository in 2001, and expects to complete the six initiatives that make up this system in 2012.

4. *GAO testified that there had been very little progress since our last hearing in November 2003. How did VA and DOD explain this to you? When Congress scheduled its March 17, 2004, hearing, did GAO get the sense that this provided an incentive for the two departments to move forward on this issue?*

In discussing with VA and DOD their actions since last November toward achieving a two-way exchange of patient health information under the Health*e*People (Federal) initiative, officials in both departments expressed their belief that progress was being made. In response to our finding that the departments had not yet defined an architecture to describe in detail how specific technologies will be used to achieve the capability to electronically exchange data between their health information systems—a significant concern that we also raised in our November testimony—the officials stated that they had recently taken an important first step toward accomplishing this task.

In particular, VA and DOD officials referred to a pharmacy prototype project, undertaken in response to the Bob Stump National Defense Authorization Act for Fiscal Year 2003, to develop a real-time interface, data exchange, and capability to check prescription drug data for outpatients by October 1, 2004. According to VA's Deputy Chief Information Officer for Health, the departments hope to determine from the prototype, planned for completion by September 2004, whether the interface technology developed to meet this mandate can be used to facilitate the exchange of data between the health information systems that VA and DOD are currently developing. However, as our testimony noted, the departments had not fully defined their approach or requirements for developing and demonstrating the capabilities of the planned prototype. Further, since VA and DOD have not yet completed their new health information systems that are intended to be used under Health*e*People (Federal), the demonstration may only test the ability to exchange data in VA's and DOD's existing health systems—the Veterans Health Information Systems and Technology Architecture (VistA) and the Composite Health Care System (CHCS), respectively. Consequently, the early stage of the prototype and the uncertainties regarding what capabilities it will demonstrate provided little evidence or assurance as to how or whether this project would contribute to defining the architecture and technological solution for the two-way exchange of patient health information.

The information collected during our review of the Health*e*People (Federal) initiative suggests that the Subcommittee's scheduled hearing may have provided an incentive for VA and DOD to move forward on this issue. In conducting our review from December 2003 through March 2004, we observed that the level of activity undertaken by the departments to support the initiative increased significantly in the month preceding the hearing. For example, the departments' officials first informed us of their intent to rely on the planned pharmacy prototype to determine the technology interface for the two-way data exchange capability in early February; a contract for development of the prototype was finalized on February 27. Beyond

these actions, VA and DOD began steps toward designating a program manager for the pharmacy prototype project and establishing an overall project plan in the week before the hearing.

> 5. *GAO stated that success lies with the highest levels of project discipline, including a well-defined architecture and an established project management structure. At the present time, these criteria are absent. Is that correct? Please provide your recommendations on the top five priorities that need to be addressed in 2004.*

At the time of our testimony, these critical project components were absent from VA's and DOD's initiative to develop a two-way exchange of patient health information. Specifically, VA and DOD lacked a clearly defined architecture to describe how they planned to develop the electronic interface needed to exchange data between their health information systems. In addition, the departments had not fully established a project management structure to ensure the necessary day-to-day guidance of and accountability for their investments in and implementation of this capability.

Given the implications that an electronic interface can have for improving the quality of health care and disability claims processing for military members and veterans, the top five priorities that VA and DOD need to address in 2004 to increase the likelihood of a successful outcome are

- development of an architecture for the electronic interface that articulates system requirements, design specifications, and software descriptions;
- selection of a lead entity with final decision-making authority for the initiative;
- establishment of a project management structure (i.e., project manager and supporting staff) to provide day-to-day guidance of and accountability for the investments in and implementation of the electronic interface capability;
- development and implementation of a comprehensive and coordinated project plan that defines the technical and managerial processes necessary to satisfy project requirements and that includes the authority and responsibility of each organizational unit; a work breakdown structure and schedule for all of the tasks to be performed in developing, testing, and deploying the electronic interface; and a security plan; and
- implementation of project review milestones and measures to provide the basis for comprehensive management, progressive decision making, and authorization of funding for each step in the development process.

VA and DOD officials stated at the conclusion of our review that they had begun discussions to establish an overall project plan and finalize roles and responsibilities for managing the joint initiative to develop an electronic interface.

6. *To your knowledge, has any major VA or DOD IT project ever been initiated with such criteria firmly established from the beginning?*

To date, we have evaluated only a small portion of VA's and DOD's respective portfolios of information technology investments. Based on our work, we cannot point to any instances in which either department has initiated a major information technology project with a clearly defined architecture and sound project management having been established. At the same time, we are generally aware that DOD has held out certain projects undertaken by its component organizations as examples in which well-defined architectures and sound project management existed. However, we did not participate in, and therefore cannot comment on, the validity of those representations.

During our reviews of the Government Computer-Based Patient Record project, we did see evidence that implementing critical project management processes after a project has been undertaken can positively affect its outcome. As our testimony noted,[7] VA's and DOD's designation of clear lines of authority and a manager to provide day-to-day oversight helped strengthen overall project management and accountability and contributed to successfully achieving the transfer of patient health information from DOD to VA's medical facilities.

Agency Comments and Our Evaluation

We received comments orally and via e-mail on a draft of this correspondence from VA's Assistant Secretary for Information and Technology and DOD's Interagency Program Integration and External Liaison for Health Affairs. In commenting on our responses, these officials offered additional perspectives and suggested clarifications, which have been incorporated where appropriate. Both departments' officials disagreed with the way in which our response to question 4 characterized their progress toward developing a two-way electronic data exchange capability.

Regarding our response to question 1, VA and DOD officials commented that they have now designated a single manager for the electronic interface initiative. They have not yet, however, provided for our analysis any documentation on the project management structure and the manager's and supporting staff's roles and responsibilities for overseeing and ensuring accountability for this initiative.

Regarding our response to question 2, VA and DOD officials stated that both departments have cooperatively implemented our recommendations. Our response has been clarified to reflect that VA and DOD took actions that addressed all of our recommendations for improving management of the Government Computer-Based Patient Record project, and to reflect that DOD has implemented three of five recommendations that we made to improve its CHCS II project.

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[7]GAO-04-402T.

In commenting on our response to question 3, which addressed the total dollars spent by VA and DOD on developing an electronic medical record through fiscal year 2003 (the latest time frame for which we had complete information reported by the departments), both VA and DOD referred to initiatives other than GCPR, FHIE, and their individual health information systems, which they believed reflected work on developing the electronic data exchange capability. For example, both departments identified the pharmacy prototype as a critical effort toward developing an electronic interface for which resources were being expended. Our testimony, as well as this correspondence, acknowledges that the departments had taken action related to the pharmacy prototype. However, this initiative was not undertaken until late February of this year, which was outside of the time frame of the reported costs reflected in our response to the question. We have revised our response to more clearly reflect our use of cost information reported through fiscal year 2003.

Beyond the pharmacy prototype, VA stated that a number of other initiatives had also demonstrated progress toward achieving an electronic interface. It stated, for example, that the departments had contributed "in-kind" resources to efforts supporting the Consolidated Health Informatics initiative and internal standards boards within each department. However, VA did not provide any specific cost information for these actions.

Finally, in commenting on the reported costs, DOD suggested that we clarify the title of our table identifying the departments' expenditures, to better reflect that not all costs reported through fiscal year 2003 were directly attributable to achieving the two-way electronic health data exchange. We have revised the table to more clearly reflect the reported expenditures for GCPR, FHIE, and the departments' individual health information system initiatives.

Regarding our response to question 4, VA and DOD stated that they did not agree with our assessment that the departments' progress since November 2003 had been limited, or that most progress had been apparent just before the March hearing. Both departments cited their work related to the pharmacy prototype project as evidence of their progress toward developing the electronic interface. For example, DOD stated that although the departments may not have informed us, before last February, of their intent to rely on the pharmacy prototype to determine the technology for the electronic interface, a memorandum discussing the pharmacy data exchange strategy had been signed in October 2003. However, we were not provided with copies of any such documentation, and without information on such an activity, we cannot offer an assessment of any actions taken by VA and DOD on the pharmacy prototype earlier than February 2004—the point at which we were made aware that this prototype would be used to help define the electronic interface. Further, in its comments, VA said it continued to anticipate that the prototype would assist in determining an appropriate architecture for the electronic interface. Given the stage of the pharmacy project and the supporting documentation available to us when our review ended, our analysis determined that the departments lacked evidence as to how or whether the

project would contribute to defining the architecture and technological solution for a two-way exchange of patient health information.

Beyond the pharmacy prototype, VA cited numerous other initiatives involving the departments' existing health information systems (VistA and CHCS) and infrastructure that it considered to be evidence of progress. These included a project aimed at automatically sending to VA relevant electronic health information for patients sent to DOD for VA-paid care as veterans; and a data-sharing interface project, involving the use of VA's and DOD's existing health information systems to produce real-time, bidirectional exchange of clinically relevant data, including outpatient pharmacy, allergy, and patient demographic information at VA and DOD locations with medical sharing agreements. During our review, VA and DOD did not offer information on these initiatives or identify them as being part of the Health*e*People (Federal) strategy for an electronic two-way data exchange capability. Therefore, we are unable to make an assessment of these initiatives or how they relate to VA's and DOD's progress toward achieving the intended capability to electronically exchange patient data between the new health information systems—Health*e*Vet (VistA) and CHCS II—that the departments are developing.

In commenting on the response to question 5, the departments identified various actions that, in their views, addressed our identified priorities for disciplined project management. Regarding the development of an architecture to define the electronic interface, the departments anticipated that the pharmacy prototype would assist them in determining the appropriate architecture and emphasized their continued work on developing standards that will affect the interface requirements. Our testimony acknowledged the departments' actions on developing data standards, and also noted their plans for using the pharmacy prototype to determine the architecture for the electronic interface. As we pointed out, however, the early stage of the prototype and the uncertainties regarding what capabilities it would demonstrate provided little evidence or assurance as to how or whether the project would contribute to defining the architecture and technological solution for a two-way exchange of patient health information.

Regarding the selection of a lead entity with final decision-making authority for the electronic interface initiative, the departments stated that the VA/DOD Health Executive Council was serving in this capacity. VA added that this council provides a fully integrated body in which decisions are made and accountability for progress is provided for both departments. We agree that the Health Executive Council plays an important role in helping to ensure full accountability for the Health*e*People (Federal) initiative. Nonetheless, as established, this council meets on a bimonthly basis and is composed of senior VA and DOD leaders who work from a high-level, departmentwide perspective, to institutionalize all of VA's and DOD's sharing and collaboration on health services and resources. As our testimony noted, there is no one entity dedicated to making binding decisions for the Health*e*People (Federal) project. Our prior work on GCPR noted the importance of a lead entity to exercise final authority over the project, and VA and DOD demonstrated improvements in

managing GCPR as a result of implementing our recommendation that it establish such an entity.

On establishing a project manager and supporting staff to provide day-to-day guidance for the electronic interface initiative, VA and DOD cited their designation of a single manager with accountability and day-to-day responsibility for project implementation. However, as discussed, the departments have not yet provided documentation of the management structure that they have implemented, including information on the roles and responsibilities that the manager and supporting staff will have for the joint electronic interface initiative.

Regarding the development and implementation of a comprehensive and coordinated project plan for the electronic interface initiative, the departments stated that a project management plan had been developed for the pharmacy prototype. We agree that such a plan is necessary for the pharmacy prototype. However, it is also essential that the departments have a project management plan for the electronic interface initiative to define the technical and managerial processes needed to satisfy project requirements, and assign responsibilities, tasks, and schedules associated with developing, testing, and deploying the electronic interface between the new health information systems that VA and DOD are developing.

Further, regarding the implementation of project review milestones and measures for the electronic interface initiative, VA and DOD stated that the departments provide updates to the Health Executive Council and the Joint Executive Council. VA added that performance measures for interoperability are built into the joint strategic plan managed by the Joint Executive Council. As our March testimony noted, the Health Executive Council meets bimonthly to institutionalize sharing and collaboration of health services and resources, and the Joint Executive Council meets quarterly to recommend strategic direction of joint coordination and sharing efforts. VA and DOD did not provide any evidence to explain the levels of update being provided to these councils or how the councils' reviews address critical milestones and measures of the initiative's progress. In addition, our review of the joint strategic plan found that this high-level strategy established broad time frames and a general approach for achieving a health data exchange between VA and DOD, but did not articulate specific details regarding the incremental design and development of the electronic interface capability. For example, the strategy lacked specific milestones or measures that would enable the departments to track the status of their actions toward developing the interface at critical intervals in the project's life cycle.

Finally, in commenting on our response to question 6, VA officials stated that the department has implemented all of its major health information initiatives under the Veterans Health Information Systems and Technology Architecture. For its part, DOD stated that it is guided by a rigorous project management system, and cited our September 2002 report[8] in which we stated that the CHCS II initiative was generally

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[8]GAO-02-345.

aligned with the Military Health System's (MHS) enterprise architecture. As noted, our evaluations have not identified any major initiatives that VA and DOD have begun with both a clearly defined architecture and sound project management already established. While our report on DOD's CHCS II noted that this system and the MHS architecture were generally aligned, it also highlighted deficiencies in the project's management during its early years. For example, performance-based contracting methods were not used to ensure contractor accountability.

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In responding to these questions, we relied on past work related to our review of VA's and DOD's actions since last November toward defining a detailed strategy and developing the capability for a two-way exchange of patient health information. We reviewed our prior analyses of key documentation supporting the departments' strategy, including deployment and conversion plans, project schedules, and status reports for their individual health information systems. In addition, we reviewed documentation identifying the costs incurred by VA and DOD in developing technology to support the sharing of health data, including costs for the Government Computer-Based Patient Record and Federal Health Information Exchange initiatives, and with their ongoing projects to develop new health information systems. We did not audit the reported costs, and thus cannot attest to their accuracy or completeness. We conducted our work in accordance with generally accepted government auditing standards, during April 2004.

We are sending copies of this letter to the Secretaries of Veterans Affairs and Defense, and to other interested parties. Copies will also be available at no charge at our Web site at www.gao.gov.

Should you or your office have any questions on matters discussed in this letter, please contact me at (202) 512-6240 or Valerie Melvin, Assistant Director, at (202) 512-6304. We can also be reached by e-mail at koontzl@gao.gov and melvinv@gao.gov, respectively. Key contributors to this correspondence include Barbara S. Oliver, J. Michael Resser, and Eric Trout.

Sincerely yours,

Linda D. Koontz
Director, Information Management Issues

Enclosure I: GAO Testimony on VA-DOD Sharing of Patient Health Information

Testimony date/number	Summary of results
March 17, 2004 GAO-04-402T	VA and DOD had made little progress since November 2003 toward defining how they intended to achieve the two-way exchange of patient health information under the Health_e_People (Federal) initiative. While VA officials recognized the importance of an architecture to describe in detail how the departments would electronically interface their health systems, they continued to rely on a less-specific, high-level strategy—in place since September 2002—to guide the development and implementation of this capability. The departments intended to rely on a pharmacy prototype project undertaken in March 2004 to better define the electronic interface needed to exchange patient health data, but had not fully determined the approach or requirements for this undertaking. Thus, there was little evidence of how this project would contribute to defining a specific architecture and technological solution for achieving a two-way exchange of patient health information. These uncertainties were further complicated by the absence of sound project management to guide the departments' actions on the Health_e_People (Federal) initiative. Although progress toward defining data standards continued, delays had occurred in VA's and DOD's development and deployment of their individual health information systems, critical for achieving the electronic interface.
November 19, 2003 GAO-04-271T	The one-way transfer of health information resulting from VA's and DOD's near-term solution—the Federal Health Information Exchange (FHIE)—represented a positive undertaking and had enabled electronic health data from separated (retired or discharged) service members contained in DOD's Military Health System Composite Health Care System to be transmitted monthly to a VA FHIE repository, giving VA clinicians more ready access to DOD health data, such as laboratory, pharmacy, and radiology records, on almost 2 million patients. The departments' longer term strategy to enable electronic, two-way information sharing—Health_e_People (Federal)—was farther out on the horizon, and VA and DOD faced significant challenges in implementing a full data exchange capability. Although a high-level strategy existed, the departments had not clearly articulated a common health information infrastructure and architecture to show how they intended to achieve the data exchange capability or what they would be able to exchange by the end of 2005. Critical to achieving the two-way exchange was completing the standardization of the clinical data that the departments planned to share.
September 26, 2002 GAO-02-1054T	VA and DOD reported some progress in achieving the capability to share patient health care data under the Government Computer-Based Patient Record (GCPR) initiative. The agencies had, since March 2002, formally renamed the initiative the Federal Health Information Exchange and begun implementing a more narrowly defined strategy involving the one-way transfer of patient health data from DOD to VA; a two-way exchange was planned by 2005.
March 13, 2002 GAO-02-369T	VA had achieved limited progress in its joint efforts with DOD and the Indian Health Service to create an interface for sharing data in their health information systems, as part of GCPR. Strategies for implementing the project continued to be revised, its scope had been substantially narrowed from its original objectives, and it continued to operate without clear lines of authority or comprehensive, coordinated plans. Consequently, the future success of this project remained uncertain, raising questions as to whether it would ever fully achieve its original objective of allowing health care professionals to share clinical information via a comprehensive, lifelong medical record.

Testimony date/number	Summary of results
February 27, 2002 GAO-02-478T	DOD's and VA's numerous databases and electronic systems for capturing mission-critical data, including health information, were not linked, and information could not be readily shared. DOD had several initiatives under way to link many of its information systems—some with VA. For example, to create a comprehensive, lifelong medical record for service members and veterans and to allow health care professionals to share clinical information, the departments, along with the Indian Health Service, initiated the Government Computer-Based Patient Record (GCPR) project in 1998. However, several factors, including planning weaknesses, competing priorities, and inadequate accountability, made it unlikely that they would achieve a GCPR or realize its benefits in the near future. To strengthen management and oversight of the project, we recommended designating a lead entity with clear lines of authority for the project and the creation of comprehensive and coordinated plans for sharing meaningful, accurate, and secure patient health data. For the near term, DOD and VA had decided to reconsider their approach to GCPR and focus on allowing VA to access selected service members' health data captured by DOD, such as laboratory and radiology results, outpatient pharmacy data, and patient demographic information. However, GCPR would not provide VA with access to information on the health status of personnel when they entered military service; on medical care provided to Reservists while not on active duty; or on the care military personnel received from providers outside DOD, including those from TRICARE.[a]
January 24, 2002 GAO-02-377T	DOD improved its medical surveillance system under Operation Joint Endeavor. However, system problems included lack of a single, comprehensive electronic system to document and access medical surveillance data. Some DOD initiatives to improve information technology capability were several years away from full implementation. The ability of VA to fulfill its role in serving veterans and providing backup to DOD in times of war was to be enhanced as DOD increased its medical surveillance capability. GCPR was a joint DOD/VA initiative in conjunction with the Indian Health Service to link information systems. However, because of planning weaknesses, competing priorities, and inadequate accountability, it was unlikely that the departments would accomplish GCPR or realize its benefits in the near future. To strengthen management and oversight of the initiative, we again recommended designating a lead entity with clear lines of authority for the project and the creation of comprehensive and coordinated plans for sharing meaningful, accurate, and secure patient health data.
October 16, 2001 GAO-02-173T	DOD and VA were establishing a medical surveillance system for the health care needs of military personnel and veterans. The system was to collect and analyze uniform information on deployments, environmental health threats, disease monitoring, medical assessments, and medical encounters. We identified weaknesses in DOD's medical surveillance capability and performance in the Gulf War and Operation Joint Endeavor, and uncovered deficiencies in its ability to collect, maintain, and transfer accurate data. The department had several initiatives under way to improve the reliability of deployment information and to enhance its information technology capabilities, although some initiatives were several years away from full implementation. VA's ability to serve veterans and provide backup to DOD in times of war was to be enhanced as DOD increased its medical surveillance capability. GCPR was one initiative to link the departments' information systems. However, because of planning weaknesses, competing priorities, and inadequate accountability, it was unlikely that they would accomplish GCPR or realize its benefits in the near future. To strengthen management and oversight of the initiative, we recommended designating a lead entity with clear lines of authority for the project and the creation of comprehensive and coordinated plans for sharing meaningful, accurate, and secure patient health data.

Source: GAO.

[a]TRICARE is the Department of Defense's worldwide health care program for active duty and retired uniformed services members and their families.

Enclosure II: Actions Taken by VA and DOD on GAO Recommendations

Report date/number	Recommendations	Actions taken by VA and/or DOD
June 12, 2002 GAO-02-703	The Secretary of Veterans Affairs, to make significant progress beyond the current strategy for the government computer-based patient record, should instruct the Veterans Health Administration (VHA) undersecretary and VHA chief information officer, in cooperation with DOD and the Indian Health Service (IHS), to revisit the original goals and objectives of the Government Computer-Based Patient Record (GCPR) initiative to determine if they remain valid, and where necessary, revise the goals and objectives to be aligned with the current strategy and direction of the project.	The Department of Veterans Affairs (VA), in conjunction with DOD, implemented this recommendation. The departments reevaluated and revised the original goals and objectives of the GCPR initiative. A May 3, 2002, memorandum of agreement between VA and DOD established the Federal Health Information Exchange (FHIE), which replaced the GCPR initiative. As of mid-July 2002, all VA medical centers had access to FHIE data on over 1 million service personnel who separated between 1987 and 2001.
June 12, 2002 GAO-02-703	The Secretary of Veterans Affairs, to make significant progress beyond the current strategy for GCPR, should instruct the VHA undersecretary and VHA chief information officer, in cooperation with DOD and IHS, to commit the executive support necessary for adequately managing the project, and ensure that sound project management principles are followed in carrying out the initiative.	VA, in conjunction with DOD, implemented this recommendation. The departments committed the executive support necessary for adequately managing the GCPR project. They also ensured that project management principles were followed in carrying out the initiative. Specifically, in May 2002 VA and DOD signed a memorandum of agreement that designated VA as the lead entity in implementing the project (formally renamed FHIE). VA committed executive support for the project by way of monthly updates, given by the FHIE program manager, to the VA chief information officer, as well as quarterly updates to the joint VA/DOD Executive Council. In addition, VA procured and implemented project management software to better track the assignment and status of project tasks and initiatives.
September 26, 2002 GAO-02-345	The Secretary of Defense, through the Assistant Secretary of Health Affairs, should direct the Military Health System (MHS) chief information officer to give expanded use of best practices in managing CHCS II the attention and priority it deserves. At a minimum, the Assistant Secretary should direct the MHS chief information officer to, as part of the CHCS II deployment decisions, consider the aggregate impact on defense health affairs mission performance caused by the workarounds needed to compensate for all unresolved defects affecting the system's operational efficiency.	DOD implemented this recommendation. In late 2002, the program office produced a maintenance release for CHCS II that corrected many of the remaining bugs that required workarounds, and the limited deployment sites have that version. In addition, MHS has put a standard operating procedure in place to evaluate the effect of all workarounds required for new systems/versions before implementation. The standard operating procedure is part of the configuration control board procedures and the service components have agreed to these procedures. Finally, a test and evaluation master plan that addresses the aggregate impact of workarounds has been completed for the CHCS II release of functionality supporting general dentistry, and will be used as a template for future plans.

Report date/number	Recommendations	Actions taken by VA and/or DOD
September 26, 2002 GAO-02-345	The Assistant Secretary of Health Affairs should direct the MHS chief information officer to verify that the CHCS II inventory of risks is complete and correct, and report this to the Assistant Secretary for Health Affairs every 6 months, along with a report on the status of all top priority risks, including each risk's probability of occurrence and impact on mission.	DOD implemented this recommendation. The program office updated the risk management plan to require continuous risk management database updates and monthly risk reports. An initial 6-month report was provided to the Assistant Secretary in April 2003 that included the status of all program risks, with details on priority 1 risks, including probability of occurrence and impact on mission.
September 26, 2002 GAO-02-345	The Secretary of Defense should direct the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence, who is the designated approval authority for CHCS II, to monitor the project's use of best practices, including implementation of each of the above recommendations, and use this information to oversee the project's movement through its acquisition cycle. To this end, the Assistant Secretary, or other designated CHCS II approval authority, should not grant any request for deployment approval of any CHCS II release that is not justified by reliable analysis of the release's costs, benefits, and risks.	DOD implemented this recommendation. The program office updated its cost-benefit analysis in September 2002, and the Naval Center for Cost Analysis validated the cost estimate. This was used to approve the limited deployment of a graphical user interface for clinical outpatient processes in January 2003, and is available for use by the milestone decision authority for the full deployment decision.
September 26, 2002 GAO-02-345	The Secretary of Defense, through the Assistant Secretary of Health Affairs, should direct the MHS CIO to give expanded use of best practices in managing CHCS II the attention and priority they deserve. At a minimum, the Assistant Secretary should direct the MHS CIO to define and implement incremental investment management processes to include (1) modifying the CHCS II investment strategy to define how this approach will be implemented; (2) justifying investment in each system release before beginning detailed design and development of the release; (3) requiring that such justification be based on reliable estimates of costs, benefits, and risks; (4) measuring whether actual return-on-investment for each deployed release is in line with justification forecasts; and (5) using actual return-on investment results in deciding whether to begin detailed design and development of the next system release.	Actions to implement this recommendation are ongoing. MHS has contracted with the Army Test and Evaluation Command and a private contractor to assess limited deployment sites and obtain data on initial benefits to support return-on-investment analyses. Deployments of the initial version of the system were delayed until fiscal year 2004; it is therefore unlikely that this recommendation will be fully addressed before the end of the fiscal year.

Report date/number	Recommendations	Actions taken by VA and/or DOD
September 26, 2002 GAO-02-345	The Secretary of Defense, through the Assistant Secretary of Health Affairs, should direct the MHS CIO to give expanded use of best practices in managing CHCS II the attention and priority they deserve. At a minimum, the Assistant Secretary should direct the MHS CIO to employ performance-based contracting practices on all future CHCS II delivery orders to the maximum extent possible, including (1) defining performance standards against which deliverables can be judged, (2) developing and using quality assurance plans that describe how contractor performance against the standards will be measured, and (3) defining and using contractor incentives and penalties tied to the quality plan.	Actions to implement this recommendation are ongoing. The program office received approval to begin acquiring commercial off-the-shelf software packages to develop prototype pharmacy/laboratory/radiology capabilities, and plans to conduct full and open competition contracts for these packages. A performance-based, firm fixed-price integration contract, with incentives, is being prepared and is expected to be awarded in the 3rd quarter of fiscal year 2004. As the program office re-negotiates the contracts for a graphical user interface for clinical outpatient processes and general dentistry, they will also be moved to this performance-based type of contract.

Source: GAO.

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