



July 2014

# ELECTRONIC HEALTH RECORDS

Fiscal Year 2013  
Expenditure Plan  
Lacks Key Information  
Needed to Inform  
Future Funding  
Decisions

# Report Documentation Page

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# GAO Highlights

Highlights of [GAO-14-609](#), a report to congressional committees

## Why GAO Did This Study

VA and DOD initiated the iEHR program with the intent of developing a single, common electronic health record system to replace their existing health record systems. However, the departments subsequently changed their approach and instead began pursuing separate efforts to modernize or replace their existing systems and ensure their interoperability. The 2013 appropriations act restricted the obligation of VA and DOD fiscal year 2013 funds for the development of iEHR to not more than 25 percent until an expenditure plan that satisfied statutory conditions, including being reviewed by GAO, was submitted to the Senate and House Appropriations Committees. GAO's objective was to determine the extent to which the iEHR expenditure plan satisfied six statutory conditions. To accomplish this, GAO analyzed the contents of the plan against the statutory conditions and applicable documentation, such as the President's budget, to determine whether the plan met the conditions.

## What GAO Recommends

GAO is recommending that the departments ensure that any future expenditure plans include verifiable and accurate budget, cost, and spending information; a deployment timeline that is consistent with an integrated master schedule; a data standardization schedule; and the basis for their assertion of compliance with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government. In joint comments on a draft of this report, DOD and VA concurred with GAO's recommendation.

View [GAO-14-609](#). For more information, contact Valerie C. Melvin at (202) 512-6304 or [melvinv@gao.gov](mailto:melvinv@gao.gov).

July 2014

## ELECTRONIC HEALTH RECORDS

### Fiscal Year 2013 Expenditure Plan Lacks Key Information Needed to Inform Future Funding Decisions

#### What GAO Found

The Departments of Veterans Affairs' (VA) and Defense's (DOD) fiscal year 2013 integrated Electronic Health Record (iEHR) expenditure plan satisfied one and partially satisfied five of the six statutory conditions specified in the Consolidated and Further Continuing Appropriations Act, 2013. Specifically, the plan

- Satisfied the condition to relay detailed cost-sharing business rules by including a memorandum of agreement between the two departments that outlined cost-sharing provisions and principles within the VA/DOD Interagency Program Office (IPO).
- Partially satisfied the condition to define the budget and cost baseline for the development of the iEHR program by including the budget and cost baseline from fiscal years 2012 through 2018 for each department. However, the baseline, as reported, was not based on accurate estimates that reflected changes in the program's direction.
- Partially satisfied the condition to identify the deployment timeline for the system. While the plan outlined milestone dates for achieving enhanced data interoperability and other near-term activities, it did not include a deployment timeline that could be linked to an integrated master schedule.
- Partially satisfied the condition to break out information related to the IPO's annual and total spending for each department on iEHR. For example, the plan included the total amount obligated as well as a funding profile that showed the funds available for execution in 2013. However, program officials could not provide the basis for the spending estimates, as reported. In addition, according to VA officials, estimates reported did not consistently reflect the current approach to pursue two separate systems.
- Partially satisfied the condition to establish data standardization schedules by including high-level data mapping activities. However, the plan did not include a schedule for achieving data standardization.
- Partially satisfied the condition to comply with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government. IPO officials asserted compliance with acquisition rules, but the plan did not explain the basis for this assertion.

Program officials stated that the focus of the work described in the plan was on the near-term activities that were prioritized following the change in approach to iEHR, but the budget and estimated spending amounts in the expenditure plan did not reflect the new direction of the program because the acquisition guidance from the department was not issued until after the plan had been completed. Thus, the expenditure plan did not provide an accurate view of the cost of the work to be done, nor offer significant insight into the future path for building electronic health record interoperability between the departments. As such, the plan does not provide adequate information for Congress, VA, and DOD to use it as a basis for measuring program success, accounting for the use of current and future appropriations, and holding the departments accountable for achieving an interoperable electronic health record.

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## Abbreviations

DOD	Department of Defense
iEHR	integrated Electronic Health Record
IT	information technology
IPO	Interagency Program Office
VA	Department of Veterans Affairs

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July 8, 2014

### Congressional Committees

The Department of Veterans Affairs (VA) and the Department of Defense (DOD) operate two of the nation's largest health care systems, providing health care to approximately 6.3 million veterans and 9.6 million active duty service members and their beneficiaries at estimated annual costs of about \$53 billion and \$49 billion, respectively. Both VA and DOD have long recognized the importance of advancing the use of shared health information systems and the potential to make patient information more readily available to their health care providers, reduce medical errors, and streamline administrative functions. Toward this end, electronic health records have become an essential part of their efforts to deliver quality care.

In February 2011, VA and DOD initiated a program to jointly develop a single electronic health record system, known as the Integrated Electronic Health Record (iEHR), which was to replace each department's existing electronic health record system. The VA/DOD Interagency Program Office (IPO)<sup>1</sup> was given responsibility for managing the iEHR program, which was to be deployed by 2017. However, in February 2013, the departments announced that they would not continue with the joint development of a single electronic health record system. This decision resulted from an assessment of the iEHR program that the secretaries requested in December 2012 because of their concerns about the program facing challenges in meeting deadlines, costing too much, and taking too long to deliver capabilities. Based on this assessment, the departments would focus on a new approach that would involve each department building or acquiring a separate core set of electronic health record capabilities and ensuring interoperability between their separate systems. They asserted that this new approach would be less expensive and faster.

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<sup>1</sup>The National Defense Authorization Act for Fiscal Year 2008 (Pub. L. No. 110-181, §1635, 122 Stat. 3, 460-463 (2008)) called for VA and DOD to set up an IPO to be a single point of accountability for their efforts to implement fully interoperable electronic health record systems or capabilities. The IPO charter was completed in January 2009.

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To facilitate oversight and inform decision making, the Consolidated and Further Continuing Appropriations Act, 2013,<sup>2</sup> restricted the obligation of VA and DOD fiscal year 2013 funds for iEHR development to not more than 25 percent until an expenditure plan meeting statutory conditions was submitted to the Senate and House Appropriations Committees.

Specifically, the expenditure plan was to meet the following six statutory conditions:

- Define the budget and cost baseline for development of the iEHR.
- Identify the deployment timeline for the system for both agencies.
- Break out annual and total spending for each department.
- Relay detailed cost-sharing business rules.
- Establish data standardization schedules between the departments.
- Comply with acquisition rules, requirements, guidelines, and system acquisition management practices of the federal government.

As a seventh condition, the VA/DOD IPO was to submit the plan to GAO for review. This condition was satisfied when, on July 23, 2013, the IPO submitted to Congress and GAO its fiscal year 2013 iEHR expenditure plan.

The objective of our review was to determine the extent to which the fiscal year 2013 iEHR expenditure plan satisfied the statutory conditions. On April 23, 2014, we provided the Senate and House Appropriations Subcommittees on Defense and Military Construction, Veterans Affairs, and Related Agencies a written briefing that outlined the results of our review. The purpose of this report is to provide the published briefing slides and to officially transmit our study results to the Secretaries of the Departments of Veterans Affairs and Defense. The slides, which discuss our scope and methodology, are reprinted in appendix I.

We conducted this performance audit from October 2013 to July 2014 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that

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<sup>2</sup>Pub. L. No. 113-6, 127 Stat. 198, 293-294, 399-400 (2013).

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the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

In summary, our review determined that the fiscal year 2013 iEHR expenditure plan satisfied one and partially satisfied five of the six statutory conditions specified in the Consolidated and Further Continuing Appropriations Act and analyzed as part of our study. The plan

- Satisfied the condition to relay detailed cost-sharing business rules by including a memorandum of agreement between the two departments that outlined cost-sharing provisions and principles within the IPO.
- Partially satisfied the condition to define the budget and cost baseline for the development of the iEHR program by including the budget and cost baseline from fiscal years 2012 through 2018 for each department. However, the baseline, as reported, was not based on accurate estimates that reflected changes in the program's direction and related decisions made by the departments.
- Partially satisfied the condition to identify the deployment timeline for the system. While the plan outlined milestone dates for achieving enhanced data interoperability and other near-term activities, it did not include a deployment timeline that could be linked to an integrated master schedule.
- Partially satisfied the condition to break out information related to the IPO's annual and total spending for each department on iEHR and related activities. For example, the plan included the total amount obligated as well as a funding profile that showed the funds available for execution in 2013 for each of the departments. However, program officials could not provide the basis for the spending estimates, as reported in the plan. In addition, according to VA officials, some of the estimates reported were not accurate or did not consistently reflect the current approach by the departments to pursue two separate systems.
- Partially satisfied the condition to establish data standardization schedules by including high-level data mapping activities, such as verifying current data mappings. However, the plan did not include a schedule for achieving data standardization.
- Partially satisfied the condition to comply with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government. IPO officials asserted compliance

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with acquisition rules, but the plan did not explain the basis for this assertion.

The plan focused on several near-term activities to accelerate the interoperability of health data between departments, with cost estimates and timelines that are not described in terms of achieving the overall electronic health record capability. IPO officials stated that the focus of the work described in the plan was on the near-term activities that were prioritized following the change in approach to iEHR announced in 2013. However, they agreed that the budget and estimated spending amounts in the expenditure plan did not reflect the new direction of the program because the acquisition guidance from the department was not issued until after the plan had been completed.

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## Conclusions

The statutorily mandated expenditure plan for iEHR is a congressional oversight mechanism aimed at ensuring that planned expenditures are justified, performance against plans is measured, and accountability for results is ensured. While the IPO's expenditure plan for fiscal year 2013 included information that fully or partially addressed all six of the statutory conditions, the budget, cost, and spending information was not always verifiable and accurate. In addition, the plan lacked a deployment timeline and a data standardization schedule that could be linked to the program's integrated master schedule and the basis for the assertion of compliance with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government. Further, the plan did not provide a meaningful representation of the iEHR approach as it has evolved over the past year. IPO officials stated that the focus of the work described in the plan was on the near-term activities that were prioritized following the change in approach to iEHR announced in 2013, but the numbers in the expenditure plan did not reflect the new direction of the program because the acquisition guidance from the department was not issued until after the plan had been completed. Thus, the expenditure plan did not provide an accurate view of the cost of the work to be done, nor offer significant insight into the future path for building electronic health record interoperability between the departments. As such, the plan does not provide adequate information for Congress, VA, and DOD to use it as a basis for measuring program success, accounting for the use of current and future appropriations, and holding the departments accountable for achieving an interoperable electronic health record.

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## Recommendation for Executive Action

To ensure that Congress has the information necessary to effectively oversee the efforts of VA and DOD to deliver an interoperable health record and hold the departments accountable for program results, we recommend that the Secretary of Defense and the Secretary of Veterans Affairs direct the appropriate organization to ensure that any future expenditure plans

- include verifiable and accurate budget, cost, and spending information reflecting the approach to the departments' electronic health records programs;
- provide a deployment timeline that is consistent with an integrated master schedule and shows how deployment activities are related to one another within the scope of the electronic health records programs;
- include a data standardization schedule for facilitating interoperability as it relates to the departments' electronic health records programs; and
- provide the basis for an assertion of compliance with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government.

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## Agency Comments

We received written comments on a draft of this report, signed jointly by the Under Secretary of Defense for Acquisition, Technology, and Logistics, U.S. Department of Defense and the Executive in Charge and Chief Information Officer, Office of Information and Technology, U.S. Department of Veterans Affairs. In the joint comments (reprinted in appendix II), the agencies concurred with our recommendation.

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We are sending copies of this report to interested congressional committees. We are also sending copies to the Secretary of Defense and the Acting Secretary of Veterans Affairs. In addition, the report is available at no charge on GAO's website at <http://www.gao.gov>.

If you or your staffs have any questions on matters discussed in this report, please contact me at (202) 512-6304 or [melvinv@gao.gov](mailto:melvinv@gao.gov). Contact points for our Offices of Congressional Relations and Public

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Affairs may be found on the last page of this report. GAO staff who made significant contributions to this report are listed in appendix III.

*Valerie C. Melvin*

Valerie C. Melvin  
Director, Information Management  
and Technology Resources Issues

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*List of Committees*

The Honorable Richard J. Durbin  
Chairman

The Honorable Thad Cochran  
Ranking Member  
Subcommittee on Defense  
Committee on Appropriations  
United States Senate

The Honorable Tim Johnson  
Chairman

The Honorable Mark Kirk  
Ranking Member  
Subcommittee on Military Construction, Veterans Affairs,  
and Related Agencies  
Committee on Appropriations  
United States Senate

The Honorable Rodney Frelinghuysen  
Chairman

The Honorable Pete Visclosky  
Ranking Member  
Subcommittee on Defense  
Committee on Appropriations  
House of Representatives

The Honorable John Culberson  
Chairman

The Honorable Sanford Bishop, Jr.  
Ranking Member  
Subcommittee on Military Construction, Veterans Affairs,  
and Related Agencies  
Committee on Appropriations  
House of Representatives

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# Appendix I: Briefing for Congressional Committees



United States Government Accountability Office

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## **Electronic Health Records: Fiscal Year 2013 iEHR Expenditure Plan Lacks Key Information Needed to Inform Future Funding Decisions**

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Briefing for Staff Members of the Subcommittees on Defense and Subcommittees on Military Construction, Veteran Affairs, and Related Agencies

Senate and House Committees on Appropriations

April 23, 2014



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Introduction  
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Agency Comments and Our Evaluation



## Introduction

The Department of Veterans Affairs (VA) and the Department of Defense (DOD) operate two of the nation's largest health care systems, providing health care to approximately 6.3 million veterans and 9.6 million active duty service members and their beneficiaries at estimated annual costs of about \$53 billion and \$49 billion, respectively. Both VA and DOD have long recognized the importance of advancing the use of shared health information systems and the potential to make patient information more readily available to their health care providers, reduce medical errors, and streamline administrative functions. Toward this end, electronic health records have become an essential part of their efforts to deliver quality care.

In February 2011, VA and DOD initiated a program to jointly develop a single electronic health record system, known as the integrated Electronic Health Record (iEHR) that was to replace each department's existing electronic health record system. The VA/DOD Interagency Program Office (IPO)<sup>1</sup> was given responsibility for managing the iEHR program, and the integrated health record was to be deployed by 2017. However, in February 2013, the departments announced that they would not continue with the joint development of a single electronic health record system that was intended to result in an integrated electronic health record. This decision resulted from an assessment of the iEHR program that the secretaries requested in December 2012 because of their concerns about the program facing challenges in meeting deadlines, costing too much, and taking too long to deliver capabilities. Based on this assessment, the departments would focus on a new approach that would involve each department building or acquiring a separate core set of electronic health record

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<sup>1</sup>The National Defense Authorization Act for Fiscal Year 2008 required VA and DOD to set up an interagency program office to be a single point of accountability for their efforts to implement fully interoperable electronic health record systems or capabilities.



## Introduction

capabilities and ensuring interoperability between their separate systems. They asserted that this new approach would be less expensive and faster.

To facilitate oversight and inform decision making regarding VA's and DOD's approach to achieving an interoperable electronic health record, Congress established limitations on the departments' funding for this capability in the Consolidated and Further Continuing Appropriations Act, 2013.<sup>2</sup> In this regard, the act restricted the obligation of certain VA and DOD fiscal year 2013 funds<sup>3</sup> for iEHR to not more than 25 percent until an expenditure plan meeting certain conditions was submitted to the Senate and House Appropriations Committees.

Specifically, the expenditure plan was to meet the following six statutory conditions:

- Define the budget and cost baseline for development of the iEHR.
- Identify the deployment timeline for the system for both agencies.
- Break out annual and total spending for each department.
- Relay detailed cost-sharing business rules.

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<sup>2</sup>Pub. L. No. 113-6, 127 Stat. 198, 293-294, 399-400 (2013).

<sup>3</sup>DOD's development fund subject to the statutory restriction for fiscal year 2013 is for research, development, test, and evaluation under the Defense Health Program appropriation. VA's development fund subject to the statutory restriction is part of the IT Development, Modernization, and Enhancement appropriation.



## Introduction

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- Establish data standardization schedules between the departments.
- Comply with acquisition rules, requirements, guidelines, and system acquisition management practices of the federal government.

As a seventh condition, the VA/DOD IPO was to submit the plan to GAO for review. This condition was satisfied when, on July 23, 2013, the IPO submitted to Congress and GAO its fiscal year 2013 iEHR expenditure plan.



## Objective, Scope, and Methodology

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Our objective for this review was to determine the extent to which the fiscal year 2013 iEHR expenditure plan satisfied the statutory conditions.

To accomplish the objective, we focused on the six conditions that were to be addressed within the contents of the expenditure plan. In this regard, we analyzed the contents of the plan against the statutory conditions identified in the Consolidated and Further Continuing Appropriations Act, 2013, to determine whether the plan contained information that defined the budget and cost baseline for the development of iEHR; identified the deployment timeline for the system; broke out annual and total spending for each department; relayed detailed cost-sharing business rules; established the data standardization schedules; and complied with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government. Further, we compared information in the plan to applicable documentation, such as the fiscal year 2013 President's budget, the iEHR program's life-cycle cost estimate and integrated master schedule, and the IPO's annual report to Congress. We also reviewed key program documentation, such as the baseline list of requirements and test plans, and compared them to relevant best practices. We supplemented our analysis with interviews of key program officials to clarify any discrepancies and corroborate our observations.

For each of the conditions, we determined whether the expenditure plan had satisfied, partially satisfied, or not satisfied the condition. To have satisfied a given condition, the plan, in combination with supporting documentation, addressed every key aspect of the condition that we reviewed. To have partially satisfied the condition, the plan, in combination with supporting documentation, addressed some, but not all, key aspects of the condition that we reviewed. To have not satisfied the

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## Objective, Scope, and Methodology

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condition, the plan, in combination with supporting documentation, did not address any of the key aspects of the condition that we reviewed.

We conducted this performance audit from October 2013 to April 2014 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.



Results in Brief

The fiscal year 2013 iEHR expenditure plan satisfied one and partially satisfied five of the six statutory conditions specified in the Consolidated and Further Continuing Appropriations Act, 2013, and analyzed as part of our review. Table 1 lists the conditions and their status.

Table 1: Satisfaction of Statutory Conditions

Condition	Status <sup>a</sup>
1. Define the budget and cost baseline for development of the iEHR	Partially satisfied
2. Identify the deployment timeline for the system for both agencies	Partially satisfied
3. Break out annual and total spending for each department	Partially satisfied
4. Relay detailed cost-sharing business rules	Satisfied
5. Establish data standardization schedules between the departments	Partially satisfied
6. Comply with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government	Partially satisfied

Source: GAO analysis of fiscal year 2013 iEHR expenditure plan and VA and DOD documentation.

<sup>a</sup>**Satisfied** means that the plan, in combination with supporting documentation, addressed every key aspect of the condition that we reviewed. **Partially satisfied** means that the plan, in combination with supporting documentation, addressed some, but not all, key aspects of the condition that we reviewed.



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The plan

- Satisfied the condition to relay detailed cost-sharing business rules by including a Memorandum of Agreement between the two departments that outlined cost-sharing provisions and principles within the IPO.
- Partially satisfied the condition to define the budget and cost baseline for the development of the iEHR program by including the budget and cost baseline from fiscal years 2012 through 2018 for each department. However, the baseline, as reported, was not based on accurate estimates that reflected changes in the program's direction and related decisions made by the departments.
- Partially satisfied the condition to identify the deployment timeline for the system. While the plan outlined milestone dates for achieving enhanced data interoperability and other near-term activities, it did not include a deployment timeline that could be linked to an integrated master schedule.
- Partially satisfied the condition to break out information related to the IPO's annual and total spending for each department on iEHR and related activities. For example, the plan included the total amount obligated as well as a funding profile that showed the funds available for execution in 2013 for each of the departments. However, program officials could not provide the basis for the spending estimates, as reported in the plan. In addition, according to VA officials, some of the estimates reported were not accurate or did not reflect the current approach by the departments to pursue two separate systems.



**Results in Brief**

- Partially satisfied the condition to establish data standardization schedules by including high-level data mapping activities, such as verifying current data mappings. However, the plan did not include a schedule for achieving data standardization.
- Partially satisfied the condition to comply with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government. IPO officials asserted compliance with acquisition rules, but the plan did not explain the basis for this assertion.

The plan focused on several near-term activities to accelerate the interoperability of health data between departments, with cost estimates and timelines that are not described in terms of achieving the overall electronic health record capability. IPO officials stated that the focus of the work described in the plan was on the near-term activities that were prioritized following the change in approach to iEHR announced in 2013. However, they agreed that the numbers in the expenditure plan did not reflect the new direction of the program because the acquisition guidance from the department was not issued until after the plan had been completed. Thus, the expenditure plan did not provide insight into how the departments intend to proceed in the future to develop separate systems while incorporating interoperability. As such, it does not provide Congress with the reliable information it needs to make future funding decisions regarding iEHR appropriations.

We are recommending that VA and DOD improve future expenditure plans by including verifiable and accurate budget, cost, and spending information reflecting the approach to the departments' electronic health records programs; a deployment timeline that is consistent with an integrated master schedule; a data standardization schedule as it relates to the departments' electronic health records programs; and the basis for their assertion of compliance with acquisition rules, requirements,



**Results in Brief**

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guidelines, and systems acquisition management practices of the federal government.

VA and DOD provided technical comments via e-mail on a draft of this briefing, which we incorporated as appropriate. The departments did not state whether they agreed or disagreed with our recommendation. However, in their comments, the departments offered suggestions for clarifying actions called for in the recommendation. In response, we made revisions to more clearly convey the focus of the recommendation.



## Background

VA and DOD both recognize the importance of advancing the use of shared health information systems and the potential to make patient information more readily available to their health care providers, reduce medical errors, and streamline administrative functions. To accelerate the exchange of electronic health information between the two departments, the National Defense Authorization Act for Fiscal Year 2008<sup>4</sup> directed VA and DOD to jointly develop and implement fully interoperable electronic health record systems or capabilities and called for the departments to set up an IPO to be a single point of accountability for their efforts to implement these systems or capabilities. Accordingly, in January 2009, the IPO completed its charter, articulating, among other things, its mission and functions with respect to attaining interoperable electronic health data.

In February 2011, the departments initiated the iEHR program to jointly develop a single electronic health record system, which was to replace the two departments' existing electronic health record systems—the Veterans Health Information Systems and Technology Architecture (VistA) and the Armed Forces Health Longitudinal Technology Application (AHLTA). According to VA and DOD officials, pursuing iEHR was expected to enable the departments to align resources and investments with common business needs and programs, resulting in a platform that would replace their separate electronic health record systems with a common system. In addition, because both departments would be using the same system, this approach was expected to largely sidestep the challenges the departments had historically encountered in trying to achieve interoperability between separate systems. The departments developed an iEHR business case in August 2012 to justify this approach,

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<sup>4</sup>Pub. L. No. 110-181, § 1635, 122 Stat. 3, 460-463 (2008).



## Background

which stated that the use of a common, integrated system would support increased collaboration between the departments and would lead to cost savings through joint investment opportunities.

Initial development plans called for the iEHR system to consist of 54 clinical capabilities that would be delivered in six increments between 2014 and 2017, with all applications in the existing health record systems continuing uninterrupted until the new capabilities could be delivered. Among the capabilities to be delivered were those supporting laboratory, anatomic pathology, pharmacy, and immunizations. In addition, the initiative was to deliver several common infrastructure components—an enterprise architecture, presentation layer or graphical user interface, data centers, and interface and exchange standards. According to the departments' plans, initial operating capability, which was to be achieved in 2014, was intended to establish the architecture and include deployment of new immunization and laboratory capabilities to VA and DOD facilities in San Antonio, Texas, and Hampton Roads, Virginia. Full operating capability, planned for 2017, was to deploy all iEHR capabilities to all VA and DOD medical facilities.

An estimate developed by the IPO in August 2012 put the cost of the integrated system at \$29 billion (adjusted for inflation) from fiscal year 2013 through fiscal year 2029. According to the IPO director at that time, this estimate included \$9 billion for the acquisition of the system and \$20 billion to sustain its operations. The office reported actual expenditures of about \$587.84 million on iEHR between October 2011 and June 2013,<sup>5</sup> which, according to the IPO, included deployment of a new graphical

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<sup>5</sup>This amount reported in the IPO expenditure plan also included \$23.41 million funding for the DOD Virtual Lifetime Electronic Record (VLER) Health initiative, a joint effort to define and plan health data-sharing activities for VA and DOD that began in 2009.



## Background

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user interface for viewing patient data to selected locations; creation of a development and test center environment for iEHR; planning efforts required for acquisition of the initial laboratory, immunization, and pharmacy with ordering services capabilities; and acquisition of program management, systems integration, and engineering and testing services required to ensure completion of required planning activities.

However, in February 2013, the departments made significant changes to the direction of the iEHR program, with the Secretaries of VA and DOD announcing that they would not continue with their joint development of a single electronic health record system. Instead, the departments would pursue a new approach focusing on building or acquiring separate core sets of electronic health record capabilities, and ensuring interoperability between their separate health information systems.

According to the IPO expenditure plan for iEHR, dated June 2013, the new approach is to be divided into three distinct efforts:



## Background

- The first effort, the accelerator initiative,<sup>6</sup> aims to accelerate what the IPO refers to as near-term activities that are to lead to a more robust and seamless integrated health care record shared between VA and DOD.
- The second effort is to support the modernization of VA's existing VistA health information system.
- The third effort is the replacement of DOD's AHLTA, which is comprised of multiple legacy medical information systems.<sup>7</sup>

According to the expenditure plan, the accelerator initiative was identified by the departments as a high-priority, operational near-term goal and was to be executed with deliverables in fiscal year 2013.

The second and third efforts are expected to be more long-term, strategic efforts that began in fiscal year 2013 and are to encompass the departments' multiyear plans to evolve/modernize, acquire, deploy, and sustain their electronic health record systems.

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<sup>6</sup>According to the IPO, these accelerators are intended to ensure the development of an integrated and interoperable health care record and include actions related to, among other things, efforts to standardize and exchange real-time health care data between VA and DOD and the expanded deployment of a graphical user interface. According to the 2013 expenditure plan, the estimated cost for the accelerators was approximately \$25 million.

<sup>7</sup>DOD announced in June 2013 that it would pursue replacement of AHLTA through a new acquisition program called the DOD Healthcare Management System Modernization program, which is being managed by DOD's Under Secretary of Defense for Acquisition, Technology, and Logistics.



## Background

We recently reported<sup>8</sup> that VA and DOD did not substantiate their claims that pursuing separate efforts to modernize or replace their existing systems would be less expensive and more timely than developing a single joint system. Our work stressed that major investment decisions—including terminating or significantly restructuring an ongoing program—should be justified using analyses that compare the costs and schedules of alternative proposals. Yet, the departments did not develop revised cost and schedule estimates for modernizing or replacing, and then achieving interoperability between their systems, and compare them with the relevant estimates for developing a single joint system. We concluded that, in the absence of such a comparison, VA and DOD lacked assurance that they were pursuing the most cost-effective and timely course of action for delivering the fully interoperable electronic health record.

Our report noted that the departments had initiated their separate system efforts. In this regard, VA had planned to deploy clinical capabilities of its new system at two locations by September 2014, and DOD had set a goal of beginning deployment of its new system by the end of fiscal year 2016. However, we reported that the departments had yet to update their joint strategic plan to reflect the new approach or to disclose what the interoperable electronic health record would consist of, as well as how, when, and at what cost it would be achieved. We concluded that without plans that included the scope, lines of responsibility, resource requirements, and an estimated schedule for achieving an interoperable health record, VA, DOD, and their stakeholders may not have a shared understanding of how the departments intend to address their common health care business needs.

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<sup>8</sup>GAO, *Electronic Health Records: VA and DOD Need to Support Cost and Schedule Claims, Develop Interoperability Plans, and Improve Collaboration*, GAO-14-302 (Washington, D.C.: Feb. 27, 2014).



## Background

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In addition, we reported that VA and DOD had not addressed management barriers to effective collaboration on their joint health information technology (IT) efforts. Specifically, the departments faced barriers to effective collaboration in the areas of enterprise architecture and IT investment management, among others. However, they had not addressed these barriers by, for example, developing a joint healthcare architecture or a joint investment management process to guide their collaboration.

We recommended, among other things, that the departments develop and compare the estimated cost and schedule of their current and previous approaches to creating an interoperable electronic health record and, if applicable, provide a rationale for pursuing a more costly or time-consuming approach. We also recommended that the departments develop plans for interoperability. VA and DOD concurred with our recommendations.



## Statutory Condition

### Define the budget and cost baseline for development of iEHR

The expenditure plan **partially satisfied** the condition to define the budget and cost baseline for the development of the iEHR program. A budget and cost baseline is essential to a program's efficient and timely execution and should be based on accurate estimates that enable the program office to justify its budget to Congress.<sup>9</sup>

The plan submitted by the IPO included the budget and cost baseline for iEHR,<sup>10</sup> compiled from the President's budget, for each department.<sup>11</sup> According to the plan, DOD's budget baseline was \$594.6 million for iEHR activities prior to fiscal year 2013, and \$331 million for fiscal year 2013. VA's budget baseline was \$136.5 million prior to fiscal year 2013 and \$242.2 million for fiscal year 2013. The plan also reported that the iEHR budget request for fiscal year 2014 included \$344.1 million for DOD and \$467.8 million for VA. See table 2 for the budget baseline for iEHR for each department through fiscal year 2018.

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<sup>9</sup>GAO, *GAO Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs*, GAO-09-3SP (Washington, D.C.: March 2009).

<sup>10</sup>The reported budget baseline also included amounts for VLER Health, a related interoperability effort.

<sup>11</sup>The iEHR program was first identified in the VA budget request for fiscal year 2013, but according to the IPO, funds related to iEHR were obligated prior to 2013. It was first identified under the DOD budget request for the Electronic Health Record Way Ahead program, a predecessor program to iEHR that was originally intended to be the department's electronic health record system and comprehensive, real-time health record for service members until the iEHR program began in 2011. The authoritative sources identified for fiscal years 2015–2018 were the VA Multi-Year Plan and the DOD Program Objective Memorandum.



**Statutory Condition**

Define the budget and cost baseline for development of iEHR

Table 2: iEHR Budget Baseline through Fiscal Year 2018 (budget in millions)

	Prior years	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
DOD	\$173.2	\$421.4	\$331.0	\$344.1	\$216.0	\$217.1	\$218.0	\$219.2
VA	\$7.6	\$128.9	\$242.2	\$467.8	\$384.7	\$392.4 <sup>a</sup>	\$400.2	\$408.2
<b>TOTAL</b>	<b>\$180.8</b>	<b>\$550.3</b>	<b>\$573.2</b>	<b>\$811.90</b>	<b>600.70</b>	<b>\$609.5<sup>a</sup></b>	<b>\$618.2</b>	<b>\$627.4</b>

Source: GAO analysis of IPO's fiscal year 2013 expenditure plan.

<sup>a</sup>The IPO's fiscal year 2013 expenditure plan contained addition errors for fiscal year 2016 we identified in our analysis. Those errors have been corrected in table 2.



### Statutory Condition

#### Define the budget and cost baseline for development of iEHR

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However, while the expenditure plan contained budget and cost baseline information, we could not determine the accuracy of the baseline amounts for the years prior to 2012, and VA officials said subsequent years' baseline information included inaccurate amounts. In addition, the information did not reflect the departments' new approach focusing on building or acquiring separate core sets of electronic health record capabilities, and ensuring interoperability between their separate health information systems.

- The budget baseline shown in the plan for the years prior to 2012 was not reflected in the President's budget for either department because the iEHR program had not yet been separately identified in the budgets for VA and DOD. In addition, VA reported budget baseline amounts in the plan from four appropriations;<sup>12</sup> however, only two of those appropriations—IT Development, Modernization, and Enhancement and IT Sustainment— were identified in any of the President's budgets as related to iEHR. As a result, we could not verify that the amounts in the plan were consistent with what had actually been budgeted. Thus, there was no basis to ensure that all of the budget baseline information reported in the expenditure plan was accurate.

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<sup>12</sup>VA appropriations in the plan included: IT Development, Modernization, and Enhancement; IT Sustainment; IT Pay; and the Veterans Health Administration Medical Services and Medical support and compliance (referred to in the plan as the Medical Care appropriation). DOD appropriations included Defense Health Program procurement; research, development, test, and evaluation; and operations and maintenance funds.



### Statutory Condition

#### Define the budget and cost baseline for development of iEHR

- According to VA officials, the budget baseline amounts, as reported, for the fiscal years prior to 2012 were not accurate because they were revised shortly after the plan was released. Specifically, the officials noted that the 2012 IT Sustainment amount reported should have been \$26.8 million instead of \$12 million and the amount listed for VA's 2013 Medical Care budget should have been updated from \$63.8 million to \$73 million after the department decided to allocate additional funds to iEHR for program needs identified during a midyear budget review.
- According to department officials, the reported budget baseline for fiscal year 2013 and 2014 for VA was based on the original intent of the iEHR program.<sup>13</sup> The 2014 budget baseline for DOD was also based on a cost estimate that was done in 2009<sup>14</sup> on a program that has made two major redirections in approach over the last 3 years. Further, according to IPO officials, the budget baseline included in the plan for fiscal years 2015 through 2018 was not accurate because it had not been adjusted to reflect the current focus on each department building or on acquiring a separate core set of electronic health record capabilities and ensuring interoperability between their systems. Thus, the reported budget baseline amounts were not based on accurate estimates that reflected changes in direction and decisions being made by the departments.

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<sup>13</sup>The iEHR was originally intended to be a single VA/DOD system to integrate capabilities provided by commercial off-the-shelf and government off-the-shelf solutions and new application functionality.

<sup>14</sup>According to the IPO, the current fiscal year 2014 budget is based on multiyear appropriations requested by the DOD Electronic Health Record Way Ahead program based on DOD's preliminary life cycle cost estimate for the program in 2009.



**Statutory Condition**

Define the budget and cost baseline for development of iEHR

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As we have previously reported,<sup>15</sup> the departments had not yet developed revised cost estimates for their new modernization efforts and any additional efforts needed to achieve interoperability between the new systems, and compared them with the relevant estimates for their former approach. Thus, because iEHR budget data reported in the expenditure plan include inaccuracies and are based on old estimates that do not reflect the current approach to the iEHR program, it is highly unlikely that Congress could use this information to reliably track progress of money spent by the departments over time or make decisions about future funding for the program.

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<sup>15</sup>GAO-14-302.



**Statutory Condition**

Identify the deployment timeline for the system for both agencies

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The expenditure plan **partially satisfied** the condition to identify the deployment timeline for the system.

A deployment timeline provides a time sequence for the duration of a program's activities and helps identify the dates for major milestones.<sup>16</sup> As such, the deployment timeline should be related to the program's integrated master schedule, a management tool that defines, among other things, when work activities will occur, how long they will take, and how they are related to one another. This provides a road map for systematic project execution and the means to gauge progress, identify and address potential problems, and promote accountability.

The plan outlined milestone dates for achieving enhanced data interoperability and other near-term activities, such as developing guidance and timelines for future electronic health record modernization efforts. However, the milestone dates included in the expenditure plan were focused on near-term efforts and were not linked to the program's integrated master schedules.

IPO officials agreed that the dates were not linked to the integrated master schedules and stated that the majority of the activities with milestone dates in the plan are designated as accelerators rather than as falling under any increments of the program. Further, the officials noted that all the activities listed in the expenditure plan had been successfully completed. However, because the reported dates are not related to an integrated master schedule for the program, we were unable to determine how

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<sup>16</sup>GAO, *GAO Schedule Assessment Guide: Best Practices for Project Schedules—Exposure Draft*, GAO-12-120G (Washington, D.C.: May 2012).



**Statutory Condition**

Identify the deployment timeline for the system for both agencies

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the activities are sequenced or related to one another within the scope of the full iEHR effort and it is unclear how completion of these activities provides a means for gauging progress for the iEHR effort. As such, the information in the plan does not provide Congress with the information it needs to measure performance and ensure that appropriated funds are being used effectively to complete work in a systematic project execution.



**Statutory Condition**

Break out annual and total spending for each department

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The expenditure plan **partially satisfied** the condition to break out information related to the IPO's annual and total spending for each department.

An expenditure plan, as a congressional oversight mechanism, aims at ensuring that planned expenditures are justified, performance against plans is measured, and accountability for results is ensured. As such, spending estimates included in the plan should be accurate in order to permit meaningful congressional oversight.<sup>17</sup>

The expenditure plan included the total amount obligated by the year in which the obligations occurred for DOD (related to VLER Health and iEHR) and VA (related to iEHR). The plan also showed that a total of \$587.84 million was obligated by both departments for iEHR from October 2011<sup>18</sup> through June 6, 2013. Further, the expenditure plan included a funding profile that showed the funds available for execution in 2013 for each of the departments. According to the plan, DOD had a total of \$422.2 million available for execution at the time the expenditure plan was released, with an additional \$45.5 million available if the Committees on Appropriation removed the 25 percent

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<sup>17</sup>GAO-09-3SP.

<sup>18</sup>IPO officials stated that the expenditure plan reported obligations starting in October 2011 because the IPO was re-chartered at that time.



## Statutory Condition

### Break out annual and total spending for each department

restriction on research, development, testing, and evaluation funds.<sup>19</sup> Similarly, VA had \$85.6 million available for execution, with an additional \$78 million available if the Committees on Appropriation removed the 25 percent restriction on IT Development, Modernization, and Enhancement funds.

In addition, the plan listed planned activities for fiscal year 2013 and their estimated costs, which totaled \$641.1 million (\$300.7 million for VA and \$340.4 million for DOD). For example, the plan showed that Increment 1 of iEHR was to be funded by DOD at a cost of \$58.1 million in fiscal year 2013. Increment 2 was to be jointly funded by DOD and VA with an estimated cost of \$201 million for DOD and \$197.2 million for VA in fiscal year 2013.<sup>20</sup>

However, IPO officials could not provide the basis for the spending estimates, as reported in the plan. In addition, according to VA officials, some of the estimates reported were not accurate or did not reflect the current approach by the departments to pursue two separate systems. For example:

- According to IPO officials, the reported dollar estimates for planned spending in fiscal year 2013 were based primarily on a life-cycle cost estimate from August 2012, and generally revised

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<sup>19</sup>Funds available for execution included appropriations that are generally available for multiple years. For example, DOD's Defense Health Program procurement and research and development funds are generally available for obligation for 3 and 2 years, respectively. VA's IT systems development funds are generally available for obligation for 2 years. Available funds may also be reduced by fees, "taxes," and, for DOD, sequestration amounts.

<sup>20</sup>When the departments committed to the development of a common integrated electronic health record system, initial development plans called for the single, joint iEHR system to be delivered in six increments between 2014 and 2017. Increments 1 and 2 included multiple iEHR projects.



### Statutory Condition

#### Break out annual and total spending for each department

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through rough-order-of-magnitude updates, more recent estimates, and actual contract awards. While the IPO was able to provide a presentation on the life-cycle cost estimate, it could not provide supporting details to allow verification of estimated spending amounts that would demonstrate the basis for those estimates.

- VA officials stated that certain amounts included in the expenditure plan were not accurate. Specifically, the officials said the spending amounts for the Veterans Health Administration were overestimated and were revised as more information became available. However, the revised estimates were not included in the plan prior to its release because, according to the officials, the IPO wanted to present a view of the program consistent with the original planned spending.
  - VA officials also stated that certain estimated spending baselines were not updated to reflect ongoing changes in program direction. For example, the February 2013 decision to pursue separate solutions for each department caused the IPO to temporarily stop spending on development of clinical capability domains. However, the expenditure plan included about \$82 million in its estimated spending baseline even though the decision to stop spending money in the area was made prior to the release of the plan.
  - As shown in table 3, the expenditure plan reported that the departments planned to spend \$641.1 million on iEHR activities for fiscal year 2013. In December 2013, the IPO reported that actual obligations for fiscal year 2013 were \$394.5 million. This means that the iEHR program spent about \$246.6 million less than originally planned. While the difference may be partially explained by the reduction in available funds due to the statutory restriction on development funds, the departments still spent over \$100 million less than originally planned. This difference
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**Statutory Condition**

Break out annual and total spending for each department

in spending demonstrates that the plan either did not reflect the program's executed development approach or was based on inaccurate or untimely estimates.

Table 3: Summary of iEHR Activities, Estimated Baseline for Spending, and Actual Obligations in Fiscal Year 2013

Activities	FY2013 estimated baseline (in millions)	VA actual obligations for FY2013 (in millions)	DOD actual obligations for FY2013 (in millions)	Total obligations for FY2013 (in millions)
<b>Increment 1</b>	<b>\$ 58.1</b>	<b>\$ 0</b>	<b>\$ 79.5</b>	<b>\$ 79.5</b>
<b>Increment 2</b>	<b>398.2</b>	<b>56.8</b>	<b>109.9</b>	<b>166.7</b>
• Accelerators	25.4	6.3	6.2	12.5
• Infrastructure	93.6	12.1	50.8	62.9
• Supporting activities	197.1	38.4	52.9	91.3
• Clinical capabilities-RFP	82.1	0	0	0
<b>Special projects</b> such as James A. Lovell FHCC and VLER Health	<b>64.5</b>	<b>30.3</b>	<b>15.3</b>	<b>45.6</b>
<b>IPO business operations support</b>	<b>120.3</b>	<b>42.5</b>	<b>60.1</b>	<b>102.6</b>
<b>Total</b>	<b>\$ 641.1</b>	<b>\$129.6</b>	<b>\$264.9</b>	<b>\$394.5</b>

Source: GAO analysis of IPO data.



**Statutory Condition**

**Break out annual and total spending for each department**

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The large difference in planned spending versus actual obligations, along with the IPO's lack of documentation for the basis of spending estimates, raises questions about the integrity and reliability of the data within the plan and their usefulness as a tool for Congress to make funding decisions.



### Statutory Condition

#### Relay detailed cost-sharing business rules

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The expenditure plan **satisfied** the condition to relay detailed cost-sharing business rules.

Specifically, the expenditure plan included a Memorandum of Agreement signed in October 2012 by both departments that outlined cost-sharing provisions and principles within the IPO. Five cost-sharing principles were described in the Memorandum of Agreement:

- 50/50 cost share—Cost is shared evenly between the departments for program resources and execution where the departments share equal responsibility.
- Proportional cost share—Percentage-based contribution requirements between the departments for items and services based on planned scope and scale within each department.
- Total cost of ownership—Both departments agree to fund specific costs within the scope of the IPO Charter on a year-by-year basis that will be balanced between the departments over the life cycle of the IPO programs.
- User-based fee-for-service—Based on the number of users within each department.
- Department-unique—Each department covers costs outside the scope of IPO contributing to IPO.

By providing and implementing detailed cost-sharing business rules to guide the iEHR program, the likelihood of improved interagency collaboration and agreement on clear lines of responsibility and accountability is increased.



### Statutory Condition

#### Establish data standardization schedules between the departments

The expenditure plan **partially satisfied** the condition to establish data standardization schedules between the departments.

Data standardization facilitates health information exchanges and interoperability. Moreover, the success of a program like iEHR depends, in part, on having a schedule that defines when such work activities will occur, how long they will take, and how they are related to one another.<sup>21</sup>

The expenditure plan outlined high-level data mapping activities that need to occur to accelerate the interoperability of health data between departments by December 2013, such as verifying current data mappings and creating terminology that would enhance clinical displays and data interoperability between the departments and civilian health care providers. According to the IPO, these near-term tasks had been completed as of December 2013.

However, the plan did not include a schedule for achieving data standardization. For example, although the plan defined high-level work activities, it did not include information on how long the activities would take or how they were related to each other. According to IPO officials, a plan to improve interoperability is being prepared for fiscal year 2014 but a time frame for establishing data standardization schedules between the departments has not been determined. Without establishing a schedule for achieving data standardization, the departments lack the means by which to gauge progress, identify and address potential problems, and promote accountability. Further, Congress will lack the needed information to make future program funding decisions.

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<sup>21</sup>GAO-12-120G.



### Statutory Condition

Comply with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government

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The expenditure plan **partially satisfied** the condition to comply with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government.

Our research and evaluations of programs across the federal government have shown that adhering to acquisition disciplines that are recommended in best practices and federal guidelines, such as Carnegie Mellon University's Software Engineering Institute and DOD's acquisition policy,<sup>22</sup> are essential to delivering promised system capabilities and benefits on time and within budget.

According to the expenditure plan, the departments asserted that the iEHR is compliant with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government. IPO officials added that the iEHR acquisition complied with applicable DOD and federal acquisition policy guidelines, as specifically prescribed by DOD Instruction 5000.2, *Operation of the Defense Acquisition System*, May 12, 2003 and the *Federal Acquisition Regulation*.

However, although the officials asserted compliance with acquisition rules, the plan did not include the basis of this assertion nor has the IPO demonstrated that these disciplines have been fully implemented. For example, the office had taken initial steps to begin employing key information technology acquisition management disciplines, such as developing an iEHR Accelerators master

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<sup>22</sup>See, for example, Carnegie Mellon Software Engineering Institute, *Capability Maturity Model® Integration for Development*, Version 1.2 (Pittsburgh, PA., August 2006); *Software Acquisition Capability Maturity Model® (SA-CMM®)* version 1.03, CMU/SEI-2002-TR-010 (Pittsburgh, PA., March 2002); and Department of Defense Instruction 5000.02, *Operation of the Defense Acquisition System*.



**Statutory Condition**

Comply with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government

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test plan and requirements traceability matrix.<sup>23</sup> However, the traceability matrix was incomplete and did not demonstrate alignment of requirements and related system design and testing artifacts. Without traceable requirements, the IPO lacked the basis for knowing that the scope of the design, development, and testing efforts will produce a system solution that meets users' operational needs and performs as intended. Furthermore, while IPO officials had reported that all activities listed in the plan with target dates through December 2013 had been successfully completed, developmental testing for the Data Federation accelerator<sup>24</sup> in November 2013 identified a number of problems, which were still in the process of being corrected and patched.

In the absence of the basis for assertion, Congress was not provided key information needed to make a determination on whether the program is being effectively managed in accordance with acquisition management practices of the federal government.

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<sup>23</sup>One of the leading practices associated with developing and managing requirements is maintaining bidirectional traceability from high-level operational requirements (e.g., concept of operations and functional requirements) through detailed lower-level requirements and design documents (e.g., software requirements specification) to test cases. Such traceability is often accomplished through the use of a requirements traceability matrix, which serves as a crosswalk between different levels of related requirements, design, and testing documentation.

<sup>24</sup>The Data Federation accelerator is designed to achieve data interoperability within the DOD and VA health care systems and present patient data to doctors and clinicians using an enhanced web presentation system to retrieve information from disparate health care systems in real time for presentation in a web browser.



## Conclusions

The statutorily mandated expenditure plan for iEHR is a congressional oversight mechanism aimed at ensuring that planned expenditures are justified, performance against plans is measured, and accountability for results is ensured. While the IPO's expenditure plan for fiscal year 2013 included information that fully or partially addressed all six of the statutory conditions, the budget, cost, and spending information was not always verifiable and accurate. In addition, the plan lacked a deployment timeline and a data standardization schedule that could be linked to the program's integrated master schedule and the basis for the assertion of compliance with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government. Further, the plan did not provide a meaningful representation of the iEHR approach as it has evolved over the past year. IPO officials stated that the focus of the work described in the plan was on the near-term activities that were prioritized following the change in approach to iEHR announced in 2013, but the numbers in the expenditure plan did not reflect the new direction of the program because the acquisition guidance from the department was not issued until after the plan had been completed. Thus, the expenditure plan did not provide an accurate view of the cost of the work to be done, nor offer significant insight into the future path for building electronic health record interoperability between the departments. As such, the plan does not provide adequate support for Congress, VA, and DOD to use it as a basis for measuring program success, accounting for the use of current and future appropriations, and holding the departments accountable for achieving an interoperable electronic health record.



## Recommendation for Executive Action

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To ensure that Congress has the information necessary to effectively oversee the efforts of VA and DOD to deliver an interoperable health record and hold the departments accountable for program results, we recommend that the Secretary of Defense and the Secretary of Veterans Affairs direct the appropriate organization to ensure that any future expenditure plans

- include verifiable and accurate budget, cost, and spending information reflecting the approach to the departments' electronic health records programs;
- provide a deployment timeline that is consistent with an integrated master schedule and shows how deployment activities are related to one another within the scope of the electronic health records programs;
- include a data standardization schedule for facilitating interoperability as it relates to the departments' electronic health records programs; and
- provide the basis for an assertion of compliance with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government.



## Agency Comments and Our Evaluation

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A liaison from VA's Office of Congressional and Legislative Affairs and DOD's Deputy Program Executive Officer for Defense Healthcare Management Systems provided technical comments via e-mail on a draft of this briefing, which we incorporated as appropriate. The departments did not state whether they agreed or disagreed with our recommendation. However, in their comments, the departments offered suggestions for clarifying actions called for in the recommendation. In response, we made revisions to more clearly convey the focus of the recommendation. Also, VA suggested revisions to the introductory text that discussed the time frame associated with the departments' decision to discontinue the joint development of a single electronic health record system. In this regard, we added text to ensure that our discussion clearly and accurately conveyed the departments' decision and related actions.

# Appendix II: Joint Comments from the Department of Defense and the Department of Veterans Affairs

JUN 18 2014

Ms. Valerie C. Melvin  
Director  
Information Management and Technology Resources Issues  
U.S. Government Accountability Office  
441 G Street, NW  
Washington, DC 20548

Dear Ms. Melvin:

Enclosed is a joint Department of Defense and Department of Veterans Affairs response to the Government Accountability Office's (GAO) draft report GAO-14-609, "ELECTRONIC HEALTH RECORDS: Fiscal Year 2013 iEHR Expenditure Plan Lacks Key Information Needed to Inform Future Funding Decisions," received May 23, 2014 (GAO Code 311516). We appreciate the opportunity to comment on the draft report.

Please direct any questions to the points of contact on this matter, Mr. Christopher Miller and Dr. Alan Constantian. Mr. Miller may be reached at (703) 588-8711, or Christopher.Miller@dha.mil. Dr. Constantian may be reached at (202) 461-6273, or Alan.Constantian@va.gov.

Sincerely,

  
Frank Kendall  
Under Secretary of Defense  
Acquisition, Technology, & Logistics  
U.S. Department of Defense

  
Stephen Warren  
Executive in Charge and  
Chief Information Officer  
Office of Information and Technology  
U.S. Department of Veterans Affairs

Enclosure:  
As stated

GAO DRAFT REPORT RECEIVED MAY 23, 2014  
GAO-14-609 (GAO CODE 311516)

**“ELECTRONIC HEALTH RECORDS: Fiscal Year 2013 iEHR Expenditure Plan Lacks  
Key Information Needed to Inform Future Funding Decisions”**

**JOINT DoD/VA COMMENTS**

**RECOMMENDATION:** To ensure that Congress has the information necessary to effectively oversee the efforts of VA and DoD to deliver an interoperable health record and hold the departments accountable for program results, we recommend that the Secretary of Defense and the Secretary of Veterans Affairs direct the appropriate organization to ensure that any future expenditure plans

- include verifiable and accurate budget, cost, and spending information reflecting the approach to the departments’ electronic health records programs;
- provide a deployment timeline that is consistent with an integrated master schedule and shows how deployment activities are related to one another within the scope of the electronic health records programs;
- include a data standardization schedule for facilitating interoperability as it relates to the departments’ electronic health records programs; and
- provide the basis for an assertion of compliance with acquisition rules, requirements, guidelines, and systems acquisition management practices of the federal government.

**DoD/VA RESPONSE:** Concur. DoD and VA concur with the recommendation to ensure that any future expenditure plans for their respective electronic health records programs include verifiable and accurate budget, cost and spending information; provide a deployment timeline; include a data standardization schedule; and provide the basis for a federal government systems acquisition management compliance assertion.

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# Appendix III: GAO Contact and Staff Acknowledgments

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## GAO Contact

Valerie C. Melvin at (202) 512-6304 or [melvinv@gao.gov](mailto:melvinv@gao.gov)

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## Staff Acknowledgments

In addition to the contact named above, Neelaxi Lakhmani (Assistant Director), Nancy Glover, Jacqueline K. Mai, and Jennifer Stavros-Turner made key contributions to this report.

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## Public Affairs

Chuck Young, Managing Director, [youngc1@gao.gov](mailto:youngc1@gao.gov), (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548

